



Office of the City Manager

PUBLIC HEARING  
September 29, 2026

To: Honorable Mayor and Members of the City Council  
 From: Paul Buddenhagen, City Manager  
 Submitted by: Jordan Klein, Director, Planning and Development Department  
 Subject: Adoption of San Pablo Avenue Specific Plan

RECOMMENDATION

Conduct a public hearing, and upon conclusion:

1. Adopt a Resolution:
  - a. Considering an Addendum to the 2023-2031 Housing Element Update Environmental Impact Report (EIR) together with the previously certified EIR and finding that none of the conditions described in CEQA Guidelines Section 15162 requiring preparation of a subsequent or supplemental EIR have occurred;
  - b. Adopting the San Pablo Avenue Specific Plan and San Pablo Avenue Specific Plan Design Standards Document;
  - c. Approving and adopting General Plan and University Avenue Strategic Plan map and text amendments to redesignate certain parcels and update certain land use designations to be consistent with the San Pablo Avenue Specific Plan; and
  - d. Rescinding the West Berkeley Plan and San Pablo Avenue Public Improvements Plan; and
2. Adopt the first reading of an Ordinance to amend the Berkeley Municipal Code to create the San Pablo Commercial District (Chapter 23.202.160) and additional conforming amendments to other sections of the Municipal Code.

SUMMARY

Staff are proposing amendments to the Zoning Map, Zoning Ordinance, and conforming amendments to the University Avenue Strategic Plan and General Plan as part of the proposed adoption of the San Pablo Avenue Specific Plan (Specific Plan) and associated Design Standards Document. The full text of the Zoning Ordinance and General Plan changes can be found in **Attachment 2**. The Specific Plan identifies

goals, policies and programs that address citywide and regional goals for housing production and affordability, and support small businesses, multimodal streets, and cultural vitality. The Design Standards Document provides a set of standards to support Specific Plan implementation. As part of adoption of the Specific Plan, staff and the Planning Commission are recommending that the West Berkeley Plan and San Pablo Avenue Public Improvements Plan be retired.

As required by the California Environmental Quality Act (CEQA), staff have prepared an Addendum (**Attachment 1, Exhibit A**) to the previously certified 2023-2031 Housing Element Update EIR to analyze the potential physical impacts to the environment as a result of Specific Plan adoption and implementation, and retirement of the West Berkeley Plan and San Pablo Avenue Public Improvements Plan. The Addendum found no new or more severe environmental impacts beyond those disclosed and analyzed in the Housing Element EIR, and concluded that no further environmental review is required.

#### FISCAL IMPACTS OF RECOMMENDATION

The proposed Specific Plan and implementing legislation are intended to support housing production and affordability, and small businesses along the San Pablo Avenue corridor, which could result in additional contributions to the tax base and economic vitality in Berkeley. While the Specific Plan proposes waiving the Outdoor Commerce fee and application and plan check review fees associated with sidewalk seating and parklets to activate the public realm within the Specific Plan Area, the proposed amendments may result in an increase in employment, property tax, business license tax and sales tax revenues due to increased business activity in the Specific Plan area.

#### CURRENT SITUATION AND ITS EFFECTS

The Specific Plan (**Attachment 1, Exhibit B**) advances the following City strategic plan goals:

- Create affordable housing and housing support services for our most vulnerable community members.
- Foster a dynamic, sustainable, and locally-based economy.
- Create a resilient, safe, connected and prepared city.

The proposal consists of adoption of the Specific Plan, as well as a Design Standards Document, Zoning Ordinance and Map amendments, corresponding General Plan text and Map amendments to ensure consistency with the Specific Plan, retirement of the West Berkeley Plan and San Pablo Avenue Public Improvements Plan, and approval and adoption of the addendum to the 2023-2031 Housing Element EIR.

The Specific Plan Area encompasses the 2.35-mile San Pablo Avenue corridor within the city limits. Parcels included in the Specific Plan Area front and are adjacent to San Pablo Avenue. In addition, parcels fronting University Avenue between Ninth Street and



Curtis Street are included, as well as various parcels fronting side streets parallel to San Pablo Avenue (see **Figure 1: Existing and Proposed Zoning Map**).

The Specific Plan would supersede the 1993 West Berkeley Plan for all properties within the Specific Plan Area, while carrying forward the West Berkeley Plan's key land use goals (such as protecting specified industrial and non-industrial uses and requiring the replacement of converted industrial spaces). (For an analysis of the West Berkeley Plan implementation measures, see Attachment 4.) Based on Planning Commission and City Council feedback, the West Berkeley Plan is proposed to be retired with adoption of the Specific Plan. The Specific Plan would also supersede the San Pablo Avenue Public Improvements Plan, which is proposed to be retired (see Summary of Proposed Plan Retirements below). All future development projects would be required to comply with the Specific Plan, the Design Standards Document, and the Berkeley Municipal Code (BMC). The Design Standards Document (**Attachment 1, Exhibit C**) and Title 23 of the BMC contain the design standards and zoning regulations that implement the Specific Plan.

**LEGEND**

**Existing Zoning**

- C-W
- C-U
- C-N
- C-AC
- C-SA
- M
- MM
- MU-LI
- MU-R
- MR-D
- R-1
- R-2
- R-2A
- R-3
- R-4
- R-BMU
- SP
- U

**Designated Nodes Area**

- C-W Designated Nodes Area
- C-U Nodes Area

**Specific Plan Area**

**City of Berkeley Boundary**

**Southern Pacific Railroad**

**Proposed Specific Plan Changes**

- New C-SP Zoning District
- New C-SP Designated Nodes
- MU-LI Housing Overlay
- Specific Plan Area

Summary of Specific Plan

The proposed Specific Plan includes six chapters, consisting of:

- The Introduction chapter (Chapter 1) provides context about Specific Plan Area conditions, the purpose of the document, and the community engagement process.
- The Vision & Desired Results chapter (Chapter 2) provides long-term vision, brief historical context, goals and planning framework for the Specific Plan Area.
- Three chapters focus on Land Use, Economic Development, and Streets, Mobility, and the Public Realm (Chapters 3 through 5, respectively), each including goals, policies and standards.
- The Implementation chapter (Chapter 6) describes implementation measures and a preliminary set of next steps to achieve the long-term vision of the Specific Plan. The Specific Plan would be monitored and updated on a regular basis to reflect progress, lessons learned, changing circumstances, new opportunities, and community priorities over time.

A stand-alone Design Standards Document would implement urban design-related policies by articulating design requirements at the site, building and public realm levels for new development and alterations of existing buildings.

The following sections briefly describe the policies contained in each chapter and Design Standards Document, as they have been refined based on feedback received on the Draft Plan.

*Introduction and Vision and Guiding Principles (Chapters 1 and 2)*

The San Pablo Specific Plan

- Identifies a community vision and provides a plan for achieving the vision;
- Includes a framework for transforming San Pablo Avenue into a multimodal street that functions well for all users, not just as a thoroughfare, but as a mixed-use place that provides a multitude of opportunities for living, working and taking part in community life;
- Explains, updates and creates new local planning policies, development standards and practices, and highlights their interrelationship, relevancy, and adherence with State, regional, and citywide planning policies and processes;
- Includes implementation strategies with clear actions and responsibilities; and
- Prioritizes equity, promotes inclusivity, and strives to eliminate disparities through the Specific Plan's policies, programs, and implementation strategies.

The overall vision for the San Pablo Specific Plan includes:

- Encouraging More Housing, through new development standards and land use regulations;
- Increasing Business Activity, through new land use regulations that streamline the approval of new businesses, and activate ground-floor spaces, as well as encouraging Business Improvement Districts;
- Enhancing Interaction Between Public and Private Spaces, by developing new sidewalk and public realm design standards, exploring the closure of streets to establish public plazas and other gathering spaces, and expanding the tree canopy to green the streetscape;
- Enhancing Local and Citywide Access by improving pedestrian crossings, lighting and streetscape design, as well as supporting reliable transit and biking options.

### *Land Use (Chapter 3)*

The following policies aim to increase the diversity and supply of housing, and to support commercial vitality and reduce ground floor vacancies while promoting active, pedestrian-oriented development and public realm improvements. For more details about how these policies would be implemented through zoning, see Summary of Zoning and Plan Changes below.

- Establish the San Pablo Commercial (C-SP) Zoning District (*Figure 1 above*)  
Currently, the Specific Plan Area is largely within the West Berkeley Commercial (C-W) district; a few parcels are split-zoned C-W and Mixed-Use Light Industrial (MU-LI), University Commercial (C-U), or residential (R-1, R-2, R-3) districts. The Specific Plan would re-zone these parcels within the Specific Plan Area to a new district, San Pablo Commercial (C-SP), to implement the Specific Plan's land use policies.
- Focus Commercial Uses within Designated Nodes  
The existing C-W district includes Designated Nodes at key intersections where development standards and permitted uses concentrate neighborhood-serving commercial uses. The Specific Plan would continue this framework and expand the number of permitted uses in Designated Nodes to increase flexibility for long-term commercial viability.
- Expand Allowed Primary and Temporary Uses  
Compared to the existing C-W district, the C-SP district would allow for a more active, flexible, and community-oriented mixed-use environment with certain industrial uses allowed where compatible with residential uses. To support commercial vitality, temporary uses that include retail, enclosed

public markets<sup>1</sup>, food service establishments, and commercial uses located outdoors would be allowed with a zoning certificate, subject to meeting performance standards.

- Allow Affordable and Family-Friendly Housing on MU-LI Parcels

The Specific Plan would permit mixed-use and multi-family developments on eight MU-LI parcels within the Specific Plan Area, as long as the applicant commits either: 1) 100% of residential units as deed-restricted affordable housing; or 2) at least 50% of residential units as “family-sized” (two or three-bedrooms). The C-SP development standards would apply to eligible projects. The affordability requirement for rental units would be to households earning less than 60 percent of the Area Median Income (AMI); for ownership units, the sales price would be affordable to households earning no more than 80 percent of the AMI.

- Local Density Bonus

The Specific Plan includes a pilot San Pablo Avenue Density Bonus Program to develop an affordable-housing benefit for new residential ownership (condominium) projects that is exclusively met through paying an in-lieu fee to the City’s Affordable Housing Trust Fund. This pilot program would align with a recently adopted Council referral to facilitate lower-cost ownership opportunities in Berkeley.<sup>2</sup>

- Public Open Space Enhancements

The Specific Plan includes incentives to create high-quality, publicly accessible open space within private development projects to enhance the pedestrian environment and support placemaking. A development project applicant could choose to substitute private open space for any of the following four types of public open space: sidewalk expansion, privately-owned publicly accessible open spaces (POPOS), side-street plazas, or mid-block passages.

- Ground Floor Form Types

The Specific Plan establishes four ground floor form types—Storefront, Active, Residential, and Live/Work—with tailored design standards to support an adaptable and walkable public realm and prioritize transparency, architectural articulation, and seamless adaptability

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<sup>1</sup> A facility or location where people regularly gather for the sale and purchase of food, beverages, flowers, crafts, and other similar goods. Public markets are open daily, year-round, in a permanent location, with multiple vendors that are owner-operated. (b) Enclosed. A public market conducted indoors. [https://berkeley.municipal.codes/BMC/23.502.020\(P\)\(20\)](https://berkeley.municipal.codes/BMC/23.502.020(P)(20))

<sup>2</sup> <https://berkeleyca.gov/sites/default/files/2026-04/2026-04-14%20Item%2013%20Referral%20to%20Establish%20a%20Citywide%20Local%20Density%20Bonus%20Program.pdf>

between various commercial uses. Outside of Designated Nodes, any form type can be selected to meet the requirement, and more than one form type can be combined within a single development.

- The Storefront form type is intended to encourage strong retail-oriented commercial frontage, where residential use is allowed behind the commercial frontage. This form type would be required on all parcels fronting San Pablo Avenue, all parcels fronting University Avenue, all parcels on Gilman Street between San Pablo Avenue and Ninth Street, parcels on the corners of San Pablo Avenue and Cedar and Hopkins Streets, parcels on the corner of Dwight Avenue and San Pablo Avenue, and parcels on Ashby Avenue.
- The Active form type is intended to be functional for a range of non-residential uses and residential amenity spaces. This form type would be allowed on certain side streets within Designated Nodes as an alternative to Storefront.
- The Residential form type is intended to foster social interaction and street activation while providing appropriate transitions between public and private space. This form type would be allowed in a few locations within the Cedar and Dwight Nodes; it is also allowed outside of Designated Nodes.
- The Live/Work form type is intended to support the unique needs of spaces that combine living and working and provide a storefront character to enhance the pedestrian environment. This form type would only be allowed outside of Designated Nodes.
- Development and Design Standards (***Attachment 1, Exhibit C***)

The Specific Plan includes new development standards to encourage additional housing development in the Specific Plan Area (see *Summary of Zoning and Plan Changes* section below). The proposed Design Standards will further the vision of the Specific Plan, by promoting a built form and architectural character that reinforces San Pablo Avenue's distinctive place in the City, that supports walking, and sustains a diverse, active and safe public realm.

### *Streets and Mobility*

Community feedback emphasized the importance of making San Pablo Avenue easier to cross, more comfortable to walk and bike along, and better connected to the surrounding neighborhoods and regional destinations. San Pablo Avenue is a California state highway (State Route 123), subject to the authority of the California Department of Transportation (Caltrans), so the ability of the City to make changes to San Pablo Avenue is limited. The Specific Plan does not focus on transportation improvements to San Pablo Avenue, as the Alameda County Transportation

Commission (ACTC) has completed a multimodal planning study for San Pablo Avenue's entire length through Alameda County. The study led to three improvement projects: the construction of safety improvements along San Pablo Avenue, bus stop improvements, and bicycle facility improvements on roads that run parallel to San Pablo Avenue, as well as a short segment of bicycle and bus lanes on the southern end of San Pablo Avenue in Berkeley.

The Specific Plan includes transportation policies that: 1) provide local context to inform updates of the City's Pedestrian and Vision Zero Action Plans, expected to begin in 2026 or 2027; 2) call for implementation of mobility hubs in collaboration with the Metropolitan Transportation Commission (MTC) and AC Transit; 3) improving safety by managing vehicle speeds and lowering speed limits; and 4) improving multimodal connectivity at key intersections (see Appendix D to the Specific Plan).

### *Public Realm*

The Specific Plan proposes policies and standards for the public realm that make it easy to reach businesses, transit, homes, and parking while also offering spaces to gather, exercise, and socialize.

- Sidewalks

To serve the range of uses and infrastructure located within sidewalks, the Specific Plan establishes design standards for each of three zones: Pedestrian, Amenity, and Frontage. Where sidewalk widths are narrower than preferred in the Berkeley Pedestrian Plan (2020),<sup>3</sup> the Specific Plan would encourage widening as properties are redeveloped. In addition, the Outdoor Commerce Use Fee would be waived for 10 years from permit issuance where sidewalks are widened for commercial uses.<sup>4</sup>

- Streetscape

The Specific Plan updates streetscape standards from the existing San Pablo Avenue Public Improvement Plan (2003) for pedestrian-scale lighting, street furnishing, bus stop improvements, medians, trees, and landscaping. Elements of the streetscape standards would apply to side streets within the Specific Plan Area, including University Avenue.

- Side Street Plazas

The Specific Plan encourages converting minor streets into side street plazas by limiting or removing vehicle access at certain intersections along

<sup>3</sup> [City of Berkeley, Pedestrian Plan. Appendix B: Engineering and Design Guidance, page B-8.](https://berkeleyca.gov/sites/default/files/documents/2020%20Pedestrian%20Plan%20Appendix%20B%20%28adopted%29.pdf) (https://berkeleyca.gov/sites/default/files/documents/2020%20Pedestrian%20Plan%20Appendix%20B%20%28adopted%29.pdf)

<sup>4</sup> [Outdoor Commerce, Sidewalk Seating, and Parklets | City of Berkeley](https://berkeleyca.gov/doing-business/operating-berkeley/operational-permits-businesses/outdoor-commerce-sidewalk-seating) (https://berkeleyca.gov/doing-business/operating-berkeley/operational-permits-businesses/outdoor-commerce-sidewalk-seating)

San Pablo Avenue that generally extend only a few blocks east/west of San Pablo Avenue or that lack a median break. Implementation approaches include public-private partnerships, a future Business Improvement District, and as an open space incentive in new development.

- **Parklets and Curb Extension Common Spaces**

On side streets within the Specific Plan Area, parklets and curb extensions offer opportunities to create community gathering areas, outdoor business spaces and streetscape landscaping within the public right-of-way. To encourage development of these spaces, the Specific Plan proposes waiving the Sidewalk Seating Permit fee for up to 10 years from permit issuance.<sup>5</sup>

- **Pocket Parks and Plazas**

There are no publicly owned park, plazas, or other community spaces located along San Pablo Avenue. Community feedback throughout the planning process emphasized a strong desire for accessible public open space along San Pablo Avenue. The Specific Plan suggests future evaluation of the feasibility of acquiring underutilized parcels for a public park along San Pablo Avenue.

### Design Standards Document

To help achieve the Specific Plan's vision of a built form and architectural character that reinforces San Pablo Avenue's distinctive place in the City, supports walking, and sustains a diverse, active and safe public realm, a Design Standards Document is proposed for adoption with the Specific Plan. The document has been developed with a goal to not adversely affect project feasibility, with language that is objective yet flexible. Compliance would be mandatory. Projects that comply with the applicable standards would be exempt from the City's Design Review process; however, a project proponent could request an exception to any standard, subject to certain findings being made by the Design Review Committee. The document is organized into five sections:

1. **Introduction.** Describes the purpose and applicability of the standards, the guiding principles, and administrative process to revise them.
2. **Site Design.** Provides standards for the arrangement of activities on the site, primarily in relation to the adjacent public space. The site design section includes standards for pedestrian and vehicular access, as well as parking and service locations within a development site.

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<sup>5</sup> Ibid.



3. **Building Design.** Provides architectural standards, including façade modulation and articulation, windows, colors and materials, roofs, and parking garages.
4. **Pedestrian-Level Design.** Provides standards primarily at the ground floor that relate to the building's interaction with sidewalks, adjacent buildings, and open space. The pedestrian-level design section includes standards for ground floor frontages, as well as private and public open space, standards for service and utilities, private parklets and public art.
5. **Glossary.** Defines technical terms not otherwise included in the Zoning Ordinance (BMC Title 23).

### Summary of Zoning and Plan Changes

Detailed descriptions of the proposed zoning changes and General Plan text and map amendments, and a detailed rationale for each proposed change, can be found in the staff report for the Planning Commission's June 3, 2026 meeting (**Attachment 3**). **Table 1** provides a summary of the recommended changes for each development standard and the policy rationale for each recommendation.

Table 1. Summary of Proposed San Pablo Commercial District Development Standards

| Development Standard and Recommendation                                                                                                                                                                                                                                                                                                  | Policy Goal                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Floor Area Ratio (FAR)</b><br>Increase the maximum FAR for mixed-use projects commensurate with the proposed increase in maximum building height.                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>• Help meet Housing Element goals to achieve Regional Housing Needs Allocation (RHNA)</li> <li>• Provide predictability for the review process and outcome</li> <li>• Increase ease of compliance through simplified standards</li> </ul>                                |
| <b>Building Height</b><br>Increase the maximum for mixed-use projects to 7 stories and 75 feet across the district.                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                 |
| <b>Setbacks</b> <ul style="list-style-type: none"> <li>• Add minimum ground-floor front setback for residential and live/work ground-floor frontage types.</li> <li>• Require 5-foot minimum front and side street setbacks on parcels adjacent to residential districts.</li> </ul>                                                     | <ul style="list-style-type: none"> <li>• Encourage context-sensitive infill development</li> <li>• Balance the needs for social interaction at the pedestrian level with privacy for residents.</li> </ul>                                                                                                      |
| <b>Open Space</b> <ul style="list-style-type: none"> <li>• Maintain existing requirement and increase flexibility in meeting open space standard.</li> <li>• Add option to provide personal and/or common private open space within a project, and allow incentives to substitute private for publicly accessible open space.</li> </ul> | <ul style="list-style-type: none"> <li>• Allow flexibility in project design</li> <li>• Encourage social interaction while providing a suitable level of privacy for residents.</li> <li>• Incentivize publicly accessible open space to enhance the pedestrian environment and support placemaking.</li> </ul> |

|                                                                    |                                                                                                              |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Lot Coverage and Building Separation</b><br>No changes proposed | <ul style="list-style-type: none"> <li>• Increase ease of compliance through simplified standards</li> </ul> |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|

### Summary of Proposed Amendments to Existing Plans

Adoption of the Specific Plan and associated Zoning Ordinance amendments requires the following conforming amendments to the University Avenue Strategic Plan and General Plan:

- **University Avenue Strategic Plan.** The Specific Plan Area would be amended to remove the existing San Pablo Avenue Node, as this area would be superseded by the Specific Plan and C-SP zoning district (**see Attachment 1, Exhibit D**).
- **General Plan.** The Land Use Element would be amended to add a new policy – LU-47: San Pablo Avenue Specific Plan – to implement the Specific Plan and take action to achieve its desired outcomes. The C-SP district would be added as a compatible zoning district to the existing Avenue Commercial land use designation. The land use diagram would be revised to apply the Avenue Commercial land use designation to the Specific Plan Area. In addition, the Urban Design and Preservation Element would be amended to add reference to the Specific Plan (**see Attachment 1, Exhibit G**).

### Summary of Proposed Retirements of Existing Plans

The following would be retired with adoption of the Specific Plan:

- **San Pablo Avenue Public Improvements Plan (SPAPIP).** Adopted on December 7, 2004, the SPAPIP was developed to support pedestrians, cyclists, drivers, and transit users, while also revitalizing the area along and surrounding San Pablo Avenue. While many improvements have been completed, the SPAPIP itself is now outdated and would be replaced/superseded by this Specific Plan. The SPAPIP's recommendations served as a foundation for the Specific Plan's public realm framework, informing its policies, programs and design standards (**see Attachment 1, Exhibit F**).
- **West Berkeley Plan (WBP).** Adopted in 1993 and amended in 2011, the WBP serves as the guiding document for land use, economic development, and urban design within West Berkeley. The Specific Plan would supersede portions of the WBP where the two plans overlap. Staff assessed the WBP and found that nearly all of its implementation measures have been completed (**Attachment 4**). The evaluation also reaffirmed that the WBP is primarily implemented through the City's Zoning Ordinance, which includes provisions related to protected

industrial uses, protected non-industrial uses, replacement space requirements and the siting of specific sensitive uses within a mixed-use manufacturing areas. The City Council and Planning Commission expressed support for retiring the WBP as part of adoption of the Specific Plan (**see Attachment 2, Exhibit D**).

## **BACKGROUND**

Land uses along San Pablo Avenue have been shifting away from the historically regional-serving, auto-oriented land use pattern of primarily commercial and light industrial businesses, towards higher density residential and local-serving commercial uses. This transition is beginning to transform the Specific Plan Area into a more vibrant, mixed-use district.

There are three main drivers to creating the Specific Plan: 1) a 2015 City Council referral to develop a plan to guide development on San Pablo Avenue; 2) a 2021 grant awarded by MTC and the Association of Bay Area Governments (ABAG), which designated San Pablo Avenue as a Priority Development Area;<sup>6</sup> and 3) The 2023–2031 Housing Element Update (Program 27), which seeks to develop a San Pablo Avenue Specific Plan to increase development capacity, study design standards, public improvements, and mechanisms to incentivize affordable housing.<sup>7</sup> As part of the Specific Plan development process, the project team produced an assessment of existing conditions, a Policy Options and Development Framework, a Public Review Draft Plan, and memorandums providing analysis and policy options regarding maximum building height, a voluntary commercial in-lieu fee, and a local density bonus program.

### *Community Outreach*

The Specific Plan development process began in June 2023. In the past three years, the project team has conducted outreach as shown in **Table 2**. Staff conducted two community open houses and a community workshop to collect community feedback on the Specific Plan, as well as hosting a walking tour of the Specific Plan Area. Two community surveys were conducted, and the Planning Commission received four status updates and overviews over the course of the project, which provided an opportunity to receive additional feedback from Commissioners and the public. The City Council provided input on the Public Review Draft Specific Plan during a worksession in November 2025. Finally, staff provided a memorandum to the Transportation and Infrastructure Commission at its April 2026 meeting, describing transportation-related changes made to the Specific Plan in response to community feedback on the Public Review draft.

<sup>6</sup> [Priority Development Areas \(PDAs\) | Metropolitan Transportation Commission](https://mtc.ca.gov/planning/land-use/priority-development-areas-pdas).  
(<https://mtc.ca.gov/planning/land-use/priority-development-areas-pdas>)

<sup>7</sup> [City of Berkeley Housing Element Update 2023-2031](https://berkeleyca.gov/sites/default/files/documents/Berkeley_2023-2031%20Housing%20Element_02-17-2023v2_0.pdf).  
([https://berkeleyca.gov/sites/default/files/documents/Berkeley\\_2023-2031%20Housing%20Element\\_02-17-2023v2\\_0.pdf](https://berkeleyca.gov/sites/default/files/documents/Berkeley_2023-2031%20Housing%20Element_02-17-2023v2_0.pdf))

**Table 2. Outreach Process**

|                    |                                                                       |
|--------------------|-----------------------------------------------------------------------|
| October 21, 2023   | Harvest Festival Pop-Up Event                                         |
| November 1, 2023   | Planning Commission Information Item                                  |
| November 2023      | Targeted Survey Results                                               |
| January 24, 2024   | Community Open House #1                                               |
| April 4, 2024      | Planning Commission Status Update and Overview #1                     |
| September 26, 2024 | Community Workshop                                                    |
| October 2024       | Community Survey Results                                              |
| November 16, 2024  | Walking Tour                                                          |
| December 4, 2024   | Planning Commission Status Update and Overview #2                     |
| October 29, 2025   | Community Open House #2                                               |
| November 5, 2025   | Planning Commission Planning Commission Status Update and Overview #3 |
| November 6, 2025   | City Council Worksession                                              |
| March 18, 2026     | Planning Commission Planning Commission Status Update and Overview #4 |
| April 16, 2026     | Transportation Infrastructure Commission Information Item             |
| June 3, 2026       | Planning Commission Recommendation                                    |

***Planning Commission Recommendation – June 3, 2026***

Pursuant to BMC 22.04.020 (Master Plan Amendment Procedures) and 23.412 (Zoning Ordinance Amendments), the Planning Commission held a duly noticed public hearing on June 3, 2026 to review and make a recommendation to the City Council on the proposed Specific Plan, Design Standards Document, Draft Ordinance, General Plan and University Avenue Strategic Plan text and map amendments, and retirement of the West Berkeley Plan and San Pablo Avenue Public Improvements Plan.

At that meeting, the Planning Commission voted (5-2-0-1; Moved by Merker, second by Hauser, Ayes: Hauser, Twu, Marthinsen, Owens, Merker; Noes: Oatfield, Kahn; Abstain: None; Absent: Wang) to recommend adoption of the proposed Specific Plan, Design Standards Document, Draft Ordinance, General Plan and University Avenue Strategic Plan text and map amendments, and retirement of the West Berkeley Plan and San Pablo Avenue Public Improvements Plan. The Planning Commission's motion included the following changes to staff's original recommendation:

- Removal of the minimum residential density standard (see Alternative Actions Considered, below);

- Establishment of a 16 foot minimum sidewalk width standard; and
- Within Designated Nodes, allowing prohibited uses on the ground floor as long as they are fronted by non-prohibited uses that front the sidewalk and are at least 50 feet in lot depth.

#### *Berkeley Fire Department*

Consistent with the Local Hazard Mitigation Plan, staff consulted with the Fire Department on the Planning Commission recommendation. The Fire Department shared the following, which have been added to the San Pablo Specific Plan:

- The Specific Plan should acknowledge that increased population, density, and building height change the community's risk profile, and initiate future review of Fire Department deployment, staffing, facilities, equipment, and the Standards of Coverage and Community Risk Assessment. The Specific Plan should include similar triggers for the preparation of an updated San Pablo Fire/EMS Deployment Impact Analysis.
- In any effort to effect street closures or plaza conversions, the Fire Department should be a principal and early partner in location selection and design, not just a final-stage approver.
- Additional development increases demand for Fire Life Safety Plans Examiners and Fire Prevention Inspectors, for review of proposed plans new construction, and on-going routine fire inspections. The Specific Plan should include development, permit, and/or occupancy triggers for consideration of staffing and funding adjustments to meet increased service demand.
- Transit signal priority provisions should explicitly require emergency-vehicle signal preemption or prioritization, with emergency requests taking precedence over transit priority. The Fire Department should participate in the design, testing, and performance monitoring of these systems.

### ENVIRONMENTAL SUSTAINABILITY AND CLIMATE IMPACTS

#### *Housing Element Update EIR*

Development projections for this project and all reasonably foreseeable growth resulting from development contemplated by the City's updated Housing Element were analyzed in the Environmental Impact Report (EIR) for the 2023-2031 Housing Element Update ("Housing Element Update EIR"), which was certified by the City Council on January 18, 2023.<sup>8</sup>

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<sup>8</sup> Housing Element Update 2023-2031 Final EIR.

[https://berkeleyca.gov/sites/default/files/documents/ATT%202%20FEIR\\_RTC.pdf](https://berkeleyca.gov/sites/default/files/documents/ATT%202%20FEIR_RTC.pdf)

Issues relating to environmental impacts on public services, particularly as they relate to fire protection services, emergency access, and wildfire issues, were analyzed in the Housing Element Update EIR for all reasonably foreseeable growth resulting from development contemplated by the City's updated Housing Element. The specific impact analyses are found in the following impact sections of the Housing Element Update EIR: (1) Section 4.13 (Public Services and Recreation); (2) Section 4.14 (Transportation); (3) Section 4.17 (Wildfire).

#### *EIR Addendum*

The Housing Element Update EIR assumed that approximately 3,682 additional dwelling units would be feasible with implementation of this project. Staff found that the changes to the development standards as currently proposed would allow approximately 8,000 additional dwelling units, an increase in development potential compared to the amount analyzed in the EIR of approximately 4,500 units

The proposed Specific Plan would amend the Zoning Code and Zoning Map to increase residential development potential consistent with the Housing Element Update. The Specific Plan does not allow for any additional growth other than that authorized by the 2023-2031 Housing Element, which was analyzed in the Housing Element Update EIR. Therefore, an Addendum to the Housing Element EIR was prepared (**Attachment 1, Exhibit A**), which demonstrated that the zoning amendments, General Plan and Specific Plan amendments, and retiring of the West Berkeley Plan and San Pablo Avenue Public Improvements Plan would have no new or substantially more severe significant environmental effects than were analyzed for the growth contemplated by the 2023-2031 Housing Element. (See CEQA Guidelines Section 15164.) The impact analyses in the Addendum that correspond to the impact discussion in the EIR are found in Addendum Sections 5.13 (Public Services and Recreation), impacts on Fire Protection; 5.14 (Transportation), impacts on emergency access; and 5.17 (Wildfire). The discussion in these Addendum sections reviewed the previous analyses conducted in the Housing Element Update EIR, including previously adopted mitigation measures, and concluded that no new or substantially more severe significant impacts would occur, and no new mitigation measures are required.

#### RATIONALE FOR RECOMMENDATION

The proposed zoning changes and General Plan text and map amendments associated with adoption of the Specific Plan align with commitments made by the City Council with the adoption of the 2023-2031 Housing Element Update. Staff engaged with various community stakeholders and facilitated multiple meetings involving both the City Council and Planning Commission to discuss and refine the policies and development standards of the Specific Plan. The feedback received during these sessions has been incorporated into the proposed Specific Plan.

#### ALTERNATIVE ACTIONS CONSIDERED

*Minimum Residential Density*

Staff originally recommended a minimum density of 135 dwelling units per acre outside of Designated Nodes and 150 dwelling units per acre within Designated Nodes. The Planning Commission recommended, instead, that the heights and densities be uniform across the entirety of San Pablo Avenue, and suggested a uniform 145 dwelling units per acre standard. The 145 dwelling unit per acre standard was supported by the Planning Commission at its March 18, 2026 meeting as a compromise.

At its June 3, 2026 meeting, the Planning Commission removed the previously recommended Minimum Residential Density standard of 145 dwelling units per acre. In part, the Planning Commission felt that a minimum density standard would discourage larger units, as proposed projects would need to include more, smaller units to meet the proposed minimum density standard.

Council could consider adopting staff's original recommendation of 135 dwelling units per acre, or, if that standard is seen as too high, staff would suggest adopting 100 dwelling units per acre. Such a standard would meet ABAG/MTC's minimum density requirements for eligibility for the Transit-Oriented Communities (TOC) program<sup>9</sup>, while encouraging an urban character that complements the 70 dwelling unit per acre *maximum* density found in the residential districts in proximity to the Specific Plan Area.

*Maximum Height Standard*

At the March 18, 2026 Planning Commission meeting, staff presented the Planning Commission with three options for the Maximum Height Standard within the C-SP zoning district. The options distinguished among the types of projects (residential-only, commercial-only, and mixed-use) and whether a project would be located within or outside of a Designated Node.

- Option 1 removed all variations among project types and locations and presented a uniform seven story maximum height for any project anywhere in the C-SP zoning district.
- Option 2 varied the maximum heights outside of Designated Nodes (3 stories for commercial-only, 4 stories for residential-only, and 7 stories for mixed-used projects), but had a single 8 story maximum height standard for any project within a Designated Node.
- Option 3 varied maximum heights outside of Designated Nodes to encourage residential projects (3 stories for commercial-only, with 7 stories for residential-

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<sup>9</sup> <https://mtc.ca.gov/funding/funding-opportunities/grantee-resources-transit-oriented-communities-priority-development-areas>

only and mixed-use projects), but kept the single 8 story maximum height standard for all projects within a Designated Node, as in Option 2.

As noted above, the Planning Commission did not select any of the three options and instead recommended an increase in the maximum height standard to 7 stories for residential and mixed-use projects anywhere in the C-SP zoning district. The Planning Commission did not recommend changing the existing 3-story height limit for commercial-only projects.

#### *Commercial In-Lieu Fee*

The Public Review Draft Plan recommended establishing a voluntary commercial in-lieu fee program. This program would offer a developer the *option* of paying a fee in-lieu of constructing the required ground-floor commercial space in mixed-use buildings outside of Designated Nodes. This would allow a developer to take advantage of the more generous development standards available to mixed-use buildings in the Draft Plan. Funds derived from the fee would be used to support small business activity in the corridor.

As noted above, the Planning Commission's recommendation removed any distinctions in development standards between mixed-use and residential-only projects, and it removed distinctions in development standards inside and outside of Designated Nodes. As such, there would be no need for an in-lieu fee option to gain access to different development standards. If the City Council were to consider reintroducing such distinctions, an in-lieu fee may serve as an option to support economic development activity.

#### *Local Density Bonus Program*

The Public Review Draft Plan recommended establishing a local alternative to the State Density Bonus. Under the proposed Local Density Bonus Program (Local Program), developers would be permitted to increase densities similarly to the State Density Bonus Program, or could pay a fee to the City's Affordable Housing Fund. As a condition of using the Local Density Bonus Program, a developer would commit to complying with Objective Design Standards included in the Design Standards Document, which could otherwise be waived if a developer were to instead choose to utilize the State Density Bonus.

The proposed Plan includes an implementation step to prepare a pilot program for a Local Density Bonus Program. Unlike the program included in the Public Review Draft, the pilot program would reflect the approach included in the City Council's April 14, 2026 referral.<sup>10</sup>

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<sup>10</sup> [April 14, 2026 City Council Referral – Establish a Citywide Local Density Bonus Program to Facilitate Lower-Cost Ownership Homes \(Condominiums\).](#)



*Prohibited Uses within Designated Nodes*

The Public Review Draft recommended prohibiting certain uses on the ground floor within Designated Nodes (**Attachment 2, Section 9**). Two of the prohibited uses were multi-unit residential and live-work. Similar to existing provisions within the Telegraph Avenue Commercial (C-T) zoning district, the Planning Commission wanted residential uses to be permitted on the ground floor as long as they were located behind a permitted commercial use. To effect this change, the Planning Commission's motion included permitting prohibited uses on the ground floor as long as they were located behind a permitted commercial use of at least 50 feet in depth.

While permitting multi-unit residential and live work uses on the ground floor, the Planning Commission's motion, by including all prohibited uses, included other uses that may not be consistent with the intent of the Designated Nodes or the promotion of more residential units. For example, the list of prohibited uses includes manufacturing, recycled materials processes, parking lots and non-vehicle repair uses.

CONTACT PERSON

Justin Horner, Principal Planner, Planning and Development, 510-981-7476.

## Attachments:

1. Resolution
  - Exhibit A: Addendum to the 2023-2031 Housing Element Update EIR
  - Exhibit B: San Pablo Avenue Specific Plan
  - Exhibit C: San Pablo Avenue Specific Plan Design Standards Document
  - Exhibit D: University Avenue Strategic Plan Amendments
  - Exhibit E: West Berkeley Plan Amendments
  - Exhibit F: San Pablo Avenue Public Improvements Plan Amendments
  - Exhibit G: General Plan Amendments
2. Ordinance – Zoning Ordinance Text and Map Amendments
3. June 3, 2026 Planning Commission Staff Report
4. West Berkeley Plan Implementation Measures Assessment Table
5. Public Hearing Notice

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(<https://berkeleyca.gov/sites/default/files/2026-04/2026-04-14%20Item%2013%20Referral%20to%20Establish%20a%20Citywide%20Local%20Density%20Bonus%20Program.pdf>)

RESOLUTION NO. ##,###-N.S.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY BERKELEY ADOPTING PROPOSED AMENDMENTS TO TITLE 23 OF THE BERKELEY MUNICIPAL CODE AND THE ZONING MAP, TO CREATE THE SAN PABLO COMMERCIAL ZONING DISTRICT AND ADOPT THE SAN PABLO AVENUE SPECIFIC PLAN AND DESIGN STANDARDS DOCUMENT, AS WELL AS CONFORMING AMENDMENTS TO THE UNIVERSITY AVENUE STRATEGIC PLAN, THE WEST BERKELEY PLAN, THE SAN PABLO AVENUE PUBLIC IMPROVEMENTS PLAN, AND THE GENERAL PLAN LAND USE ELEMENT AVENUE COMMERCIAL LAND USE DESIGNATION AND LAND USE DIAGRAM, TO REDESIGNATE CERTAIN PARCELS WITHIN THE PROJECT AREA TO BE CONSISTENT WITH ASSOCIATED TEXT AMENDMENTS.

WHEREAS, the City of Berkeley ("City"), in accordance with the provisions of California Government Code Section 65300 et seq., is required to adopt a General Plan for its long-range development, and further to periodically update that plan to reflect current conditions; and

WHEREAS, the City adopted the West Berkeley Plan in 1993, and adopted amendments to that plan in 1999 and 2011; and

WHEREAS, the City adopted the University Avenue Strategic Plan in 1996; and

WHEREAS, the City adopted the San Pablo Avenue Public Improvements Plan in 2003; and

WHEREAS, the amendments do not change the designation of any parcel to reduce the intensity of use allowed under the existing General Plan or zoning pursuant to Gov. Code section 66300(b)(1); and

WHEREAS, the adopted Housing Element Update (HEU) includes "Program 27 – Priority Development Areas (PDAs), Commercial and Transit Corridors" to develop a San Pablo Avenue Specific Plan to increase allowed densities and/or development capacity, and study design standards, public improvements, and mechanisms to incentivize affordable housing by December 2025; and

WHEREAS, on July 14, 2015, the City Council forwarded a referral to the Planning Commission to develop a Plan to guide development on San Pablo Avenue; and

WHEREAS, on July 13, 2021, the City Council adopted Resolution No. 69,953-N.S. accepting a \$750,000 Priority Development Area (PDA) planning grant from the Metropolitan Transportation Commission (MTC) to develop the San Pablo Avenue Specific Plan; and

WHEREAS, the City held community engagement workshops on the following dates: January 24, 2024, September 26, 2024, and October 29, 2025; and

WHEREAS, the Planning Commission held discussions on the San Pablo Specific Plan on the following dates: April 3, 2024, December 4, 2024, November 5, 2025, and March 18, 2026; and

WHEREAS, on March 4, 2025, letters were sent to tribes with traditional lands or places located within the geographical areas affected by the proposed changes, to provide opportunity for tribal consultation, pursuant to Government Code Section 65352.3(a)(2). No requests for consultation were received; and

WHEREAS, on June 3, 2026, the Planning Commission held a duly noticed public hearing and considered all public comments received, the presentation by City staff, the staff report, and all other pertinent documents regarding the proposed request; and

WHEREAS, at that hearing, pursuant to California Government Code Section 65354, the Planning Commission made the following findings to support its recommendation for the General Plan, University Avenue Strategic Plan, West Berkeley Plan, and San Pablo Avenue Public Improvement Plan text and map amendments included as Exhibits of this resolution:

- (1) The proposed amendment is in the public interest. The proposed General Plan, University Avenue Strategic Plan, West Berkeley Plan, and San Pablo Avenue Public Improvement Plan amendments serve the public interest by facilitating additional housing capacity and production in a transit-rich area of the City, to better meet housing demand, increase business activity to support a thriving community, enhance interaction between public and private spaces, and improve local and citywide access to and from the Plan Area.
- (2) The proposed amendment is consistent and compatible with the General Plan. The proposed General Plan, University Avenue Strategic Plan, West Berkeley Plan, and San Pablo Avenue Public Improvement Plan amendments support a pedestrian-friendly, visually attractive area of pedestrian scale and serve neighborhood needs by providing ground floor commercial standards and permitting a range of commercial uses that are compatible with residential uses, consistent with General Plan Policy LU-27. Further, the amendments ensure internal consistency among General Plan elements. The potential effects of the proposed amendment have been evaluated and have been determined not to be detrimental to the public health, safety, or welfare. The General Plan amendments would not be detrimental to the public health, safety and welfare of the City because they would facilitate development that would be completed in compliance with current building and fire codes and regulations; and would be subject to the City's standard conditions of approval regarding noise and air quality, waste diversion, toxics and stormwater requirements, as well as applicable mitigation measures included in the Housing Element Update EIR; and

WHEREAS, on May 15, 2026, a public hearing notice was provided to tribes with traditional lands or places located within the geographical areas affected by the proposed changes, pursuant to Government Code Section 65352.3(a)(2), for the public hearing held on June 3, 2026; and

WHEREAS, a public hearing notice was published in the Berkeley Voice and posted in three public places pursuant to California Government Code Section 65090 on May 15, 2026 and May 22, 2026 for the public hearing held on June 3, 2026; and

WHEREAS, all documents constituting the record of this proceeding are and shall be retained by the City of Berkeley Planning and Development Department, Land Use Planning Division, at 1947 Center Street, Berkeley, California; and

WHEREAS, in connection with the amendments, an Addendum to the certified Final Environmental Impact Review (EIR) pursuant to Section 15164 of the CEQA Guidelines has been prepared that describes the changes the proposed Project would have to the HEU, and compares the impacts of those changes to the impacts of the HEU identified in the EIR; and

WHEREAS, the Addendum to the certified Final EIR determined that potential impacts associated with the proposed Project are consistent with potential impacts disclosed and analyzed in the EIR. That is, the proposed Project would not result in any new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the EIR. Further, no new information of substantial importance exists which would require major revisions of the HEU EIR. Therefore, none of the conditions outlined in CEQA Guidelines Section 15162(a)(1-2) requiring preparation for a subsequent EIR have been met. Further, none of the conditions outlined in CEQA Guidelines Section 15162(a)(3)(A-D) requiring preparation of a subsequent EIR have been met; and

WHEREAS, based on the analysis contained in the Addendum, no further evaluation of environmental impacts is required for the proposed Project, no subsequent EIR is required pursuant to CEQA Guidelines Section 15162, and the Addendum is the appropriate level of environmental analysis and documentation for the proposed Project pursuant to CEQA Guidelines Section 15164, and therefore the Mitigation Monitoring and Reporting Program in the Final EIR sufficiently addresses impacts from the proposed Project; and

WHEREAS, the Addendum demonstrates that the proposed Project was analyzed as HEU Program 27 in the 2023 EIR and the Addendum further demonstrates that the Project proposes to modify HEU Program 27 but these modifications do not result in the need to prepare a subsequent or supplemental EIR. Consequently, pursuant to CEQA Guidelines Section 15168(c)(2), no further environmental review is required; and

WHEREAS, public hearing notice was published in the Berkeley Voice, posted at each street frontage adjacent to properties proposed for rezoning, and mailed to all property owners, tenants, and residents within properties proposed to be rezoned

pursuant to California Government Code Section 65090 and BMC Section 23.404.040 for the City Council hearing on September 29, 2026.

NOW, THEREFORE, IT BE RESOLVED that the City Council of the City of Berkeley: 1) Adopt findings in support of a separately proposed Zoning Ordinance amendment to establish a San Pablo Commercial (C-SP) zoning district; 2) Amend the General Plan and Land Use Diagram to incorporate the C-SP zoning district into the existing Avenue Commercial (AC) land use designation and redesignate certain parcels within the project area to be consistent with the C-SP zoning district; 3) Amend the University Avenue Strategic Plan to conform to the C-SP zoning district text and map amendments; 4) Retire the West Berkeley Plan; and 5) Retire the San Pablo Avenue Public Improvement Plan.

Pursuant to Berkeley Municipal Code Section 23.412.060, the City Council makes the following findings to support its recommendation for the zoning ordinance amendments:

- (1) The proposed amendments are consistent with the General Plan and any applicable specific plan or area plan. The Zoning Ordinance amendments are consistent and compatible with the General Plan, as the proposed San Pablo Commercial (C-SP) district will support a pedestrian-friendly, visually attractive area of pedestrian scale and serve neighborhood needs by providing ground-floor commercial standards and permitting a range of commercial uses that are compatible with residential uses, consistent with General Plan Policy LU-27.
- (2) The proposed amendments are consistent with state law. The Zoning Ordinance amendments are consistent with state law because they do not reduce the intensity of use allowed under the existing General Plan or zoning pursuant to Gov. Code section 66300(b)(1). Further, staff prepared an Addendum to the HEU EIR in accordance with CEQA Guidelines to evaluate the potential environmental effects of adoption and implementation of the proposed zoning and General Plan and West Berkeley Plan amendments.
- (3) The proposed amendments will not be detrimental to the public interest, health, safety, convenience, or welfare. The Zoning Ordinance amendments serve the public interest by facilitating implementation of the San Pablo Specific Plan. The Plan goals include increased diversity and supply of housing, increased business activity to support a thriving community, enhanced interaction between public and private spaces, and enhanced local and citywide access. The Zoning Ordinance amendments will not result in the immediate approval of any specific development project. Any future development project will continue to be subject to the City's development and environmental review procedures.
- (4) The proposed amendments are internally consistent with other applicable provisions of the Zoning Ordinance. The Zoning Ordinance amendments to create the C-SP district and retire the West Berkeley Plan include non-substantive revisions to the Zoning Ordinance to ensure internal consistency.

- (5) The affected site is physically suitable in terms of design, location, shape, size, and other characteristics to ensure that the permitted land uses and development will comply with the Zoning Ordinance and General Plan and contribute to the health, safety, and welfare of the property, surrounding properties, and the community at large. The affected sites are physically suitable for the proposed Zoning Map Amendments to create the C-SP district, as the changes implement General Plan policies related to commercial land use designations.

**Exhibits:**

- A. Addendum to the Housing Element Environmental Impact Report
- B. San Pablo Avenue Specific Plan
- C. San Pablo Avenue Specific Plan Design Standards Document
- D. University Avenue Specific Plan Amendments
- E. West Berkeley Plan Amendments
- F. San Pablo Avenue Public Improvements Plan Amendments
- G. General Plan Amendments

## San Pablo Avenue Specific Plan

### CEQA Review Document

### 2023-2031 Housing Element Update Final EIR Addendum (SCH #2022010331)

City of Berkeley

September 1, 2026

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## I. INTRODUCTION

This document is an Addendum to the 2023-2031 Housing Element Update Environmental Impact Report (State Clearinghouse #2022010331) (“**2023 HEU EIR**”), which was prepared for the City of Berkeley’s 2023-2031 Housing Element Update (“**HEU**”). The agency subsequently prepared an addendum to this certified EIR: (1) the Southside Zoning Implementation Project Addendum (August 2023). On January 18, 2023 the Berkeley City Council certified the HEU EIR, adopted the Mitigation Monitoring and Reporting Program, and approved the HEU. The Southside Zoning Implementation Project Addendum to the 2023 HEU EIR was considered by the City in November 2023.

This Addendum demonstrates that the proposed San Pablo Avenue Specific Plan (hereinafter referred to as “the Specific Plan project” or “the Specific Plan”) was analyzed as HEU Program 27 in the 2023 EIR. It describes the changes in the HEU and other associated implementation actions that constitute the CEQA project and compares the impacts of those changes to the impacts of the HEU identified in the 2023 HEU EIR. Specific Plan Adoption will also require the City to approve General Plan text and map amendments for the San Pablo Avenue Specific Plan Area (the “Specific Plan Area”); Municipal Code and Zoning Map amendments; the adoption of the San Pablo Avenue Design Standards (SPADS); and the retirement of the West Berkeley Plan (WBP) and the San Pablo Avenue Public Improvements Plan (SPAPIP). These approvals are collectively included in the “Specific Plan project” and considered throughout this analysis. The analysis in this Addendum concludes that the proposed project does not require preparation of a subsequent EIR because none of the conditions outlined in Section 15162 have been met. Therefore, pursuant to State CEQA Guidelines Section 15168, no further environmental review is required.

Pursuant to State CEQA Guidelines section 15150, an addendum “may incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public.” Accordingly, the environmental analysis and mitigation measures identified in the 2023 HEU EIR are incorporated by reference into this CEQA Review Document/Addendum. Where the analysis in this Addendum relies on HEU EIR, the findings relied upon are briefly summarized and cross-referenced.

The Final 2023 HEU EIR is available for review via the following:

- **Digital copy** can be accessed at the following link: <https://berkeleyca.gov/construction-development/land-use-development/general-plan-and-area-plans/housing-element-update>.
- **Paper copy** is available for in person review during the hours of 8:30 AM to 4:00 PM, Mon – Thursday at: City of Berkeley, Land Use Planning Division, 1947 Center Street, Second Floor, Berkeley, California 94704

This addendum demonstrates that the San Pablo Avenue Specific Plan and associated actions and approvals (“the project”) would not result in new or more significant impacts than those analyzed in the 2023 HEU EIR. The Plan will increase the projected HEU buildout considered in the 2023 HEU EIR from approximately 19,098 units to 23,598 units, an increase of approximately 4,500 units. This CEQA Review Document demonstrates that no subsequent or supplemental EIR is necessary; rather, it finds that the 2023 HEU EIR adequately analyzes the project and that therefore an Addendum is sufficient with respect to CEQA compliance.

Pursuant to Section 15164 of the CEQA Guidelines,<sup>1</sup> a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 – requiring a subsequent EIR – have occurred. Under Section 15162 (a), a subsequent EIR is only required if substantial evidence demonstrates one or more new significant impacts not discussed in the previous EIR or a substantial increase in the severity of previously identified significant impacts due to substantial changes are proposed in the project, substantial changes occur with respect to the circumstances under which the project is undertaken, or new information of substantial importance require major revisions.

Regarding preparation of an addendum to an EIR, Section 15164 of the CEQA Guidelines states that:

- The lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred (Section 15164(a)).
- An addendum need not be circulated for public review but can be included in or attached to the final EIR (Section 15164(c)).
- The decision-making body shall consider the addendum with the Final EIR prior to making a decision on the project (Section 15164(d)).
- A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency’s findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence (Section 15164(e)).

Further, Section 15168(c)(2) of the CEQA Guidelines states that with respect to later activities in a program that were analyzed in a programmatic EIR, if an agency finds that no subsequent EIR is required pursuant to Section 15162 then it may approve the project without a new environmental document.

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<sup>1</sup> California Code of Regulations, Title 14, § 15000 et seq. (CEQA Guidelines).

## II. 2023-2031 HOUSING ELEMENT UPDATE (HEU) PROJECT OVERVIEW

The 2023-2031 Housing Element Update (HEU) project amended the City's General Plan by replacing the 5th Cycle Housing Element with the 2023-2031 6th Cycle Housing Element and amended other portions of the City's General Plan as needed for consistency and HEU implementation. The City's Regional Housing Needs Allocation (RHNA) for the 2023-2031 planning period was 8,934 units, distributed among four income categories (very low, low, moderate, and above moderate). To meet the RHNA, the City assessed the capacity to provide sites to meet the RHNA in three categories: Likely Sites, Pipeline Sites, and Opportunity Sites. The Likely Sites, Pipeline Sites and Opportunity Sites together constituted the 2023 HEU EIR Sites Inventory of 15,153 units.<sup>2</sup> Out of the 15,153 units, a total of 3,429 units are within the San Pablo Avenue PDA Specific Plan Area. Additional HEU implementation programs and zoning policies, including the Middle Housing Rezoning and Southside Zoning Modification Project, as well as additional anticipated units at the Ashby and North Berkeley BART stations resulting in an additional 3,945 housing units for a total of 19,098 units anticipated as a result of the HEU (see **Table 1** for a summary).

**TABLE 1      2023 HEU EIR PROJECTED BUILDOUT**

| Source                                                                                | Total Units   |
|---------------------------------------------------------------------------------------|---------------|
| <b>2023 HEU EIR Sites Inventory</b>                                                   |               |
| Outside of Specific Plan Area                                                         | 11,724        |
| Within San Pablo Avenue PDA Specific Plan Area                                        | 3,429         |
| <b>Total EIR Sites Inventory</b>                                                      | <b>15,153</b> |
| <b>Implementation Programs</b>                                                        |               |
| Middle Housing Rezoning, Southside Zoning Modification, Ashby and North Berkeley BART | <b>3,945</b>  |
| <b>OVERALL 2023 HEU EIR GROWTH ASSUMPTION</b>                                         | <b>19,098</b> |

Source: City of Berkeley 2023.

Specifically, Program 27 provides that the City "will be developing a San Pablo Avenue Corridor PDA Specific Plan, which will increase allowed densities and/or development capacity, and study design standards, public improvements, and mechanisms to incentivize affordable housing. The Housing Element sites inventory identifies 64 sites completely or partially within the San Pablo Avenue PDA, accounting for a total of 3,429 anticipated units (665 very low income, 599 low income, 353 moderate income, and 1,812 above moderate income units)."

<sup>2</sup> Likely Sites included 4,685 units with an estimated 800 ADUs; Pipeline Sites included 2,415 units; and Opportunity Sites included 8,053 units.

### III. 2023-2031 HOUSING ELEMENT UPDATE EIR

The 2023 HEU EIR evaluated potential environmental consequences associated with the HEU for each environmental issue area identified in the *CEQA Guidelines*, Appendix G checklist. The 2023 HEU EIR found the following impacts to be less than significant without mitigation: aesthetics, biological resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services and recreation, transportation, and utilities and service systems.

The 2023 HEU EIR found that the following impacts would have less-than-significant impacts with implementation of mitigation measures identified in the EIR:

- Air Quality (LTS with Mitigation)
- Cultural Resources (CUL-3, CUL-4) (LTS with Mitigation)
- Geology and Soils (GEO-1) (LTS with Mitigation)
- Tribal Cultural Resources (TCR-1) (LTS with Mitigation)

Mitigation Measure AQ-1 (Construction Emissions Reduction Measures), Mitigation Measure AQ-2 (Construction Health Risk Assessment), and Mitigation Measure AQ-3 (TAC Exposure Reduction Building Measures) would reduce air quality impacts to less than significant levels.

No mitigation measures beyond the identified standard conditions of approval are necessary to reduce Archaeological Resources (CUL-3) and Human Remains (CUL-4) to less than significant levels.

Mitigation Measure GEO-1 (Protection of Paleontological Resources) would reduce geology and soils impacts to less than significant levels.

Mitigation Measure TCR-1 (Tribal Cultural Monitoring) would reduce tribal cultural resources impacts to less than significant levels.

The 2023 HEU EIR found that the HEU would have significant and unavoidable impacts related to:

- Cultural Resources (CUL-1 and CUL-2) (SU)
- Noise (SU)
- Wildfire (SU)

Mitigation Measure CUL-1 (Historic Context Statement, Cultural Resources Survey and Designations) and Mitigation Measure CUL-2 (Historic Resources Discretionary Review) would reduce cultural resources impacts to the maximum extent feasible. However, even with implementation of mitigation measures, existing historical resources and historical resources eligible for listing could still be materially impaired by future development that would be carried

out under the HEU. Therefore, cultural resources impacts would remain significant and unavoidable.

The 2023 HEU EIR also found that the HEU would have significant and unavoidable impacts related to noise. Although future development facilitated by the HEU would be required to comply with the City's Standard Conditions of Approval, which would reduce construction noise impacts to the extent feasible, larger developments involving lengthier construction durations with the use of larger, heavy-duty equipment could still exceed the City's standards for stationary equipment in both multi-family residential and commercial zones. Furthermore, construction noise levels could exceed the City's standards at multiple sites where the HEU would facilitate development in Berkeley. Therefore, construction noise impacts would remain significant and unavoidable.

The 2023 HEU EIR also found that the HEU would have significant and unavoidable impacts related to wildfire. Adherence to City regulations and procedures and implementation of Mitigation Measure W-1 (Undergrounding of Power Drops in the VHFHSZs) would reduce the risk of fire during construction, but not to a less-than-significant level. That is because, for some development projects, even with implementation of wildfire prevention measures, impacts may result from the potential for unusual site-specific or road conditions, project characteristics, and the general ongoing fire risk in Berkeley Hills. Therefore, wildfire impacts would remain significant and unavoidable.

## IV. PROJECT DESCRIPTION

### A. Project Location

The project site/Specific Plan area encompasses the 2.35-mile corridor along San Pablo Avenue, from the Berkeley/Oakland border in the south, to the Berkeley/Albany border in the north and totals approximately 11.7 acres, as shown in **Figure 1**. The Specific Plan Area includes parcels fronting on and adjacent to San Pablo Avenue. Additionally, it covers parcels along University Avenue between Ninth Street and Curtis Street and about 100 feet along some side streets. It also covers some parcels fronting on other side streets and some parcels on the west side of San Pablo Avenue that front onto Tenth Street.

### B. Existing Conditions

The Specific Plan Area has a mix of existing land uses with a significant amount of single and multi-family residential that vary significantly in density and scale. Other uses include a range of light industrial; commercial including retail, vehicle repair, offices and food and alcohol service; personal and household services; retail financial services; and public and quasi-public uses (e.g. community centers, privately-owned publicly accessible open space [POPOS]). Similar uses extend into Albany to the north and Oakland to the south including personal and professional services, food and alcohol services, multi-family residential, auto-related commercial uses.

As shown in **Figure 1**, the existing zoning district for properties fronting on San Pablo Avenue is predominantly West Berkeley Commercial (C-W). The portion of University Avenue within the Specific Plan Area includes both C-W and University Avenue Commercial (C-U). Other zoning districts in proximity to the study area include: Mixed Use-Light Industrial (MU-LI), Mixed Use-Residential (MU-R), Restricted Two-Family Residential (R-2), Restricted Multiple-Family Residential (R-2A), and Multi-Family Residential (R-4). **Figure 1** also shows the 64 HEU opportunity sites located within the Specific Plan Area.

The 1993 West Berkeley Plan and the City's zoning also delineate Commercial Designated Nodes at the following major intersections along San Pablo Avenue: Gilman Street, Cedar Street, University Avenue, Dwight Way, and Ashby Avenue, as shown in **Figure 1**. The purpose of the nodes is to intensify retail, commercial, and mixed-use activity to support a commercial and pedestrian-oriented environment by requiring new development to include certain ground-floor commercial uses.

### C. Proposed Project

The San Pablo Avenue Corridor was identified as a priority development area in Program 27 of the City's HEU to address housing scarcity, promote fair housing, and overcome barriers to development. The Specific Plan Area has strong access to transit, schools, and jobs, but has produced less housing than other areas of the City. The proposed Specific Plan/project would encourage development of housing and diverse commercial uses in the Specific Plan Area by lowering the permit thresholds for some uses, expanding the allowable uses, reducing minimum setbacks and allowing greater height, residential density and Floor Area Ratio (FAR). Additionally, the proposed project would include policies and standards that encourage and allow mixed uses and live/work strategies. The proposed project would include adoption of the Specific Plan, adoption of the San Pablo Avenue Design Standards (SPADS), amendments to the Zoning Ordinance and Zoning Map, amendments to the General Plan text and map, and retirement of the West Berkeley Plan (WBP) and the San Pablo Avenue Public Improvements Plan (SPAPIP).

The proposed project would require amendments to the Zoning Ordinance and Zoning Map to create a new zoning district – Commercial San Pablo (C-SP). **Table 2** below summarizes the proposed development standard changes associated with the proposed zoning, where highlighted cells identify the changes.

**TABLE 2      EXISTING AND PROPOSED DEVELOPMENT STANDARDS**

| Zone / Category      | FAR  | Maximum Height | Maximum Stories |
|----------------------|------|----------------|-----------------|
| <b>Existing C-W</b>  |      |                |                 |
| Single-Use           | 3.0  | 40'            | 3               |
| Mixed-Use            | 3.0  | 50'            | 4               |
| <b>Proposed C-SP</b> |      |                |                 |
| Non-Residential Only | 3.0  | 40'            | 3               |
| Residential-Only     | 4.25 | 75'            | 7               |
| Mixed-Use            | 4.25 | 75'            | 7               |

Source: City of Berkeley Municipal Code and San Pablo Avenue Specific Plan, 2026.

To ensure consistency with the City's Zoning Ordinance, the following rezoning actions would be included with adoption of the Specific Plan:

- Rezone existing C-W parcels within the Specific Plan Area to C-SP.
- Rezone existing C-U parcels within the Specific Plan Area to C-SP.
- Rezone 12 parcels to eliminate existing split-zoned properties. These changes are limited to parcels fronting on either San Pablo Avenue or University Avenue, and will result in the



subject parcel being zoned C-SP. In cases where the split-zoned portion of a parcel fronts on a side-street, the split zone would be maintained.

- Establish C-SP nodes and remove the C-W designated nodes and the C-U node that are located within the Specific Plan Area.

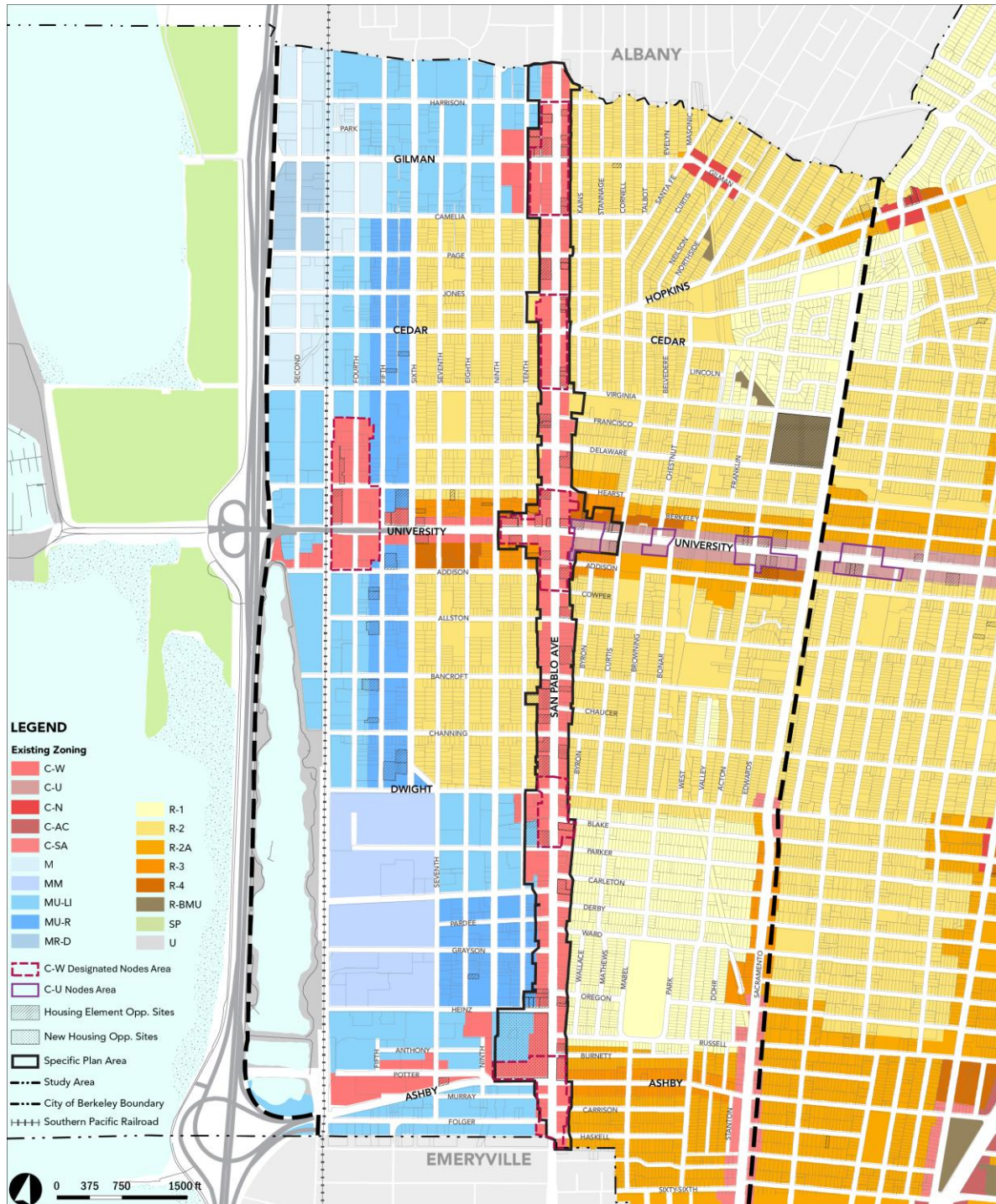
The proposed zoning district changes are shown in **Figure 1** and **Figure 2**. Parcels in the Specific Plan Area zoned MU-LI, R-1, R-2, or R-3 would retain their existing zoning designation. While they fall within the PDA boundary that received the Planning Grant for the creation of this Plan, they are not subject to any of the above rezoning actions.

Additionally, the Specific Plan includes policies to improve the public realm along San Pablo Avenue. Implementation of these policies would be beneficial for the pedestrian and cyclist experience and circulation of the Specific Plan Area is discussed further in the *Hazard and Hazardous Materials* and *Transportation* sections and is not anticipated to result in any significant adverse impacts.

The proposed project would require General Plan amendments including text changes to land use designations, text for overlapping Area Plans, such as the University Avenue Specific Plan, and map amendments to reflect the zoning change by re-designating parcels zoned as C-SP as Avenue Commercial (AC).

The proposed project also includes the retirement of the West Berkeley Plan (WBP) and the San Pablo Avenue Public Improvements Plan (SPAPIP). The WBP was adopted in 1993 and was “intended to guide the development of West Berkeley at least until the year 2005.” The WBP includes goals and policies related to land use, environmental quality and transportation. The overwhelming majority of the WBP’s implementation steps have been completed, including all of the WBP’s recommended changes to the Zoning Ordinance. Important WBP goals including the preservation of industrial uses and blue-collar jobs, replacement requirements for certain important uses and policies regarding the colocation of industrial and artisan uses with residential and other sensitive uses are all enshrined in the Zoning Ordinance and its Manufacturing zoning district regulations. Retirement of the WBP would therefore not result in any policy change, as the WBP’s goals and programs are either existing BMC requirements, BMC requirements that were adopted and have since been changed, or were considered and not adopted subsequent to the adoption of WBP. The underlying General Plan and Zoning Ordinance already control development within the WBP Area. Therefore, the repeal does not change development capacity nor remove any existing General Plan policy related to industrial uses within what is now the WBP Area. Retiring the SPAPIP would also not result in additional impacts because the action is administrative clean-up and the standards in the Plan are being moved into the Specific Plan, removing a redundant plan. The Specific Plan, SPADS, Zoning Ordinance text and map amendments, and General Plan text and map amendments would be implemented together to

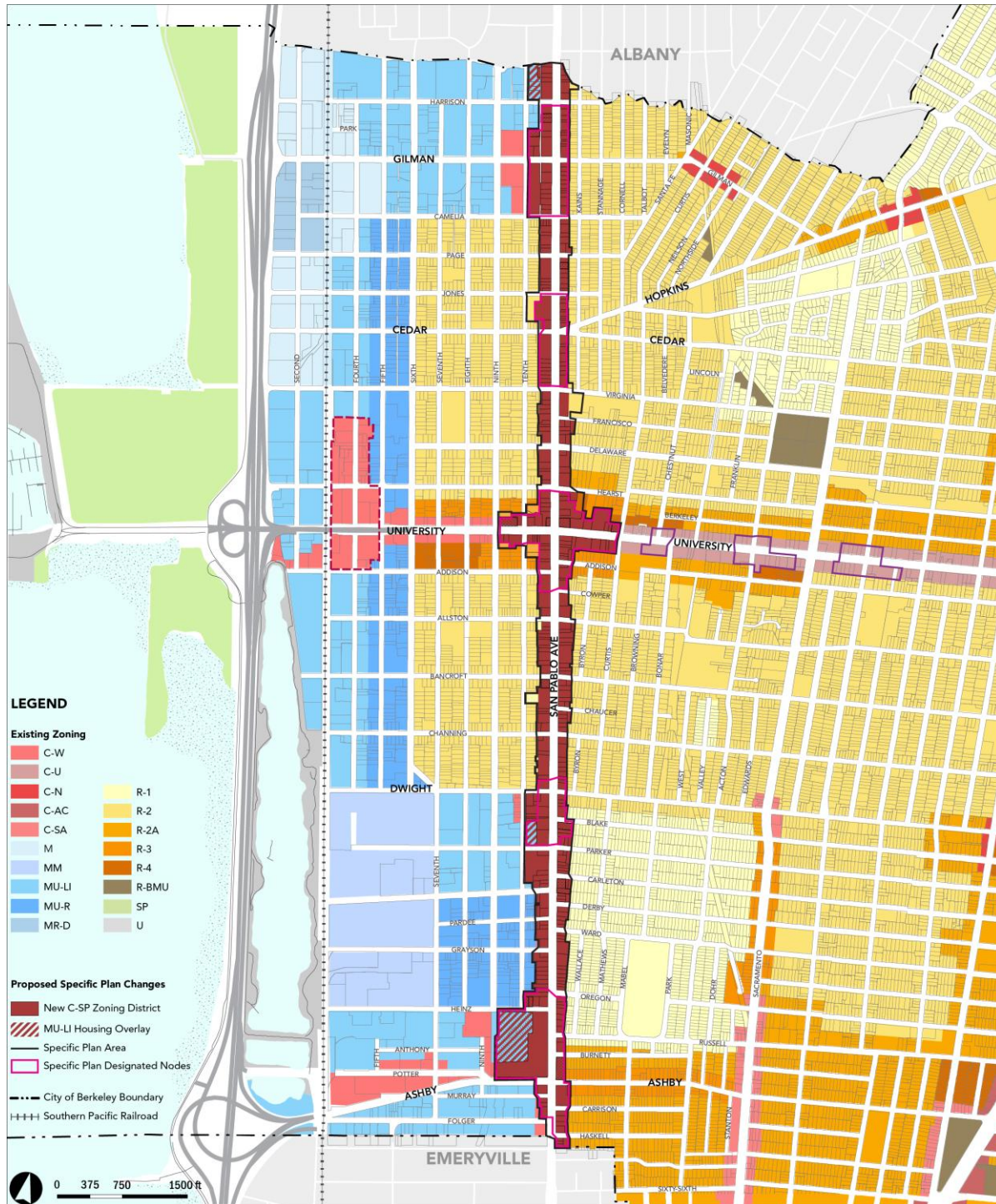
increase development capacity within the Specific Plan Area. Accordingly, the proposed project comprises all of these actions (as well as repeal of the WBP), and this addendum analyzes the potential impacts associated with the increased development capacity resulting from their combined implementation.

**FIGURE 1 PROJECT LOCATION AND EXISTING ZONING**

Source: City of Berkeley, 2023 and Community Design + Architecture, 2025.



FIGURE 2 PROPOSED ZONING



Source: City of Berkeley, 2023 and Community Design + Architecture, 2025.

**D. Proposed Project Buildout Assumptions**

As discussed in section II. *2023-2031 Housing Element Update (HEU) Project Overview*, the 2023 HEU EIR analyzed a buildout of 3,429 units for the Likely, Pipeline, and Opportunity sites within the San Pablo PDA Plan Area. During the early stages of the Specific Plan development and boundary assessment, the PDA boundary was refined, and select parcels located along University Avenue in the University Avenue Commercial (C-U) and West Berkeley Commercial (C-W) zoning districts, and parcels located in Residential (R) and Mixed Use Light Industrial (MU-LI) zoning districts were included or excluded based on split zoning, near-term development, ownership, or other boundary inconsistencies. As a result, the Specific Plan Area is slightly larger, including 15 additional opportunity sites, compared to the San Pablo Avenue PDA and, therefore, the proposed project is anticipated to include 3,682 units from Likely, Pipeline, and Opportunity sites identified in HEU.

The maximum buildout scenario that may occur with the proposed project is shown below in **Table 3** and provides the basis for this analysis. As shown in **Table 3**, the project could result in up to 8,000 new units in the Specific Plan Area. This new unit total is based on the following maximum buildout<sup>3</sup>:

- 1,500 Remaining (unbuilt) HEU Likely and Pipeline units (i.e., approved projects and projects under review), as of August 2025.
- 3,900 HEU Opportunity units that are assumed to develop based on the Specific Plan development standards, which allow a greater level of density than assumed in the HEU.
- 1,500 New Specific Plan Opportunity units that are assumed to develop based on the development standards.
- 1,100 Opportunity units are assumed to develop from the utilization of State Density Bonus Law (SDBL) on every opportunity site in the Specific Plan Area up to 8-stories.

**TABLE 3      MAXIMUM BUILDOUT ASSUMPTIONS UNDER THE PROPOSED PROJECT**

| Units                                   | Specific Plan Area |
|-----------------------------------------|--------------------|
| Maximum Buildout (Units)                | 8,000              |
| Remaining HEU Likely and Pipeline Units | 1,500              |
| HEU Opportunity Units                   | 3,900              |
| New Specific Plan Opportunity Units     | 1,500              |
| SDBL Opportunity Units                  | 1,100              |
| <b>Total</b>                            | <b>8,000</b>       |
| Assumed HEU Units                       | (3,682)            |
| <b>PROJECTED ADDITIONAL UNITS</b>       | <b>4,318</b>       |

Source: City of Berkeley, 2023, and San Pablo Avenue Specific Plan.

<sup>3</sup> Rationale for the buildout assumptions are further explained in Appendix C of the Specific Plan.

The proposed project therefore has a maximum potential build out of up to an additional **4,318 units** within the Specific Plan Area compared to those analyzed in the HEU. For the purposes of this analysis, the number of potential additional units compared to the HEU is **4,500 units, providing a buffer of 182 units or 4 percent.**

Future residential projects under the proposed project may be eligible to utilize provisions of the State Density Bonus.<sup>4</sup> The State Density Bonus program encourages the development of on-site affordable housing, including up to a 50 percent increase in project densities for most projects, depending on the amount of affordable housing provided. Additional bonuses are possible up to 100 percent density bonus if additional affordable housing is provided. The State Density Bonus program also includes a package of incentives intended to help make the development of affordable and senior housing economically feasible. These include waivers and concessions, such as reduced setbacks, increased height or modified open space and other requirements. Whether an individual project will utilize the State Density Bonus, or which aspects of State Density Bonus law an individual project would utilize, is difficult to predict. However, based on recent trends, multi-family residential projects in higher density residential and commercial zoning districts are most likely to utilize the State Density Bonus if it allows them to maximize mid-rise construction types (6-8 stories in height; see **Appendix C State Density Bonus Analysis**). This is partly due to the requirements of Berkeley's inclusionary housing ordinance, which would qualify a project for the bonus if they build the required affordable housing on-site. Using the bonus to build high-rise construction, generally 9 stories or above, would be unlikely due to the higher per square foot construction costs for high-rise buildings, although projects may utilize the bonus to obtain concessions and waivers that improve project feasibility. Accordingly, the development assumptions used for this analysis assume that all opportunity sites in the Specific Plan area would develop 8-story buildings.

In addition, based on projections of development potential in the Specific Plan Area, it is estimated that the proposed project would reduce the maximum potential buildout of commercial area by up to 319,600 square feet, from 1,202,400 square feet to 1,171,000 square feet.<sup>5</sup>

The 2023 HEU EIR was a program EIR that analyzed the impacts of the City's HEU, including HEU Program 27, which called upon the City to "create multi-unit objective development standards, which would include standards to increase development potential, including but not limited to, increasing building height, coverage, floor area ratio, and reducing setbacks and building separation, and allowing for more flexibility in the calculation and configuration of open space, particularly along transit corridors." The proposed project is designed to implement Program 27.

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<sup>4</sup> Cal. Gov't Code §§ 65915–65918.

<sup>5</sup> Rationale for the buildout assumptions are further explained in Appendix C of the Specific Plan.

However, as implemented, the proposed project would increase the number of residential units to be developed beyond what was analyzed in the 2023 HEU EIR. As a result, pursuant to CEQA Guidelines 15168, the City must determine whether these changes to Program 27 require the preparation of a subsequent EIR. Guidelines § 15168(c)(2). Pursuant to CEQA Guidelines Section 15164, a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred.

The impact analysis that follows in this Addendum concludes, based on substantial evidence, that the proposed project would not result in new or substantially more severe significant environmental impacts beyond those identified in the 2023 HEU EIR due to substantial changes in the previously approved project, substantial changes in the circumstances under which the project is undertaken, or new information of substantial importance. Therefore, none of the conditions described in CEQA Guidelines Section 15162 that would call for preparation of a subsequent EIR have been met. Accordingly, this Addendum is the appropriate level of environmental documentation to prepare for the proposed project under CEQA. The City will consider this Addendum, along with the 2023 HEU EIR, prior to making a decision on the proposed project.

## V. ENVIRONMENTAL IMPACTS OF THE PROPOSED CHANGES TO THE HEU

As summarized above, the proposed project involves the adoption of the Specific Plan, adoption of the San Pablo Avenue Design Standards (SPADS), amendments to the Zoning Ordinance and Zoning Map, associated General Plan text and map amendments, and would allow for a higher level of residential development than was evaluated in the 2023 HEU EIR, as shown below in Table 4.

**TABLE 4 ENVIRONMENTAL ANALYSIS ASSUMPTIONS**

| Topic                                         | Assumption                                                                                                   |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Additional Units (Over HEU Assumption)</b> | Up to 4,500 units (24% increase)                                                                             |
| <b>Population Increase</b>                    | Up to 11,250 new residents (2.5 persons/unit) <sup>a</sup>                                                   |
| <b>Commercial Space</b>                       | Up to 1,171,000 square feet (26% reduction)                                                                  |
| <b>Max Building Height</b>                    | 75 feet                                                                                                      |
| <b>Max FAR</b>                                | 4.25                                                                                                         |
| <b>Zoning Changes</b>                         | Rezoning C-W, and parcels included in MU-R, R-3, and R-2 to C-SP; potential Housing Overlay on MU-LI parcels |

<sup>a</sup> Consistent with 2023 HEU EIR household size assumption of 2.5 persons per multi-family household.

Source: City of Berkeley Municipal Code and San Pablo Avenue Specific Plan Draft, 2026.

Consistent with CEQA Guidelines sections 15162 and 15164, this section evaluates whether implementation of the Specific Plan and its associated maximum buildout scenario would result in new or substantially greater significant impacts or require new mitigation measures, or includes new information and/or changes in baseline conditions that could not have been known at the time the prior EIR was certified, and therefore trigger a need for a new or subsequent EIR.

Appendix G of the CEQA Guidelines provides a checklist of environmental topic areas suggested for assessment in CEQA analyses. This CEQA Addendum evaluates most of these issue areas, which are listed below:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire



No impacts associated with agriculture and forestry resources or mineral resources were found to occur, and these issues were not analyzed further in the 2023 HEU EIR. The proposed project would be located within the study area analyzed in the 2023 HEU EIR, which includes the entire City of Berkeley, and for the same reasons as stated in the 2023 HEU, these issues are not addressed further in this Addendum. The remaining environmental issue areas included in Appendix G of the CEQA Guidelines were analyzed in the 2023 HEU EIR and are analyzed in this CEQA addendum.

Potential environmental impacts of the proposed project are analyzed in this Addendum to determine if they are consistent with the impact analysis in the 2023 HEU EIR, and whether additional mitigation measures are required to minimize or avoid further potential impacts. Where the following analysis identifies impacts, mitigation measures identified in the 2023 HEU EIR and adopted and incorporated into the HEU, as well as existing applicable policies and regulations, are discussed, as relevant, with respect to mitigating potentially significant impacts of the proposed project that are different from (new) or substantially more severe than those identified in the 2023 HEU EIR.

## **A. Aesthetics**

### **1. Impacts Identified in the 2023 HEU EIR**

As discussed in *Section 4.1, Aesthetics*, of 2023 HEU EIR, the HEU would not have a substantial adverse effect on a scenic vista since most new buildings would be of a similar height as existing development and views that would be affected are already fully or intermittently impeded by mature trees and buildings. Development under the proposed project would be subject to the City's general development standards (Berkeley Municipal Code [BMC] Chapter 23.304) as well as objective development standards to ensure that buildings are compatible with neighboring land uses and architectural design and scale. Development under the proposed project could replace facilities such as parking lots with buildings that may reduce nighttime sources of light, and new light sources would likely be adjacent and similar to nearby light sources. Development would also be required to comply with BMC Sections 23.304.100 and 23.304.130 which require exterior lighting to be shielded to avoid light spillover onto adjacent residential properties. Furthermore, the closest State Scenic Highway to the city is I-580 in Oakland approximately 1.6 miles from the city limits, and the closest eligible State Scenic Highway is SR 13 located approximately 0.5 miles from the city limits. The proposed project would not have a substantial adverse effect on a scenic vista, conflict with applicable local regulations governing scenic quality, create a new source of substantial light and glare, or substantially damage scenic resources within a scenic highway. Therefore, aesthetics impacts would be less than significant.

## 2. Impacts of the Proposed Project

Senate Bill 743<sup>6</sup> passed in 2013, made changes to CEQA for projects located in transit-oriented development areas. Among these changes are that a project's aesthetics impacts are no longer considered significant impacts on the environment if the project is a residential, mixed-use residential, or employment center project and if the project is located on an infill site within a transit priority area (TPA). Pursuant to Section 21099 of the California Public Resources Code, a "transit priority area" is defined as an area within 0.5-mile of an existing or planned major transit stop. A "major transit stop" is defined in Section 21064.3 of the California Public Resources Code as a rail transit or bus rapid station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

The entire Specific Plan Area is within a TPA, as shown on the Metropolitan Transportation Commission's (MTC) Transit Priority Areas maps<sup>7</sup> and **Figure 3**; and therefore impacts would be less than significant by definition.

**FIGURE 3 TRANSIT PRIORITY AREAS IN BERKELEY**



City of Berkeley TPAs and VMT per Resident.

Source: City of Berkeley and MTC.

<sup>6</sup> California Public Resources Code section 21099.

<sup>7</sup> Metropolitan Transportation Commission (MTC). 2021. Transit Priority Area map viewer. <https://www.arcgis.com/home/item.html?id=370degdc4d65402d992a769bf6ac8ef5>

Multiple bus routes such as the Alameda-Contra Costa Transit District (AC Transit) bus routes 72, 72L, 72M, 72R, and 802 are located along the San Pablo Avenue Corridor. Additionally, the Specific Plan Area is located within 0.5-mile of the Ashby BART station at its southern end and within 0.5 mile of the North Berkeley BART station at its northern end. Therefore, because the proposed project would facilitate residential and mixed uses within a TPA, aesthetics impacts are not considered significant impacts on the environment pursuant to SB 743.

The proposed project would not have any new or substantially more severe significant effects related to aesthetics than were identified in the 2023 HEU EIR, and no new mitigation measures are required.

### **3. Conclusion**

The proposed project would have less than significant impacts with respect to aesthetics, similar to the 2023 HEU EIR findings. Furthermore, aesthetics impacts within TPAs, where the entire Specific Plan Area is located, are not considered significant effects on the environment, pursuant to SB 743. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to aesthetics than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## **B. Air Quality**

### **1. Impacts Identified in the 2023 HEU EIR**

As discussed in *Section 4.2, Air Quality*, of the 2023 HEU EIR, analysis of the HEU relied on the 2017 Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines. Construction-related air quality impacts were found to be less than significant with implementation of Berkeley's Standard Conditions of Approval (COA) related to diesel particulate matter controls during construction, as well as Mitigation Measure AQ-1, which was adopted and incorporated into the HEU and requires adherence to BAAQMD's Basic Construction Mitigation Measures to reduce fugitive dust impacts. Operational air quality impacts were also found to be less than significant because the VMT associated with HEU buildout would increase by approximately 38 percent, which would not exceed the rate of increase from the forecast population of approximately 43 percent. As discussed in Section 4.2 of the 2023 HEU EIR, because the HEU's VMT increase would not conflict with the BAAQMD's CEQA Guidelines operational plan-level significance thresholds for criteria air pollutants, and the HEU would be consistent with control measures within the BAAQMD 2017 Clean Air Plan, impacts related to conflicting or obstructing implementation of an applicable air quality plan would be less than significant.

According to the California Office of Environmental Health Hazard Assessment (OEHHA), construction of individual projects lasting longer than two months or located within 1,000 feet of sensitive receptors could potentially expose nearby sensitive receptors to substantial pollutant concentrations and therefore could result in potentially significant health risk impacts.<sup>8</sup> Future construction that could result from implementation of the HEU could exceed BAAQMD's thresholds for increased cancer risk of greater than 10.0 in a million and an increased non-cancer risk of greater than 1.0 Hazard Index (Chronic or Acute), and result in potentially significant impacts related to construction toxic air contaminant (TAC) emissions. However, with implementation of Mitigation Measure AQ-2, which was adopted and incorporated into the HEU, construction-related TAC impacts were found to be less than significant. The 2023 HEU EIR determined that operation of land uses facilitated by buildout of the HEU would not include sources of TACs such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities, and also would not include new stationary sources onsite such as emergency diesel generators.<sup>9</sup> Therefore, the 2023 HEU EIR found less than significant impacts related to operational TACs.

In 2005, CARB issued recommendations to avoid siting new residences within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day or close to known stationary TAC sources.<sup>10</sup> BAAQMD's average daily traffic (ADT) threshold is lower, at 10,000 vehicles per day; therefore, this analysis conservatively uses BAAQMD's ADT threshold. Development consistent with the HEU could place sensitive receptors living in housing within approximately 500 to 1,000 feet of Interstate 580 (I-580) and Interstate 80 (I-80). There is also the potential for development to occur within 500 feet of roadways that have existing traffic volumes of 10,000 vehicles per day or more such as University Avenue, Adeline Street, Telegraph Avenue, Claremont Avenue, and Gilman Street.<sup>11</sup> Therefore, development of those housing sites could create a potentially significant impact by exposing future sensitive receptors to substantial pollutant concentrations. However, implementation of Mitigation Measure AQ-3, which was adopted and incorporated into the HEU, would be required and would reduce impacts to a less than significant level.

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<sup>8</sup> Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. <https://oehha.ca.gov/air/cmr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-o>

<sup>9</sup> Bay Area Air Quality Management District (the Air District). 2023. California Environmental Quality Act Air Quality Guidelines. [https://www.baaqmd.gov/~/\\_media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-o-cover-page-pdf.pdf?la=en](https://www.baaqmd.gov/~/_media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-o-cover-page-pdf.pdf?la=en)

<sup>10</sup> California Air Resources Board (CARB). 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April 2005.

<sup>11</sup> California Department of Transportation (Caltrans). 2023. Traffic Volumes. <https://dot.ca.gov/programs/traffic-operations/census>

The 2023 HEU EIR found that the HEU would not generate objectionable odors affecting a substantial number of people during operation since it would not include uses such as wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, or chemical plants. Impacts related to odors would be less than significant.

## 2. Impacts of the Proposed Project

The proposed project would increase the potential residential density and the total number of potential units above those studied in the 2023 HEU EIR by up to 4,500 units, and is anticipated to facilitate redevelopment of some commercial-only sites with mixed-use such that amount of commercial space would decrease. Overall, the proposed project would facilitate increased development in areas well-served by alternative transportation thereby reducing the use of personal vehicles and subsequent mobile emissions. Specifically, AC Transit bus routes 72, 72L, 72M, 72R, and 802 are located along San Pablo Avenue. San Pablo Avenue is located within 0.5 mile of the Ashby BART station at its southern end and within 0.5-mile of the North Berkeley BART station at its northern end. The Specific Plan Area also includes bicycle and pedestrian facilities to encourage walking and biking. Similar to the HEU, development facilitated by the proposed project would be consistent with applicable 2017 Clean Air Plan Control Measures, including measures to increase pedestrian and bicycle access, decrease electricity demand, facilitate green building, and support water conservation, as shown in Table 4.2-6 of the HEU FEIR.

The proposed project would also increase the amount of construction activity compared to the HEU since it would potentially facilitate up to 4,500 more units, and would allow for increased building heights and density, which could require deeper foundations and/or increase the likelihood of sub-grade parking, thereby incrementally increasing construction-related air pollutant emissions that would affect local air quality. Similar to the HEU, development facilitated by the proposed project would be required to comply with the City's Standard COA regarding diesel particulate matter controls during construction, as well as previously adopted Mitigation Measure AQ-1, which requires implementation of Bay Area Air District's (Air District) Basic Construction Mitigation Measures. This would reduce construction-related emissions to a less than significant level, similar to the 2023 HEU EIR findings.

According to the Air District's 2022 CEQA Air Quality Guidelines,<sup>12</sup> determining compliance with the threshold for criteria air pollutants and precursors requires an assessment of the rate of

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<sup>12</sup> Bay Area Air Quality Management District (the Air District). 2023. California Environmental Quality Act Air Quality Guidelines. <https://www.baaqmd.gov/-/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-o-cover-page-pdf.pdf?la=en>

increase of plan VMT and population. As discussed in the 2023 HEU EIR, VMT associated with the HEU buildout across the city would increase by approximately 38 percent, which would not exceed the rate of increase from the forecast population of approximately 43 percent. While the 2023 HEU EIR VMT analysis studied the entire city, which included areas in the hills that are more car-dependent and less accessible by bus and bike, the proposed project concentrates growth and residences in proximity to transit, bicycle facilities, jobs and services to reduce single-occupancy vehicle trips and encourage alternative models of travel. Therefore, VMT increases compared to the population growth for the proposed project are anticipated to be less than studied in the 2023 HEU EIR. As a result, impacts concerning criteria pollutants generated from transportation-related emissions would remain less than significant, same as the HEU.

Similar to the HEU, development facilitated by the proposed project could contribute to the Air District's thresholds being exceeded for cancer risk of greater than 10.0 in a million, non-cancer risk of greater than 1.0 Hazard Index (Chronic or Acute), and construction TAC impacts. Consistent with previously adopted Mitigation Measure AQ-2, individual development projects that would require construction activities occurring within 1,000 feet of sensitive receptors, last longer than two months, and are not using Tier 4 and/or alternative fuel construction equipment would be required to prepare a construction Health Risk Assessment (HRA). Implementation of this mitigation measure would reduce construction TAC impacts to a less than significant level consistent with the 2023 HEU EIR findings.

Operation of development facilitated by the proposed project would not include sources of TACs such as freeways and high-volume roadways, truck distribution centers, ports, rail yards, refineries, chrome plating facilities, dry cleaners using perchloroethylene, and gasoline dispensing facilities, and therefore would not be considered sources of TACs. Residences also do not typically include new stationary sources of TACs onsite, such as emergency diesel generators. However, if residences did include a new stationary source onsite, it would be subject to the Air District Regulation 2, Rule 2 and require permitting. This process would ensure that the stationary source does not exceed applicable the Air District health risk thresholds. Therefore, similar to the 2023 HEU EIR findings, operational TAC impacts due to the proposed project would be less than significant.

Unlike the HEU, increased development facilitated along San Pablo Avenue would not place sensitive receptors living in housing within approximately 500 to 1,000 feet of Interstate 580 (I-580), Interstate 80 (I-80), or State Route 13 (SR 13). However, there is potential for development to occur within 500 feet of San Pablo and Solano Avenues, roadways that have a traffic volume of 10,000 vehicles per day or more, which could result in a potentially significant impact.<sup>13</sup>

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<sup>13</sup> California Department of Transportation (Caltrans). 2023. Traffic Volumes. <https://dot.ca.gov/programs/traffic-operations/census>

Therefore, continued implementation of previously adopted Mitigation Measure AQ-3 would be required for future development located within 500 feet of Solano Avenue or San Pablo Avenue, which would require the incorporation of TAC reduction design features into future projects and reduce impacts to a less than significant level.

The proposed project's changes to the HEU would include the addition of residential uses and the reduction of commercial uses and, like the HEU, would not include odor-generating uses such as wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, confined animal facilities, food manufacturing, smelting plants, or chemical plants. Therefore, development facilitated by the proposed project would not generate objectionable odors affecting a substantial number of people during operation, and impacts would be less than significant, similar to the 2023 HEU EIR findings.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to air quality, and no new mitigation measures are required. Berkeley's Standard COA requiring construction BMPs, as referenced in the 2023 HEU EIR, would remain applicable.

**Air Quality – Diesel Particulate Matter Controls During Construction.** All off-road construction equipment used for projects with construction lasting more than 2 months shall comply with **one** of the following measures:

- A. The project applicant shall prepare a health risk assessment that demonstrates the project's on-site emissions of diesel particulate matter during construction will not exceed health risk screening criteria after a screening-level health risk assessment is conducted in accordance with current guidance from BAAQMD and OEHHA. The health risk assessment shall be submitted to the Public Works Department for review and approval prior to the issuance of building permits.
- B. All construction equipment shall be equipped with Tier 2 or higher engines and the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by the California Air Resources Board (CARB). The equipment shall be properly maintained and tuned in accordance with manufacturer specifications.

In addition, a Construction Emissions Minimization Plan (Emissions Plan) shall be prepared that includes the following:

- An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification



number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all VDECS, the equipment inventory shall also include the technology type, serial number, make, model, manufacturer, CARB verification number level, and installation date.

- A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract. The Emissions Plan shall be submitted to the Public Works Department for review and approval prior to the issuance of building permits.

Previously adopted 2023 HEU EIR Mitigation Measures AQ-1 through AQ-3, incorporated in the City's Standard COAs, would remain applicable and would continue to be implemented and monitored.

AQ-1: Construction Emissions Reduction Measures. As part of the City's development approval process, the City shall require applicants for future development projects within the project sites to comply with the current BAAQMD basic control measures for reducing construction emissions of PM<sub>10</sub>, outlined below.<sup>14</sup>

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times a day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.

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<sup>14</sup> Bay Area Air Quality Management District (the Air District). 2023. Table 8 2, Basic Construction Mitigation Measures Recommended for All Proposed Projects. California Environmental Quality Act Air Quality Guidelines. <https://www.baaqmd.gov/-/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-o-cover-page-pdf.pdf?la=en>



7. All construction equipment shall be maintained and properly tuned in accordance with manufacture's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper conditions prior to operation.
8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's number shall also be visible to ensure compliance with applicable regulations.

AQ-2: Construction Health Risk Assessment. For individual projects (excluding ADUs, single-family residences, and duplexes) where construction activities would occur within 1,000 feet of sensitive receptors, would last longer than two months, and would not utilize Tier 4 and/or alternative fuel construction equipment, the project applicant shall prepare a construction health risk assessment (HRA). The HRA shall determine potential risk and compare the risk to the following BAAQMD thresholds:

- Non-compliance with Qualified Community Risk Reduction Plan;
- Increased cancer risk of > 10.0 in a million;
- Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute); or
- Ambient PM<sub>2.5</sub> increase of > 0.3 µg/m<sup>3</sup> annual average.

If risk exceeds the thresholds, measures such as requiring the use of Tier 4 and/or alternative fuel construction equipment shall be incorporated to reduce the risk to appropriate levels.

AQ-3: TAC Exposure Reduction Building Measures. The following design features shall be incorporated for residential development located within 1,000 feet of I-580/80 or on a lot that fronts on a section of roadway with 10,000 vehicles per day or more in order to reduce exposure of proposed residences to TACs from vehicles and stationary combustion engines (i.e., generators):

1. If the proposed buildings would use operable windows or other sources of infiltration of ambient air, the development shall install a central HVAC system that includes high efficiency particulate filters (HEPA). These types of filters are capable of removing approximately 99.97 percent of the DPM emissions from air introduced into the HVAC system.<sup>15</sup> The system may also include a carbon filter to remove other chemical matter. Filtration systems must operate to maintain positive pressure within the building interior to prevent entrainment of outdoor air indoors.

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<sup>15</sup> United States Environmental Protection Agency (USEPA). 2022. What is MERV Rating. <https://www.epa.gov/indoor-air-quality-iaq/what-merv-rating>

2. If the development limits infiltration through non-operable windows, a suitable ventilation system shall include a ventilation system with filtration specifications equivalent to or better than the following: (1) American Society of Heating, Refrigerating and Air- Conditioning Engineers MERV-13 supply air filters, (2) greater than or equal to one air exchanges per hour of fresh outside filtered air, (3) greater than or equal to four air exchanges per hour recirculation, and (4) less than or equal to 0.25 air exchanges per hour in unfiltered infiltration. These types of filtration methods are capable of removing approximately 90 percent of the DPM emissions from air introduced into the HVAC system.
3. Windows and doors shall be fully weatherproofed with caulking and weather-stripping that is rated to last at least 20 years. Weatherproof should be maintained and replaced by the property owner, as necessary, to ensure functionality for the lifetime of the project.
4. Where appropriate, install passive (drop-in) electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).
5. Prepare an ongoing maintenance plan for the HVAC and filtration systems, consistent with manufacturers' recommendations.
6. The applicant shall inform occupants regarding the proper use of any installed air filtration system.

#### 4. Conclusion

The proposed project would have less than significant impacts after mitigation with respect to air quality, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to air quality than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

### C. Biological Resources

#### 1. Impacts Identified in the 2023 HEU EIR

As discussed in *Section 4.3, Biological Resources*, of the 2023 HEU EIR, the HEU did not include development sites on the western boundary of Berkeley, where marine, estuarine, and lacustrine habitats may provide habitats for special-status species and native fish and wildlife and includes mainly sites in the urbanized core of the City. Therefore, the HEU would have less than significant impacts related to riparian habitats and sensitive natural communities, state or federally protected wetlands, and movement of native resident or migratory fish or wildlife species.

Nonetheless, trees, shrubs, man-made structures, and the ground surface throughout Berkeley provide suitable nesting substrates for birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC), and construction activities under the HEU could potentially affect nesting birds if carried out during breeding season. However, with compliance with the City's Standard COA related to avoiding disturbance of nesting birds, impacts were found to be less than significant. As discussed in the 2023 HEU EIR, development facilitated by the HEU would be required to comply with the City's Tree Ordinance (BMC No. 6,509-N.S.) and the City's Creek Protection Ordinance (BMC 17.08) and because there are no adopted habitat conservation plans or natural community conservation plans within the city of Berkeley, the HEU would not conflict with provisions of an adopted Habitat Conservation Plan or Natural Community Conservation Plan.

## 2. Impacts of the Proposed Project

Although the proposed project's changes to the HEU would facilitate the development of up to 4,500 more units in the Specific Plan Area, compared to the adopted HEU, the proposed project would only increase residential density on underutilized sites in a highly-urbanized area of the city away from open space preserves and non-channelized creeks and would not directly or indirectly impact the habitat of special-status species. New development facilitated under the proposed project would not differ substantially from the existing urban development in the Specific Plan Area with respect to implications for biological resources. Although trees and other vegetation in the Specific Plan Area may support species of nesting migratory birds protected under the CFGC, development facilitated by the proposed project would be required to comply with the City's Standard COA regarding avoidance of disturbance of nesting birds, which would reduce impacts to a less than significant level, similar to the 2023 HEU EIR findings<sup>2023 HEU EIR findings</sup>.

The Specific Plan Area does not contain natural communities considered sensitive by the California Department of Fish and Wildlife. There are also no mapped or designated federally protected wetlands in the Specific Plan Area.<sup>16</sup> Some underground drainage culverts may intersect the Specific Plan Area; however, these are not federally protected and therefore are not subject to United States Army Corps of Engineers (USACE) jurisdiction. Additionally, pursuant to BMC Chapter 17.08, obstructing or interfering with watercourses is prohibited and construction within 30 feet of a culverted creek must receive a permit from the City Engineer and comply with the provisions in the chapter to ensure the watercourse is protected. Due to the developed nature of the Specific Plan Area, there would not be potential for impacts to protected wetlands. Additionally, the Specific Plan Area is not within, and does not function as, a significant regional or local wildlife movement corridor, since there are no waterways that could be utilized for

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<sup>16</sup> U.S. Fish and Wildlife Service (USFWS). 2025. National Wetlands Inventory. <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>

movement of native residents or migratory fish. Furthermore, there are no habitat conservation plans or natural community conservation plans adopted in the Specific Plan Area, and the proposed project would not conflict with such plans. Therefore, impacts would be less than significant, similar to the 2023 HEU EIR findings.

Similar to the HEU, the proposed project could result in the removal of mature trees during construction. General Plan Policy EM-29 requires the City to maintain and enhance street and park trees to improve the environment and provide habitat. On-going implementation of that policy through site-specific design review and use permits would reduce potential impacts to locally significant trees to a less than significant level. Development facilitated by the proposed project would also be required to adhere to the City of Berkeley's Tree Ordinance (BMC No. 6,509-N.S.), which prohibits the removal of coast live oak trees unless determined to be necessary for public safety by the City Manager. Therefore, with adherence to the City's Tree Ordinance and other policies and ordinances for protecting biological resources, impacts would be less than significant, similar to the 2023 HEU EIR findings.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to biological resources, and no new mitigation measures are required. Berkeley's Standard COA requiring avoiding disturbance of nesting birds, as referenced in the 2023 HEU EIR, would remain applicable.

BIO-1: Avoid Disturbance of Nesting Birds. Initial site disturbance activities, including vegetation and concrete removal, shall be prohibited during the general avian nesting season (February 1 to August 30), if feasible. If nesting season avoidance is not feasible, the applicant shall retain a qualified biologist to conduct a preconstruction nesting bird survey to determine the presence/absence, location, and activity status of any active nests on or adjacent to the project site. The extent of the survey buffer area surrounding the site shall be established by the qualified biologist to ensure that direct and indirect effects to nesting birds are avoided. To avoid the destruction of active nests and to protect the reproductive success of birds protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF), nesting bird surveys shall be performed not more than 14 days prior to scheduled vegetation and concrete removal. In the event that active nests are discovered, a suitable buffer (typically a minimum buffer of 50 feet for passerines and a minimum buffer of 250 feet for raptors) shall be established around such active nests and no construction shall be allowed inside the buffer areas until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). No ground-disturbing activities shall occur within this buffer until the qualified biologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Nesting bird

surveys are not required for construction activities occurring between August 31 and January 31.

#### **4. Conclusion**

The proposed project would have less than significant impacts with respect to biological resources, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to biological resources than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

#### **D. Cultural Resources**

##### **1. Impacts Identified in the 2023 HEU EIR**

As discussed in *Section 4.4, Cultural Resources*, of the 2023 HEU EIR, the City has adopted regulations related to cultural resources that would apply to development facilitated by the HEU. Pursuant to Chapter 3.24 of the BMC, the City's Landmarks Preservation Commission (LPC) ordinance provides procedures for the local designation of historical resources and includes a provision for a permit review which allows the LPC to review and approve construction, alteration, or demolition of a designated landmark, buildings in designated historic districts, and structures of merit. In addition, pursuant to BMC Section 23.326.070(C), the City requires any application for a use permit or administrative use permit to demolish a non-residential building or structure which is 40 or more years old to be forwarded to the LPC for review before consideration of the permit. Further, the City's zoning project application has submittal requirements for zoning projects that include the proposed demolition or substantial change to any building 40 or more years old subject to environmental review requiring a historical resource evaluation. For projects subject to discretionary review, potential impacts to historical resources would be addressed by following the existing procedures of the City's permit review process, and by adherence to the City's Standard COAs. The BMC requirements and zoning project application submittal requirements are intended to reduce impacts to historical resources by ensuring that proposed changes to buildings do not negatively impact the resource by encouraging the preservation and maintenance of historical materials and ensuring work performed is consistent with the resource's historical character. Nonetheless, the 2023 HEU EIR determined that there is potential for historic resources that have not yet been subject to evaluation or would not be subject to the City's permit review or zoning application requirements to be adversely impacted, and Mitigation Measure CUL-1 and Mitigation Measure CUL-2, which were adopted and incorporated into the HEU, would be required to reduce impacts to the maximum extent feasible.

However, even with implementation of previously-adopted Mitigation Measure CUL-1 and Mitigation Measure CUL-2, existing and eligible historical resources could still be materially impaired by future development that would be facilitated by the HEU because specific actions intended for the reduction of impacts to historical resources could be deemed infeasible. In addition, future projects that are not subject to discretionary review and have not been previously evaluated for the presence of historical resources could result in the demolition of potential historic resources. Therefore, impacts to historical resources were found to be significant and unavoidable.

The 2023 HEU EIR found that ground-disturbance of native soils on properties for the purposes of development facilitated by the HEU could contain previously unknown prehistoric or historic-period resources, and individual development projects facilitated by the HEU that would involve ground disturbance activities would have the potential to damage or destroy archaeological resources, especially if they occur below previously disturbed sediments. However, with adherence to the City's Standard COA related to archaeological resources, impacts would be less than significant.

The 2023 HEU EIR also determined that ground-disturbing activities associated with development under the HEU could result in damage to or destruction of human burials. However, compliance with the California Health and Safety Code (Section 7050.5, 7051, and 7054), which has specific provisions for the protection of human burial remains; PRC Section 5097.98, which addresses the disposition of Native American burials, protects such remains, and establishes the Native American Heritage Commission (NAHC) to resolve related disputes; and the City's Standard COA related to human remains; would result in impacts that would be less than significant.

## **2. Impacts of the Proposed Project**

### **Historical Resources**

The Landmarks Preservation Commission, enabled by BMC 3.24, maintains a list of "Berkeley Landmarks," "Structures of Merit" and "Historic Districts". The Specific Plan Area does contain buildings with these designations, listed below in **Table 5**, but does not include areas that are designated historical districts. The 2023 HEU EIR did not include specific physical development projects, but it assumed that development was a reasonably foreseeable outcome that would be facilitated by adoption of the HEU. The proposed project also does not call for specific physical development projects but, similarly, this analysis assumes that implementation of the proposed project's zoning changes in the Specific Plan Area would facilitate development projects. Therefore, as was assumed in the 2023 HEU EIR, reasonably foreseeable development facilitated

by the proposed project could impact historical resources through demolition and construction activities.

**TABLE 5 HISTORIC LANDMARKS**

| Historic Landmark                           | Address                       | Date of Construction | Designation |                    |
|---------------------------------------------|-------------------------------|----------------------|-------------|--------------------|
|                                             |                               |                      | Date        | Designation Type   |
| Gullen Market<br>(Henry S. Patton Building) | 1523-1531 San Pablo Avenue    | 1906-1907            | 1985        | City Landmark      |
| Weisbrod Building                           | 2001 San Pablo Avenue         | 1930                 | 1985        | Structure of Merit |
| H.J. Heinz Co. Factory                      | 2900 San Pablo Avenue         | 1927                 | 1986        | City Landmark*     |
| Ashkenaz Music & Dance<br>Community Center  | 1317 San Pablo Avenue         | 1973                 | 1992        | City Landmark      |
| Mobilized Women of Berkeley<br>Building     | 1007 University Avenue        | 1949                 | 2009        | City Landmark      |
| The Borg Building                           | 2136-2154<br>San Pablo Avenue | 1923                 | 2020        | City Landmark      |

\* Listed in the California State Historic Places Inventory.

Source: List of Designated City Landmarks, Structures of Merit, and Historic Districts. Updated October 6, 2025.

The City encompasses approximately 6,675 acres and contains 346 city, state, and national landmarks.<sup>17</sup> Six of these landmarks, listed in **Table 5**, are located within the approximately 12-acre Specific Plan Area. While this represents a higher concentration of historical resources than exists citywide and a greater concentration than was analyzed in the 2023 HEU EIR, the proposed project would potentially affect only six landmarks, or approximately 1.7 percent of the city's total historic landmarks. Additionally, the City currently has procedures in place for projects that would involve the demolition of non-residential buildings 40 or more years old that require use permits or administrative use permits to be forwarded to the LPC for review. The City's zoning project application requires a historic resources evaluation for zoning projects subject to environmental review that include the proposed demolition or substantial change to a building more than 40 years. For projects subject to discretionary review, potential impacts to historical resources would be addressed by following the existing procedures of the permit review process, and by adherence to the City's Standard COAs. These regulations are intended to reduce impacts to historical resources by ensuring that proposed changes to buildings do not adversely impact the resource through encouraging the preservation and maintenance of historical materials and ensuring work performed is consistent with the resource's historical character.

<sup>17</sup> City of Berkeley. List of Designated City Landmarks, Structures of Merit, and Historic Districts. Updated October 6, 2025. [https://berkeleyca.gov/sites/default/files/documents/COB%20Landmarks%20Updated%20Jan%202023\\_o.pdf](https://berkeleyca.gov/sites/default/files/documents/COB%20Landmarks%20Updated%20Jan%202023_o.pdf)

However, future development in the Specific Plan Area may be allowed with a Zoning Certificate and would not undergo discretionary review. For these projects, the City would not have the authority to implement review procedures for evaluating buildings 40 or more years old. Further, as mentioned previously, there are designated, known, and potential historic resources in the Specific Plan Area. Although the continued implementation of previously adopted Mitigation Measure CUL-1 and Mitigation Measure CUL-2 would be required in order to reduce impacts to historical resources to the extent feasible, even with implementation of these mitigation measures, existing and eligible historical resources could still be materially impaired by future development that would be facilitated by the proposed project. Material impairment could occur because specific actions intended for the reduction of impacts to historical resources could be determined to be infeasible. Material impairment could also occur because future projects that are not subject to discretionary review on sites with structures that have not been previously evaluated to initiate a landmark or structure-of-merit designation could result in the demolition of potential but unknown historic resources. Although future development would be required to comply with mitigation measures CUL-1 and CUL-2 as adopted in the HEU, similar to the 2023 HEU EIR findings, impacts due to the proposed project's changes to the HEU would remain significant and unavoidable. Nonetheless, impacts related to historical resources would not be substantially more severe than what was analyzed in the HEU.

### **Archaeological Resources and Human Remains**

Implementation of the proposed project would involve disturbance in the same areas as analyzed in the 2023 HEU EIR, and conditions in the Specific Plan Area have not substantially changed since certification of the 2023 HEU EIR and adoption of the HEU and development under the proposed project would occur on underutilized sites in previously disturbed areas. Nevertheless, ground-disturbing activities such as earthmoving and excavation could still potentially damage and/or destroy unrecorded archaeological resources or human remains in subsurface soils within the Specific Plan Area. Additionally, the proposed project would allow increased building heights and density, which could require deeper foundations and/or increase the likelihood of sub-grade parking, and thereby increase the likelihood of encountering archaeological resources or human remains. However, future development would be subject to federal and State regulations, such as the California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e) (CEQA), which state the mandated procedures of conduct following the discovery of human remains. Future development facilitated by the proposed project would also be required to comply with the City's Standard COA related to archaeological resources and human remains during demolition, grading, and construction, which would reduce impacts to a less than significant level, similar to the 2023 HEU EIR findings.

### **Archaeological Resources (Ongoing throughout demolition, grading, and/or construction).**

Pursuant to CEQA Guidelines Section 15064.5(f), "provisions for historical or unique



archaeological resources accidentally discovered during construction” should be instituted. Therefore:

- A. In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist, historian or paleontologist to assess the significance of the find.
- B. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified professional would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Berkeley. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a CEQA Review Document prepared by the qualified professional according to current professional standards.
- C. In considering any suggested measure proposed by the qualified professional, the project applicant shall determine whether avoidance is necessary or feasible in light of factors such as the uniqueness of the find, project design, costs, and other considerations.
- D. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation measures for cultural resources is carried out.
- E. If significant materials are recovered, the qualified professional shall prepare a CEQA Review Document on the findings for submittal to the Northwest Information Center.

**Human Remains (Ongoing throughout demolition, grading, and/or construction).** In the event that human skeletal remains are uncovered during ground-disturbing activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

## Effects and Mitigation Measures

### Historical Resources

No new or substantially more severe significant effects would occur to cultural resources, and no new mitigation measures are required. Previously adopted Mitigation Measure CUL-1 and Mitigation Measure CUL-2 would remain applicable and would continue to be implemented and monitored.

CUL-1: Historic Context Statement, Cultural Resources Survey and Designations. During the period of this Housing Element, the City should conduct a citywide historic context statement and a cultural resource survey to identify historic resources, with priority given to sites in the 2023 HEU EIR Site Inventory, to determine if there are designed built environment features which are over 40 years of age proposed to be altered or demolished. Designation of historic or cultural resources should be conducted by the Landmarks Preservation Commission pursuant to 3.24.260 of the Berkeley Municipal Code.

CUL-2: Historical Resources Discretionary Review. For projects that are subject to discretionary review that occur during the Housing Element period where a historical-age building or structure that has not been previously evaluated is present, a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior Professional Qualification Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level survey in accordance with the California Office of Historic Preservation guidelines to determine if the property qualifies for federal, state, or local historical resources designation. All age eligible properties shall be evaluated within their historic context and documented in a technical memorandum with Department of Parks and Recreation Series 523 Forms.

Should a property be found to be a qualifying historical resource, the project shall be subject to the City's regulations for permit review, including by the Preservation Landmarks Commission pursuant to Chapter 3.24.260, and/or by the Zoning Adjustments Board pursuant to Chapter 23.326 of the City of Berkeley Municipal Code. Efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with a development application that may affect the historical resource, the historical resources built environment assessment shall also identify and specify the treatment of character-defining features and construction activities.

Efforts shall be made to the greatest extent feasible to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). In accordance with CEQA, a project that has been

determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR Section 15126.4(b)(1)). Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a CEQA Review Document identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence. As applicable, the CEQA Review Document shall demonstrate how the project complies with the Standards and be submitted to the City for review and approval prior to the issuance of permits.

If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These may include documentation of the resource in a manner consistent with the standards of the Historic American Building Survey (HABS). Documentation should include full descriptive and historical narrative, measured drawings, and medium format photographs, all in archivally stable format.

#### **Archaeological Resources and Human Remains**

No new or substantially significant effects to archaeological resources or human remains were identified and no new mitigation measures are required. Berkeley's Standard COAs, as referenced in the 2023 HEU EIR, would remain applicable and continue to be implemented, reducing impacts to archaeological resources and human remains to a less than significant level.

### **3. Conclusion**

#### **Historical Resources**

Previously adopted Mitigation Measure CUL-1 and Mitigation Measure CUL-2 would remain applicable to the proposed project. However, even with implementation of these mitigation measures, impacts to cultural resources would remain significant and unavoidable, similar to the adopted HEU. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to historical resources than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

#### **Archaeological Resources and Human Remains**

The proposed project would have less than significant impacts with respect to archaeological resources and human remains, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating

that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to archaeological resources or human remains than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## **E. Energy**

### **1. Impacts Identified in the 2023 HEU EIR**

As discussed in *Section 5.5, Energy*, of the 2023 HEU EIR, construction facilitated by the HEU would involve temporary energy use. During construction, contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than 5 minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the United States Environmental Protection Agency's (USEPA) Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. The HEU would also be required to comply with standards and regulations such as 2019 CALGreen (as codified in CCR Title 24, Part 11), California Energy Code (as codified in CCR Title 24, Part 6), and BMC Chapter 19.37, Berkeley's Green Code.

Development under the HEU would be required to comply with standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California's CALGreen standards (California Code of Regulations, Title 24, Part 11) and BMC Chapters 19.36 and 19.37 would require implementation of energy-efficient light fixtures and building materials into the design of new construction projects, limit the use of natural gas infrastructure in new development, and provide for electric-ready infrastructure for natural gas appliances in new buildings. The HEU would facilitate development along transit corridors, near BART stations, and in Priority Development Areas (PDA), which would place residents in proximity to public transit and encourage walking and bicycling. BMC Chapter 19.37 would require at least 20 percent of parking spaces at new multi-family residential developments to be capable of supporting electric vehicle chargers and raceway at the remaining 80 percent of parking spaces to facilitate future electric vehicle supply equipment, which would support the use of electric vehicles by future residents.

In addition, the HEU would be consistent with state renewable energy and energy efficiency plans as well as the City's General Plan policies related to energy. Impacts of the HEU would be less than significant.

## 2. Impacts of the Proposed Project

Although the proposed project would increase potential buildout in the Specific Plan Area compared to what was analyzed in the 2023 HEU EIR by up to 4,500 units, increasing construction activities and energy use during demolition and construction would be temporary. Construction contractors would also be required to comply with the same regulations outlined in the 2023 HEU EIR such as CARB regulations, provisions of California Code of Regulations, Title 13, Sections 2449 and 2485, USEPA Construction Equipment Fuel Efficiency, and 40 Code of Federal Regulations Parts 1039, 1065, and 1068. Future development would also be expected to utilize fuel-efficient equipment consistent with State and federal regulations, as well as divert a minimum of 65 percent of construction and demolition debris and recycle and salvage 100 percent of excavated soil and land-clearing debris, concrete, and of asphalt during construction and demolition activities pursuant to the latest iteration of CALGreen and BMC Chapter 19.37. Therefore, construction-related energy impacts would be less than significant, similar to the 2023 HEU EIR findings.

Future development would be required to comply with all standards set in the latest iteration of the California Building Standards Code (California Code of Regulations, Title 24) and locally adopted amendments codified in Title 12 and 19 of the BMC, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. Long-term operation of future development under the proposed project would require permanent grid connections for electricity to power internal and exterior building lighting, and heating and cooling systems. Electricity in Berkeley is supplied by Ava Community Energy (Ava) and all future residential customers would be placed in Ava's Renewable 100 Plan which utilizes 100 percent renewable and carbon-free energy. The proposed project would also facilitate increased development within a PDA which would encourage the use of alternative modes of transportation such as cycling and walking, thereby reducing fuel consumption and minimizing the potential of the proposed project to result in the wasteful or unnecessary consumption of vehicle fuels. Therefore, given the above-mentioned reasons, the proposed project would also be consistent with State renewable energy and energy efficiency plans, the City's General Plan, and the City's CAP.

## 3. Effects and Mitigation Measures

No new or substantially more severe significant effects related to energy would occur, and no new mitigation measures are required.

## 4. Conclusion

The proposed project would have less than significant impacts with respect to energy, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023

HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to energy than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## **F. Geology and Soils**

### **1. Impacts Identified in the 2023 HEU EIR**

As discussed in *Section 5.6, Geology and Soils*, of the 2023 HEU EIR, the HEU would facilitate development in areas near the Hayward fault, which would increase the population and infrastructure that would be exposed to earthquake-related hazards. However, with compliance with applicable State and local laws such as the Alquist-Priolo Earthquake Fault Zone Act and Title 19, Chapter 28 of the BMC, impacts would be less than significant. The 2023 HEU EIR determined that the HEU would be located in areas with “low” to “moderate” liquefaction potential and low landslide risk, and impacts were found to be less than significant. The 2023 HEU EIR also determined that although unstable soils within Berkeley have the potential to damage infrastructure or introduce hazards to human health and safety, the City requires site-specific geotechnical evaluations for individual development on steep slopes and unstable soils in accordance with the California Building Code (CBC), and development under the HEU would be required to comply with the Policies S-13A and S-14B of the City’s General Plan Disaster Preparedness and Safety Element. Impacts related to unstable soils were found to be less than significant.

The 2023 HEU EIR found that Berkeley’s soils are characterized by having “moderate” or a “high” potential for erosion-related hazards, and construction activities could result in erosion and the loss of topsoil. However, new development under the HEU would be required to comply with the State Water Regional Control Board’s General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit [CGP] Order 2009-0009-DWQ). Construction activities that disturb one or more acres of land surface are subject to the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB. Development would also be required to comply with BMC Chapter 21.40, which requires compliance with the CGP, as well as BMC Section 21.40.270 which requires subdivision projects to comply with grading, erosion and sediment control regulations on file with the Public Works Department. Therefore, impacts related to soil erosion or the loss of topsoil were found to be less than significant.

As discussed in *Section 4.6, Geology and Soils*, of the 2023 HEU EIR, many of the soil types within Berkeley have “moderate” to “high” potential for shrink-swell behavior, or expansiveness.

Building on unsuitable soils would have the potential to create future subsidence or collapse issues that could result in the settlement of proposed project infrastructure, and/or the disruption of utility lines and other services. Development facilitated by the HEU would be required to comply with existing State and local regulations, such as the CBC and General Plan Action S-14B, which would require submittal to and review by the City of detailed soils and/or geologic reports prior to construction. Impacts were found to be less than significant.

The 2023 HEU EIR found that construction activities related to the HEU would potentially result in significant impacts to paleontological resources. However, implementation of Mitigation Measure GEO-1, which was adopted and incorporated into the HEU, would reduce impacts to a less than significant level.

The 2023 HEU EIR found no impacts related to requiring septic tanks or alternative wastewater disposal systems.

## **2. Impacts of the Proposed Project**

As with any site in the Bay Area region, development facilitated by the proposed project would be susceptible to strong seismic ground shaking in the event of a major earthquake. The Specific Plan Area is located in a seismically active region and is located proximate to the Hayward Fault, Chabot Fault, and Wildcat Fault, which run east of Specific Plan Area. Although the proposed project would facilitate the development of up to 4,500 more units compared to what was analyzed in the 2023 HEU EIR, the proposed project would not facilitate development on or adjacent to the faults; therefore, fault rupture risks would not be increased by the proposed project. In addition, the proposed project would promote infill development which would replace older buildings subject to seismic damage with newer structures built to current seismic standards that could better withstand the adverse effects of strong ground shaking. Future development would be required to conform to the CBC adopted pursuant to Title 19.28 of the BMC, which includes requirements for foundation and structural design to resist seismic hazards and requirements for geotechnical investigation based on soil conditions and proposed construction methods in specific instances. New projects would be reviewed by the Building and Safety Division during the normal plan review process to confirm that the necessary geotechnical investigations are completed and that the structural design of the project is consistent with design measures recommended in the Geological Report prior to issuance of required building permits. The City would therefore ensure that development occurring in the Specific Plan Area would be designed and constructed consistent with the current City of Berkeley Building Codes and with the findings and recommendations of the site-specific geotechnical reports to effectively minimize or avoid potential hazards associated with redevelopment and/or new building construction. Therefore, similar to the 2023 HEU EIR findings, earthquake-related impacts would be less than significant with adherence to State and local regulations.



Although the proposed project would increase potential buildout in the Specific Plan Area compared to what was analyzed in the 2023 HEU EIR by up to 4,500 units, as required by the Public Resources Code (PRC) Section 2690-2699.6, Seismic Hazards Mapping Act and CBC requirements as adopted in the BMC, site-specific geotechnical investigations would be required for individual development projects within the portions of the Specific Plan Area susceptible to seismic-related ground failure to identify the degree of potential hazards, design parameters for the project based on the hazard, and describe appropriate design measures to address hazards. These geotechnical studies customarily include recommendations for foundation design, as well as soil improvement techniques, both of which help mitigate these unstable soils.

Additionally, as discussed in the 2023 HEU EIR, future projects requiring discretionary approval would be reviewed for their compliance with General Plan policies, including Policy S-13A: Hazards Identification and Policy S-14B: Land Use Regulation of the City's General Plan Disaster Preparedness and Safety Element. Future development in the Specific Plan Area and located in areas with identified hazards would be required to appropriately address and be designed to withstand associated hazards to the maximum extent feasible. Therefore, impacts related to liquefaction, landslides, and expansive and/or unstable soils would be less than significant with adherence to State and local regulations, similar to the 2023 HEU EIR findings.

Construction activities of future development that disturb one or more acres of land surface are subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the California State Water Resources Control Board (SWRCB). Compliance with the NPDES permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require the development of a stormwater pollution prevention plan, which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the Construction Stormwater Ground Permit (CGP) is reinforced through the BMC Chapter 21.40, which requires applicants to comply with grading, erosion and sedimentation control plan regulations on file with the Public Works Department. Therefore, impacts related to soil erosion would be less than significant with compliance with State and local regulations, similar to the findings of the 2023 HEU EIR.

Additionally, the proposed project would allow increased building heights, which could require deeper foundations and thereby increase the likelihood of encountering paleontological resources. Therefore, previously adopted Mitigation Measure GEO-1 would be required for future



development facilitated by the proposed project and would ensure the protection of paleontological resources and reduce impacts to a less than significant level.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to geology and soils, and no new mitigation measures are required. Previously adopted 2023 HEU EIR Mitigation Measure GEO-1, incorporated in the City's Standard COAs, would remain applicable and would continue to be implemented and monitored.

**GEO-1: Protection of Paleontological Resources.** If ground disturbance below the level of prior disturbance and into native soils is proposed to occur in areas mapped as Pleistocene alluvial fan and fluvial deposits (Qpaf), Orinda Formation (Tor), or Knoxville Formation (Kjk), then the City shall require the following to be implemented:

**Retention of Qualified Professional Paleontologist.** Prior to initial ground disturbance, the project applicant shall retain a Qualified Professional Paleontologist, as defined by Society of Vertebrate Paleontology (SVP),<sup>18</sup> to determine the project's potential to significantly impact paleontological resources according to SVP standards.

If underlying formations are found to have a high potential for paleontological resources, the Qualified Professional Paleontologist shall create a Paleontological Mitigation and Monitoring Program, which will be approved by the City and contain the following elements:

**Paleontological Worker Environmental Awareness Program (WEAP).** Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and procedures for notifying paleontological staff should fossils be discovered by construction staff.

**Paleontological Monitoring.** Full-time paleontological monitoring shall be conducted during ground disturbing construction activities (i.e., grading, trenching, foundation work) in sediments assigned a high paleontological sensitivity. Paleontological monitoring shall be conducted by a qualified Paleontological Resources Monitor, as defined by the SVP. The duration and timing of the monitoring will be determined by the Qualified Professional Paleontologist based on the observation of the geologic setting from initial ground disturbance, and subject to the review and approval by the City. If the Qualified Professional

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<sup>18</sup> Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee. [https://vertpaleo.org/wpcontent/uploads/2021/01/SVP\\_Impact\\_Mitigation\\_Guidelines-1.pdf](https://vertpaleo.org/wpcontent/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf).

Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions once the full depth of excavations has been reached, they may recommend that monitoring be reduced to periodic spot-checking or ceased entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Professional Paleontologist at that time. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Professional Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Professional Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources.

Upon completion of ground disturbing activity (and curation of fossils if necessary) the Qualified Professional Paleontologist shall prepare a final CEQA Review Document describing the results of the paleontological monitoring efforts associated with the project. The CEQA Review Document shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The CEQA Review Document shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the CEQA Review Document shall also be submitted to the designated museum repository.

#### **4. Conclusion**

The proposed project would have less than significant impacts with respect to geology and soils, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to geology and soils than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

### **G. Greenhouse Gas Emissions**

#### **1. Impacts Identified in the 2023 HEU EIR**

As discussed in Section 4.7, *Greenhouse Gas Emissions*, of the 2023 HEU EIR, full buildout of the HEU would generate 81,985 MT of CO<sub>2</sub>e per year, equating to an increase of 1.7 MT of CO<sub>2</sub>e per service population per year. As analyzed in the 2023 HEU EIR, the HEU's greenhouse gas (GHG) emissions of 1.7 MT of CO<sub>2</sub>e per service population per year would not exceed the BAAQMD's interpolated 2031 target of 3.7 MT CO<sub>2</sub>e per service population at the plan-level (refer below to the "Impacts of the Proposed Project" section for interpolation methodology). Therefore, impacts related to GHG emissions were found to be less than significant.

The 2023 HEU EIR found that the HEU would be consistent with GHG reduction goals and policies in the 2017 Scoping Plan, Plan Bay Area 2050, the City's General Plan, and the City's Climate Action Plan (CAP). Therefore, the 2023 HEU EIR determined that the HEU would have less than significant impacts related to conflicting with an applicable GHG reduction plan.

## 2. Impacts of the Proposed Project

The City of Berkeley adopted a CAP in 2009 with the goal of reducing communitywide GHG emissions by 80 percent below 2000 levels by 2050. While the CAP is not considered a "qualified greenhouse gas reduction plan" for the purposes of streamlining GHG emissions analysis under CEQA, it is actively used by the City for guiding GHG emission reduction efforts. Since publication of the CAP, the City has revised the CAP to add the following climate commitments/goals in support of achieving the goals of the 2009 Plan:

- 100 percent renewable electricity by 2035.
- Net-Zero Carbon Emissions by 2045, in alignment with Governor Brown's Executive Order B 55 18.
- Declared a Climate Emergency and resolved to become a Fossil Fuel Free City.

Since the certification of the 2023 HEU EIR and approval of the HEU, the Air District has updated its GHG emissions thresholds of significance. The 2022 Air District thresholds allow two options for plan-level projects to meet the significance thresholds,<sup>19</sup> one of which is to meet State's goals to reduce emissions to 40 percent below 1990 levels by 2030 and carbon neutrality by 2045.

As discussed in the 2023 HEU EIR, the Air District's plan-level efficiency threshold of 6.6 MT CO<sub>2</sub>e per service population per year is reduced to 4.0 MT CO<sub>2</sub>e per service population per year to be 40 percent below the 2030 target of 1990 emissions. To set a significance threshold that would achieve the 2045 target, the 4.0 MT CO<sub>2</sub>e per service population per year threshold was reduced by 0.27 MT CO<sub>2</sub>e per year to reach 2045's goal of zero MT CO<sub>2</sub>e per population per year. Based on the trajectory to achieve this 2045 target, in the year 2031 this would equate to an interpolated threshold of 3.7 MT CO<sub>2</sub>e per service population per year threshold.

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<sup>19</sup> Bay Area Air Quality Management District (the Air District). 2023. California Environmental Quality Act Air Quality Guidelines. <https://www.baaqmd.gov/-/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-o-cover-page-pdf.pdf?la=en>

As discussed in Section 4.7, *Greenhouse Gas Emissions*, of the 2023 HEU EIR, the analysis assumed that 90 percent of new development would be all-electric pursuant to Chapter 12.80 of the Berkeley Municipal Code. However, this ordinance has since been repealed and is no longer applicable.<sup>20</sup> Since adoption of the 2023 HEU EIR, new building electrification data has suggested that 30 to 40 percent of new developments include natural gas connections, resulting in approximately 60 to 70 percent electrification of development facilitated by the Specific Plan.<sup>21</sup> Pursuant to CEQA Guidelines Section 16152, Rincon Consultants, Inc., who previously assisted the City in preparing the GHG analysis for the 2023 HEU EIR, prepared updated modeling to reflect the revised assumption for the percentage of building electrification for the full buildout of the HEU, as well as the increased residential buildout from the proposed project. Rincon used the most recent version of the California Emissions Estimator Model (CalEEMod 2022) to model both the revised natural gas usage scenario and the additional proposed project buildout, replicating the 2023 HEU EIR methodology where applicable. Rincon's Analysis is included in **Appendix B** and the results are further summarized in **Table 6**.

**Table 6** shows the operational GHG emissions associated with future development under HEU, with the revised assumption of 60 percent development electrification, and the additional buildout from the Specific Plan that was not analyzed under the 2023 HEU EIR. As shown therein, annual emissions from the HEU and the Specific Plan, 22,348 dwelling units over 2020 conditions, would be 99,794 MT of CO<sub>2</sub>e per year. With the associated HEU and proposed project combined increase in population of 47,773 this would result in an increase to 1.8 MT of CO<sub>2</sub>e per service population per year. This would not exceed the HEU threshold of 3.7 MT CO<sub>2</sub>e per service population at the plan-level.

**TABLE 6      INCREASED NATURAL GAS AND  
BUILDOUT SCENARIOS GHG EMISSIONS**

| <b>Annual Emissions (MT of CO<sub>2</sub>e)</b>     |               |
|-----------------------------------------------------|---------------|
| HEU Buildout <sup>a</sup>                           | 85,759        |
| Additional Proposed Project Buildout <sup>a</sup>   | 14,035        |
| <b>Total MT of CO<sub>2</sub>e</b>                  | <b>99,794</b> |
| <b>Population</b>                                   |               |
| HEU Population                                      | 47,443        |
| Additional Proposed Project Population              | 8,125         |
| <b>Total</b>                                        | <b>55,568</b> |
| <b>MT of CO<sub>2</sub>e per Service Population</b> | <b>1.8</b>    |

<sup>a</sup> Reflects the revised 60 percent electrification scenario and 2022 CalEEMod.

Source: Rincon Consultants, Inc Analysis (See Appendix B) and City of Berkeley, 2023.

Rincon's analysis used an estimated net increase of 3,250 multi-family units and 8,125 additional residents beyond the 2023 HEU EIR projections. However, the analysis was completed while the proposed project was being developed and before the design standards were finalized. The final design standards increased the potential maximum buildout assumption from 3,250 units, the

<sup>20</sup> Chapter 12.80, Prohibition of Natural Gas Infrastructure in New Buildings, was repealed on June 4, 2024 by Ordinance 7907-NS.

<sup>21</sup> Robert, Rivera, Senior Planner, 2025. Personal communications with Urban Planning Partners, May 29, 2025.

assumption used for Rinon's Analysis, to 4,500 units and from 8,125 additional residents to 11,250 additional residents. The additional 1,250 units may incrementally increase the impact but not to levels that would change the level of significance. The original analysis found that the proposed project would increase the potential MT of CO<sub>2</sub>e per service population per year from 1.7 to 1.8. The addition of 1,250 units, would proportionally add an additional .04 MT of CO<sub>2</sub>e per service population per year. 1.84 MT of CO<sub>2</sub>e per service population per year would not exceed the HEU threshold of 3.7 MT CO<sub>2</sub>e per service population per year at the plan-level. Furthermore, the proposed project's annual emissions represent a conservative estimate since it does not take into account the reduction of up to 319,600 square feet of commercial uses. Commercial land uses typically generate higher levels of energy consumption, area source emissions, and vehicle trips per square foot compared to residential uses. Therefore, the reduction of potential commercial space would likely offset a portion of the projected emissions associated with the increase of potential residential uses. As a result, the proposed project would not change the level of significance compared to the 2023 HEU EIR.

As discussed in the 2023 HEU EIR, the HEU would be consistent with the 2017 Scoping Plan, which provides a framework towards reaching statewide per capita goals of 6 MT CO<sub>2</sub>e by 2030 and 2 MT CO<sub>2</sub>e by 2050; Plan Bay Area 2050, a State-mandated, integrated long-range transportation, land-use, and housing plan with 35 strategies to improve the transportation system, provide affordable housing, and reduce climate emissions; and the City's General Plan and Climate Action Plan, which includes policies, actions, and measures aimed at reducing GHG emissions. Although the proposed project would facilitate the development of up to 4,500 more units compared to the HEU, all the units would be concentrated in TPAs which would further reduce reliance on personal vehicles and encourage usage of alternative modes of transport. Specifically, AC Transit bus routes 72, 72L, 72M, 72R, and 802 are located along San Pablo Avenue and San Pablo Avenue is located within 0.5 mile of the Ashby BART station at its southern end and within 0.5 mile of the North Berkeley BART station at its northern end. The Project area also includes bicycle and pedestrian facilities to facilitate walking and biking. Development facilitated by the proposed project would also be required to comply with EV requirements pursuant to BMC Section 19.37.040, which currently requires one parking space per dwelling unit to be equipped with low power Level 2 EV charging receptacles at all new multi-family developments; and for new one- and two-family dwelling units to minimum 40-ampere 208/240-volt dedicated EV branch circuit in close proximity to the proposed location of an EV charger at the time of original construction in accordance with the California Electrical Code. Future development would also be subject to BMC Chapter 19.37, which requires diversion of 65 percent diversion of construction/demolition waste, and recycling and salvage of 100 percent of excavated soil and land-clearing debris, 100 percent of concrete, and 100 percent of asphalt during construction and demolition activities. Ava would be the electricity supplier for the proposed project and would enroll residential customers in their Renewable 100 service plan, which provides 100 percent of

electricity from renewable energy sources. Therefore, similar to the 2023 HEU EIR findings, the proposed project would be consistent with goals and policies of the 2017 Scoping Plan, Plan Bay Area 2050, the City's General Plan, and the City's CAP, and impacts would be less than significant.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects related to GHG emissions would occur and no new mitigation measures are required.

### 4. Conclusion

The proposed project would have less than significant impacts with respect to GHG emissions, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to GHG emissions than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## H. Hazard and Hazardous Materials

### 1. Impacts Identified in the 2023 HEU EIR

As discussed in Section 4.8, *Hazards and Hazardous Materials*, of the 2023 HEU EIR, construction of development facilitated by the HEU could result in an increase in the overall routine, transport, use, and disposal of hazardous materials in Berkeley. However, hazardous materials would be required to be transported under U.S. Department of Transportation (DOT) regulations (U.S. DOT Hazardous Materials Transport Act, 49 Code of Federal Regulations). The California Department of Toxic Substances Control (DTSC) also regulates hazardous waste under the authority of Resource Conservation and Recovery Act (RCRA) and in accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Divisions 4 and 4.5). The 2023 HEU EIR found that portions of Berkeley are located in Environmental Management Areas (EMA) as identified by the City's Toxics Management Division (TMD). As a Certified Unified Program Agency (CUPA) for the City of Berkeley, the TMD is responsible for identifying areas known or suspected to have groundwater contamination that could result in potential health and environmental impacts, and development in the EMA would require project review by the TMD prior to issuance of permits. Future development projects facilitated by the HEU would be subject to the City's Standard COA related to Environmental Site Assessments, Soil and Groundwater Management Plans, Building Materials Surveys, and Hazardous Materials Business Plans, which would reduce impacts to a less than significant level.

The 2023 HEU EIR determined that operation of the HEU would not risk exposing the public to hazardous materials because residential uses do not typically use hazardous materials other than small amounts for cleaning and landscaping. Although the HEU would increase the number of residents near transportation corridors where hazardous materials may be routinely transported, as discussed above the transportation of hazardous materials is regulated by the DOT. Additionally, since the HEU would facilitate residential development within areas of Berkeley where hazardous materials could be stored or used, such as near mixed-use or industrial areas, the potential of residents being exposed to hazardous materials may be increased. However, future development would be required to adhere to the California Accidental Release Prevention (CAL ARP) program as required by the California Environmental Protection Agency (Cal EPA)<sup>22</sup>, develop a Hazardous Materials Business Plan enforced by Berkeley's TMD<sup>23</sup>, and adhere to the Local Hazard Mitigation Plan (LHMP) established by Alameda County and the City of Berkeley,<sup>24</sup> which aim to minimize community exposure to hazardous and potentially hazardous materials by avoiding toxic cleaning and building materials and products in civic facilities and services; providing information, opportunities, and incentives to the community for proper disposal of toxic materials; encouraging non-toxic materials and products in homes and businesses as an alternative to products containing potentially hazardous materials; and providing procedures to follow in the event of a spill. Compliance with these policies would further prepare the City, reduce the risk of spills, and protect the public in the event of an accidental spill or exposure. Future development would also be required to comply with policies and programs in the Disaster Preparedness and Safety Element, Environmental Management Element, and the Housing Element of the City's General Plan such as Policies S-15, EM-12, EM-13, and EM-15, as well as Housing Element Programs 16, 21, 22, and 25, impacts would be less than significant.

The 2023 HEU EIR determined that although 122 housing inventory sites listed in the HEU would be located within a 0.25-mile radius of Berkeley's existing schools and childcare facilities, impacts related to the accidental release of hazardous materials and exposure to these materials would be less than significant with adherence to the above-referenced State and local laws, regulations and plans. The 2023 HEU EIR stated that Berkeley has 361 documented sites containing or potentially containing hazardous materials contamination in underlying soil and/or groundwater that have not received regulatory closure. Development facilitated by the HEU could involve ground disturbance on sites where soil, soil vapor, or groundwater contamination is present such that hazardous materials are released, exposing construction workforce and nearby occupants to

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<sup>22</sup> California Environmental Protection Agency (Cal EPA). 2023. California Accidental Release Prevention Program. <https://calepa.ca.gov/california-accidental-release-prevention/>

<sup>23</sup> Berkeley, City of. 2023. General Plan. Hazardous Materials Business Plan website. <https://berkeleyca.gov/doing-business/operating-berkeley/hazardous-materials-business-plan>

<sup>24</sup> Berkeley, City of. 2019. General Plan. Local Hazard mitigation Plan. Adopted December 10, 2019. <https://berkeleyca.gov/sites/default/files/2022-01/Local-Hazard-Mitigation-Plan-2019.pdf>



hazardous materials. However, development near hazardous locations would be preceded by investigation, remediation (cleanup), and monitoring, as necessary, under the supervision of the City's TMD, RWQCB, or DTSC before construction activities begin. Furthermore, if an unidentified underground storage tank (UST) is uncovered or disturbed during construction, it would be removed under permit, and potential risks due to residual contamination would be minimized by managing the site according to existing standards contained in Division 20, Chapters 6.7 and 6.75 (Underground Storage Tank Program) of the California Health and Safety Code as enforced and monitored by the City's TMD. Similarly, if groundwater contamination is identified, characterization of the vertical and lateral extent of the contamination and remediation activities would be required by the RWQCB prior to the commencement of new construction activities that would disturb the subsurface. If contamination exceeds regulatory action levels, the developer would be required to undertake remediation prior to grading and development under the supervision of the RWQCB, depending upon the nature of identified contamination to levels that do not pose an unacceptable risk for the intended land use. Therefore, impacts related to hazardous materials sites would be less than significant.

Development facilitated by the HEU also would be required to comply with Policy T-28 of the City's General Plan which identifies actions for emergency access. Development would also be required to conform to the latest Fire Code requirements, including provisions for emergency access. Because there are no public or private airports within Berkeley, the 2023 HEU EIR determined that the HEU would not result in impacts related to safety hazards or excessive noise hazards within airport land use plan areas or in proximity to airports.

## **2. Impacts of the Proposed Project**

Much of Specific Plan Area is within the City's identified EMA, which includes areas known or suspected to have groundwater contamination issues. Additionally, a search of the DTSC's EnviroStor database and the SWRCB's GeoTracker database (conducted in May 2026), which contain information on properties in California where hazardous substances have been released or where the potential for release exists, identified one closed cleanup program site, seven open cleanup sites, 22 closed LUST sites, and three open LUST sites within the Specific Plan Area. There are two active voluntary cleanup sites, 2371 San Pablo Avenue and 1625-1627 San Pablo Avenue and two closed state response sites, 2378/2366 San Pablo Avenue and 1138 Delaware Street within the Specific Plan Area. Future development of these two sites would be subject to DTSC oversight and regulation, City review, and other existing environmental laws related to cleanup of hazardous materials. Cleanup of the site would have to be certified as suitable for the intended land use by DTSC before new development could occur. Because development, including grading and excavation, would be contingent on cleanup of existing hazards on this site, no significant impacts related to hazardous materials would occur with implementation of the proposed project.



Similar to the HEU, development facilitated by the proposed project would be subject to the City's Standard COA. With adherence to the City's Standard COA, the City's TMD would evaluate projects to determine if Phase I/Phase II Environmental Site Assessments are required to characterize potential contamination. If contamination is present, applicants would be required to develop a soil and groundwater management plan, a type of construction management plan that would identify procedures for soil and groundwater management and disposal to address hazards during construction.

The proposed project would allow for development of up to 4,500 more units in the Specific Plan Area compared to the buildout analyzed in the 2023 HEU EIR, and therefore would potentially involve transport, use, or dispose of more hazardous materials than what was analyzed in the 2023 HEU EIR during construction, and would facilitate increased development on sites that are possibly contaminated and inactive, undergoing evaluation, and/or undergoing corrective action, where grading or excavation may result in the transport, disposal, and release of hazardous materials if they are discovered and removed from the site. However, future development would be required to comply with the same federal, State, and local laws and regulations as discussed in the 2023 HEU EIR, such as DOT regulations (U.S. DOT Hazardous Materials Transport Act, 49 Code of Federal Regulations), California Hazardous Waste Control Law (California H&SC Division 20, Chapter 6.5), and Hazardous Waste Control Regulations (California Code of Regulations, Title 22, Divisions 4 and 4.5). Although the majority of the Specific Plan Area is within the City's EMA, development within the EMA would be subject to project review by the TMD prior to issuance of permits. Future projects also would be subject to the City's Standard COA regarding Environmental Sites Assessments, Soil and Groundwater Management Plans, Building Materials Surveys, and Hazardous Materials Business Plans, which would reduce impacts to a less than significant level.

**Toxics.** The applicant shall contact the Toxics Management Division (TMD) to determine which of the following documents are required and timing for their submittal:

#### **A. Environmental Site Assessments**

1. Phase I & Phase II Environmental Site Assessments (latest ASTM 1527-13). A recent Phase I ESA (less than 6 months old) shall be submitted to TMD for developments for:
  - All new commercial, industrial and mixed-use developments and all large improvement projects.
  - All new residential buildings with 5 or more dwelling units located in the Environmental Management Area (or EMA).
  - EMA is available online at: <https://berkeleyca.gov/construction-development/permits-design-parameters/design-parameters/berkeley-requirements-building>

2. Phase II ESA is required to evaluate Recognized Environmental Conditions (REC) identified in the Phase I or other RECs identified by TMD staff. The TMD may require a third party toxicologist to review human or ecological health risks that may be identified. The applicant may apply to the appropriate state, regional or county cleanup agency to evaluate the risks.
3. If the Phase I is over 6 months old, it will require a new site reconnaissance and interviews. If the facility was subject to regulation under Title 15 of the Berkeley Municipal Code since the last Phase I was conducted, a new records review must be performed.

#### **B. Soil and Groundwater Management Plan**

1. A Soil and Groundwater Management Plan (SGMP) shall be submitted to TMD for all non-residential projects, and residential or mixed-use projects with five or more dwelling units, that: (1) are in the Environmental Management Area (EMA) and (2) propose any excavations deeper than 5 feet below grade. The SGMP shall be site specific and identify procedures for soil and groundwater management including identification of pollutants and disposal methods. The SGMP will identify permits required and comply with all applicable local, state and regional requirements.
2. The SGMP shall require notification to TMD of any hazardous materials found in soils and groundwater during development. The SGMP will provide guidance on managing odors during excavation. The SGMP will provide the name and phone number of the individual responsible for implementing the SGMP and post the name and phone number for the person responding to community questions and complaints.
3. TMD may impose additional conditions as deemed necessary. All requirements of the approved SGMP shall be deemed conditions of approval of this Use Permit.

#### **C. Building Materials Survey**

Prior to approving any permit for partial or complete demolition and renovation activities involving the removal of 20 square or lineal feet of interior or exterior walls, a building materials survey shall be conducted by a qualified professional. The survey shall include, but not be limited to, identification of any lead-based paint, asbestos, polychlorinated biphenyl (PBC) containing equipment, hydraulic fluids in elevators or lifts, refrigeration systems, treated wood and mercury containing devices (including fluorescent light bulbs and mercury switches). The Survey shall include plans on hazardous waste or hazardous materials removal, reuse or disposal procedures to be implemented that fully comply with state hazardous waste generator requirements (22 California Code of Regulations 66260 et seq). The Survey becomes a condition of any building or demolition permit for the project. Documentation evidencing disposal of hazardous waste in compliance with the survey shall be submitted to TMD within 30 days of the completion of the demolition. If asbestos is

identified, BAAQMD Regulation 11-2-401.3 a notification must be made and the J number must be made available to the City of Berkeley Permit Service Center.

#### **D. Hazardous Materials Business Plan**

A Hazardous Materials Business Plan (HMBP) in compliance with BMC Section 15.12.040 shall be submitted electronically at <http://cers.calepa.ca.gov/>. HMBP requirement can be found at <https://berkeleyca.gov/doing-business/operating-berkeley/hazardous-materials-business-plan>.

Similar to the HEU, the proposed project's changes to the adopted HEU would facilitate the development of residential uses, which may involve use and storage of some materials considered hazardous, though these materials would be primarily limited to solvents, paints, chemicals used for cleaning and building maintenance, and landscaping supplies. However, the proposed project would also result in a decrease in 319,600 square feet of commercial uses, reducing the amount of hazardous materials used.

These materials would not be different from chemicals and solvents already in wide use throughout the Specific Plan Area, and the use of such products would be required to comply with all applicable laws and regulations regarding the disposal of household waste. New housing units would be located in an area near major transportation stations and existing residential and commercial development. Hazardous materials may be transported into and through the Specific Plan Area via San Pablo Avenue, and collector and local streets. The proposed project would increase the number of residents near transportation corridors where hazardous may be routinely transported compared to the HEU. However, as discussed in the 2023 HEU EIR, compliance with existing federal, State, and local laws and regulations would reduce risks related to the handling and storage of hazardous materials would minimize the risk of the public's potential exposure to these materials. Therefore, impacts from a hazard to the public or the environment due to routine transport, use or disposal of hazardous materials, or from accidental release or exposure to hazardous materials would be less than significant, similar to the 2023 HEU EIR findings.

Several streets in Specific Plan Area, such as San Pablo Avenue, University Avenue, Dwight Way, Ashby Avenue, Cedar Street, Hopkins Street and Gilman Street are designated as emergency access routes to move people and emergency response equipment in a.<sup>25</sup> General Plan Policy T-28 identifies actions for emergency access. These include not installing diverters or speed humps on streets identified as Emergency Access and Evacuation Routes. While the proposed project would increase the number of units in the Specific Plan Area by up to 4,500 units, and may result in increased traffic compared to the HEU, the designated access routes would continue to serve

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<sup>25</sup>Berkeley, City of. 2011. General Plan. Berkeley Emergency Access and Evacuation Routes. <https://berkeleyca.gov/sites/default/files/documents/Berkeley-Emergency-Access-Evacuation-Routes-06-2011.pdf>

as evacuation routes in the case of emergency. The proposed project includes incentives for developers to create pedestrian plazas by partially or fully closing minor side streets that intersect with San Pablo Avenue to vehicular traffic, while maintaining emergency access. However, prior to any streets being closed, the selected streets would be reviewed by the Fire and Public Works Departments to ensure that there are no significant emergency access or safety impacts. Additionally, because the Specific Plan Area can be accessed by several designated access routes, and new development in the Specific Plan Area is anticipated to be distributed throughout the area, the traffic increase that would result from new development would not substantially impact one route and would be distributed among existing routes. Future development would be required to conform to the latest Fire Code requirements, including provisions for emergency access, and would not obstruct existing roadways or require the construction of new roadways or access points. Therefore, impacts would be less than significant, similar to the 2023 HEU EIR findings.

The Specific Plan Area is not located within two miles of an airport and is not in the land use plan for the airport.<sup>26</sup> There would be no impacts related to airport safety hazards for people residing or working in the Specific Plan Area.

The proposed project would increase the intensity/density of development along the San Pablo Avenue beyond what was evaluated in the 2023 HEU EIR and the level of impact may incrementally increase but not to the levels that will change the level of significance. Ground disturbance associated with development of new residential units would occur in the same areas as studied in the 2023 HEU EIR on sites in urbanized areas of the city. The same existing regulations and standard conditions of approval would apply. Potential impacts related to hazardous materials use, contaminated sites, and risk of release would be within those disclosed in the 2023 HEU EIR.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to hazards and hazardous materials, and no new mitigation measures are required. Berkeley's Standard COA requiring contacting the TMD and determining if Environmental Site Assessments, Soil and Groundwater Management Plans, Building Materials Surveys, and Hazardous Materials Business Plans, as referenced in the 2023 HEU EIR, would remain applicable.

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<sup>26</sup> Alameda County Community Development Agency. 2010. Oakland International Airport Land Use Compatibility Plan. [https://www.acgov.org/cda/planning/generalplans/documents/OAK\\_ALUCP\\_122010\\_FULL.pdf](https://www.acgov.org/cda/planning/generalplans/documents/OAK_ALUCP_122010_FULL.pdf)

#### 4. Conclusion

The proposed project would have less than significant impacts with respect to hazards and hazardous materials, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to hazards and hazardous materials than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

#### I. Hydrology and Water Quality

##### 1. Impacts Identified in the 2023 HEU EIR

As discussed in Section 4.9, *Hydrology and Water Quality*, of the 2023 HEU EIR, construction activities could cause soil erosion from exposed soil, and accidental release of hazardous materials used for equipment such as vehicle fuels and lubricant, or temporary siltation from storm water runoff. However, future development facilitated by the HEU would be required to comply with State and local water quality regulations designed to control erosion and protect water quality during construction, such as requirements of the SWRCB Construction General Permit (CGP), which requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and BMPs for projects that disturb one acre or more of land. Should dewatering be necessary during construction, development projects would be subject to the San Francisco Bay Regional Water Quality Control Board Order No. R2-2012-0060, General Waste Discharge Requirements for Discharge or Reuse of Extracted Brackish Groundwater, Reverse Osmosis Concentrate Resulting from Treated Brackish Groundwater, and Extracted Groundwater from Structural Dewatering Requiring Treatment (Groundwater General Permit). Development would also be required to comply with BMC Chapters 17.20, which would reduce construction-related water quality impacts to a less than significant level.

Development under the HEU and development resulting from the proposed project, would also be required to comply with the BMC and the Municipal Regional Stormwater NPDES Permit (No. CAS612008). Development design would include BMPs to avoid adverse effects associated with stormwater runoff quality. The 2023 HEU EIR stated that development would also be required to implement LID Measures and on-site infiltration, as required under the C.3 provisions of the Municipal Regional Stormwater Permit (MRP). Provision C.3 requires projects that create and/or replace between 2,500 square feet and 10,000 square feet of impervious surface to install at least one of a menu of site-specific design measures to either redirect runoff into vegetated areas or to include design site features with permeable surfaces. Given the built-out character of the C-SP

Zoning District, projects would primarily consist of redevelopment of already urbanized parcels which include impervious surfaces, not development on vacant greenfield parcels.

In addition to Provision C.3, development would also be required to comply with Provisions C.6 (Construction Site Control), C.10 (Trash Load Reduction), and C.15 (Exempted Discharges) of the MRP, which would reduce operational water quality impacts to a less than significant level.

Similarly, with adherence to the NPDES Construction General Permit, NPDES MS<sub>4</sub> General Permit, MRP, the Alameda County Clean Water Program, and the BMC, the 2023 HEU EIR found that development facilitated by the HEU would not substantially alter the existing drainage pattern of the site or area or alter the course of a stream or river, not result in erosion or siltation, and not substantially increase the rate of surface runoff in a manner which would result in flooding on- or off-site or exceed capacity of a stormwater system. Impacts were found to be less than significant.

The 2023 HEU EIR determined that development facilitated by the HEU would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. Compliance with the above-mentioned regulations would increase the potential for groundwater recharge, resulting in less than significant impacts to groundwater.

The 2023 HEU EIR noted that development facilitated by the HEU would be subject to the following provisions within the BMC:

- **Preservation and Restoration of Natural Watercourses – Chapter 17.08.** The purpose of this chapter is to regulate: (1) building over or near culverted creeks; (2) building near open creeks; (3) the rehabilitation and restoration of natural waterways; and (4) the management of watersheds.
- **Discharge Of Non-Stormwater Into The City's Storm Drain System--Reduction Of Stormwater Pollution – Chapter 17.20.** This chapter provides the stormwater requirements for projects conducted within the City of Berkeley and is consistent with the requirements of the San Francisco RWQCB and the MRP permit. The purpose of this chapter is to ensure the health, safety, and general welfare of the City of Berkeley's citizens by eliminating non-stormwater discharges to the City's storm drain system and by reducing the contamination of stormwater by pollutants to the maximum extent practicable.
- **Flood Zone Development – Chapter 17.12.** The ordinance also ensures that property owners construct new and substantially improved buildings in the 100-year floodplain in accordance with the National Flood Insurance Program's goals to protect life and property. Section 500 of this chapter addresses standards of construction in special flood hazard areas. Section 530 addresses coastal high hazard areas vulnerable to future sea level rise.

- **Grading, erosion and sediment control requirements – Section 21.40.270.** This requires projects to comply with all grading, erosion and sediment control regulations on file in the Public Works Department.

As discussed in Section 4.9 of the 2023 HEU EIR, there are a few FEMA-designated 100-year Flood Hazard Areas throughout the city, particularly in the western portion of the city. However, development in Flood Hazard Areas would be required to comply with Chapter 17.12 of the BMC, which contains standards for construction in flood zones, as well as Policies S-26, S-27, and S-28 of the Berkeley General Plan, which would reduce impacts to a less than significant level.

## 2. Impacts of the Proposed Project

Similar to what was assumed in the 2023 HEU EIR, although development facilitated by the proposed project would occur on underutilized sites in previously disturbed areas, ground-disturbing activities would still have the potential to cause soil erosion from exposed soil, an accidental release of hazardous materials used for equipment such as vehicle fuels and lubricant, or temporary siltation from storm water runoff. If uncontrolled during construction, soil erosion and water pollutants could have adverse offsite effects on water quality. Although most future development projects in the Specific Plan Area would likely be on sites under one acre in size, future development projects that disturb more than one acre of land – for example, where lots are consolidated – would be required to comply with the requirements of the California State Water Resources Control Board (SWRCB) Construction Stormwater General Permit (CGP), which requires preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must include erosion and sediment control best management practices (BMPs) that would meet or exceed measures required by the CGP, as well as those that control hydrocarbons, trash, debris, and other potential construction-related pollutants. Post-construction stormwater performance standards are also required to specifically address water quality and channel protection events.

In addition, future subdivisions would be required to comply with BMC Section 21.40.270, which contains regulations that govern the grading, erosion, and sediment control, and future development would be required to comply with BMC Chapter 17.20, which requires BMPs to be implemented to minimize non-stormwater discharges during construction. Additionally, as discussed in *Hazard and Hazardous Materials*, the Specific Plan Area is in the EMA, and all future non-residential projects as well as residential or mixed-use projects with more than four dwelling units that are in the EMA and include excavations deeper than 5 feet would also be required to prepare a site-specific Soil and Groundwater Management Plan (SGMP). Therefore, as with the HEU, construction-related water quality impacts would be less than significant.



The Specific Plan Area is urbanized, largely consisting of impervious surfaces, including structures, parking lots, and roadways, with the exception of designated landscaped areas. Therefore, future development would likely replace existing impervious surfaces and would not substantially increase the existing amount of impervious surfaces. Nonetheless, the proposed project would increase development potential and building height in the Specific Plan Area by up to 4,500 units, which could require deeper foundations and increase the likelihood of including underground parking. These features could, in turn, result in greater operational and dewatering-related water quality impacts compared to the HEU. However, as discussed in the 2023 HEU EIR with regard to the HEU, the proposed project would be required to comply with the same State and local regulations, such as the NPDES Permit; MRP, specifically Provision C.3, C.6, and C.15; and BMC regulations, which would reduce impacts to a less than significant level, similar to the 2023 HEU EIR findings.

The Specific Plan Area is urbanized, largely consisting of impervious surfaces, including structures, parking lots, and roadways. Stormwater runoff generated by new development or redevelopment under the proposed project would be collected by drainage inlets and conduits and conveyed to the San Francisco Bay, as under current conditions. There are no surface waters within the Specific Plan Area, and the Specific Plan Area is not located within a FEMA designated Flood Hazard Area.<sup>27</sup> Site-specific drainage pattern alterations could be required for development facilitated by the proposed project, but such alterations would not result in substantial adverse effects. Because the Specific Plan Area is already largely covered with impervious surfaces, development under the proposed project would not introduce substantial new impervious areas to the extent that the rate or amount of surface runoff would substantially increase, would not introduce substantial new surface water discharges, and would not result in flooding on- or off-site. Regulated projects within the Specific Plan Area must treat 80 percent or more of the volume of annual runoff for volume-based treatment measures or 0.2-inch per hour for flow-based treatment measures. Furthermore, projects that create or replace 2,500 square feet or more of impervious surface must implement site design measures to reduce stormwater runoff. All regulated projects within the Specific Plan Area would also be required to prepare a Stormwater Management Plan (SWMP) that includes the post-construction BMPs that control pollutant levels pursuant to BMC Chapter 17.20. SWMPs would be reviewed by the City of Berkeley prior to the issuance of building permits. In areas of the city that have soils with low permeability and/or area with high water tables, which may include portions of the Specific Plan Area, BMPs that do not rely on infiltration are most appropriate. Therefore, similar to the 2023 HEU EIR findings, this impact would be less than significant.

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<sup>27</sup> FEMA. Flood Map Service Center. <https://msc.fema.gov/portal/home>



The proposed project would increase the intensity/density of development along the San Pablo Avenue beyond what was evaluated in the 2023 HEU EIR and the level of impact may incrementally increase but not to the levels that will change the level of significance. Potential impacts related to hydrology and water quality would be within those disclosed in the 2023 HEU EIR.

### **3. Effects and Mitigation Measures**

No new or substantially more severe significant effects would occur related to hydrology and water quality, and no new mitigation measures are required.

### **4. Conclusion**

The proposed project would have less than significant impacts with respect to hydrology and water quality, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to hydrology and water quality than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## **J. Land Use and Planning**

### **1. Impacts Identified in the 2023 HEU EIR**

As discussed in Section 4.10, *Land Use and Planning*, of the 2023 HEU EIR, the HEU would have no impact regarding division of an established community because the HEU includes policies and programs to encourage housing development on underutilized and vacant sites and along established commercial corridors and neighborhoods. The HEU was determined to be consistent with the goals and strategies of Plan Bay Area 2050, as well as policies in the City's General Plan and the BMC. As stated in Government Code Section 65589.5(a), the Legislature has concluded that "the lack of housing, including emergency shelters, is a critical problem that threatens the economic, environmental, and social quality of life in California." The HEU establishes policies and programs to further the goal of meeting the existing and projected housing needs of all household income levels of the community. In addition, the sites inventory provides evidence of the City's ability to accommodate the RHNA through the year 2031, as established by the Association of Bay Area Governments (ABAG), as well as efficiently utilize vacant, underutilized, and underdeveloped lots within the City to increase the supply of housing. Impacts were found to be less than significant.

## 2. Impacts of the Proposed Project

Although the proposed project would allow for up to an additional 4,500 units in the Specific Plan Area, no new roads, linear infrastructure, or other development features are proposed that would divide an established community or limit movement, travel, or social interaction between established land uses. Therefore, similar to the 2023 HEU EIR findings, this impact would be less than significant.

The proposed project would include Zoning Ordinance text and map amendments, General Plan text and map amendments, the retirement of the West Berkeley Plan and the San Pablo Avenue Public Improvements Plan and the adoption of the San Pablo Avenue Design Standards (SPADS). As shown and described in the *Project Description* and **Table 2** the proposed project would increase the intensity and density of development in the Plan Area by establishing a the Commercial-San Pablo (C-SP) Zoning District where height would be increased up to seven stories and 75' and maximum density would be increased up to 4.25 FAR for mixed-use and residential developments and increased up to 145 and 150 dwelling units per acre for mixed-use developments and residential-only developments, respectively. Future development facilitated by the proposed project would be required to comply with zoning requirements for residential uses as described in Title 23, Zoning, of the BMC. Therefore, similar to the 2023 HEU EIR findings, the proposed project would be consistent with the BMC with adoption of the proposed project.

As mentioned in *2023-2031 Housing Element Update (HEU) Project Overview and Project Description*, the Specific Plan Area is identified as a Priority Development Area (PDA) in Plan Bay Area 2050, a long-range regional plan, prepared by the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). PDAs are select areas with strong potential to support sustainable development patterns for housing and jobs in walkable, transit-oriented infill areas. As shown in **Table 7** below the proposed project would be consistent with the goals and policies outlined in Plan Bay Area 2050.

**TABLE 7 PROJECT CONSISTENCY WITH PLAN BAY AREA 2050**

| Measure                                                                                                                                                                                                                                            | Proposed Project Plan Bay Area 2050 Consistency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Housing. Spur Housing Production for Residents of all Income Levels</b>                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>H3. Allow a greater mix of housing densities and types in Growth Geographies.</b> Allow a variety of housing types at a range of densities to be built in Priority Development Areas, select Transit-Rich Areas and Select High-Resource Areas. | <b>Consistent.</b> The proposed project would facilitate up to 4,500 more units compared to the HEU in the Specific Plan Area, which is in a TPA. Specifically, AC Transit bus routes 72, 72L, 72M, 72R, and 802 are located along San Pablo Avenue. San Pablo Avenue is located within 0.5 mile of the Ashby BART station at its southern end and within 0.5 mile of the North Berkeley BART station at its northern end. The project area also includes bicycle and pedestrian facilities to facilitate walking and biking. This would further reduce reliance on personal vehicles and encourage usage of alternative modes of transport. |

| Measure                                                                                                                                                                                                                                                            | Proposed Project Plan Bay Area 2050 Consistency                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>H5. Integrate affordable housing into all major housing projects.</b> Require a baseline of 10-20% of new market-rate housing developments of five units or more to be affordable to low-income households.                                                     | <b>Consistent.</b> Pursuant to Chapter 23.328 of the BMC, Inclusionary Housing, the City requires that new rental housing with five or more units must provide 20 percent of the units as below market rate units or pay the Affordable Housing Mitigation Fee or provide some below market rate units and pay a prorated fee. Of the 20 percent below market rate units, half must be provided to low-income households, and half must be provided to very-low income households.    |
| <b>EN4. Maintain urban growth boundaries.</b> Using urban growth boundaries and other existing environmental protections, focus new development within the existing urban footprint or areas otherwise suitable for growth, as established by local jurisdictions. | <b>Consistent.</b> The project would facilitate increased development of housing on underutilized sites in Specific Plan Area, all within the incorporated City of Berkeley, which would reduce pressure to develop open space areas. By placing residents close to jobs, services, and alternative methods of transportation, the project would reduce greenhouse gas emissions and other criteria pollutants associated with vehicle use to help communities stay healthy and safe. |

Source: Plan Bay Area 2050. ABAG. 2021.

Additionally, the HEU includes implementation programs to promote middle- and moderate-income housing and facilitate additional housing development along three of the City's corridors, including San Pablo Avenue. Specifically, Program 27 calls for preparation of the "San Pablo Avenue Corridor PDA Specific Plan," to evaluate opportunities to increase allowed densities and development capacity and to study design standards, public improvements, and mechanisms to incentivize affordable housing. Additionally, the proposed project is consistent with other goals and policies outlined in the General Plan as outlined below in **Table 8**.

**TABLE 8 PROJECT CONSISTENCY WITH RELEVANT GENERAL PLAN GOALS AND POLICIES**

| Measure                                                                                                                                                                                                                                                                   | Proposed Project General Plan Consistency                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Land Use Element</b>                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Maintain and Preserve the Character of Berkeley</b>                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Policy LU-3 Infill Development.</b> Encourage infill development that is architecturally and environmentally sensitive, embodies principles of sustainable planning and construction, and is compatible with neighboring land uses and architectural design and scale. | <b>Consistent.</b> The proposed project would facilitate increased infill development on underutilized sites in order to increase density to accommodate a higher number of residents. Individual future projects would be subject to the City's existing general development standards (BMC Chapter 23.304) to ensure that buildings are compatible with neighboring land uses and architectural design and scale. |
| <b>Policy LU-4 Discretionary Review.</b> Preserve and enhance the aesthetic, environmental, economic, and social character of Berkeley through careful land use and design review decisions.                                                                              | <b>Consistent.</b> Future development would be required to comply with General Plan land use and design review policies and processes, and discretionary review would be required for applicable projects.                                                                                                                                                                                                          |

| Measure                                                                                                                                                                                                                                                                                                                            | Proposed Project General Plan Consistency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Maintain and Enhance Berkeley's Residential Areas</b>                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Policy LU-9 Non-Residential Traffic.</b> Minimize or eliminate traffic impacts on residential areas from institutional and commercial uses through careful land use decisions.                                                                                                                                                  | <b>Consistent.</b> The proposed project would facilitate up to 4,500 more units compared to the HEU in the Specific Plan Area, which is in a TPA. Specifically, AC Transit bus routes 72, 72L, 72M, 72R, and 802 are located along San Pablo Avenue. San Pablo Avenue is located within 0.5 mile of the Ashby BART station at its southern end and within 0.5 mile of the North Berkeley BART station at its northern end. The project area also includes bicycle and pedestrian facilities to facilitate walking and biking. This would further reduce reliance on personal vehicles and encourage usage of alternative modes of transport.                                                                                                                                                       |
| <b>Policy LU-11 Pedestrian- and Bicycle-Friendly Neighborhoods.</b> Ensure that neighborhoods are pedestrian- and bicycle-friendly with well-maintained streets, street trees, sidewalks, and pathways.                                                                                                                            | <b>Consistent.</b> Future development would be required to comply with residential bicycle parking standards pursuant to BMC Section 23.322.090. Future residents and workers would be able to utilize existing bicycle routes. Implementation of the proposed project would not interfere or conflict with the City's pedestrian or bicycle network.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Maintain and Enhance Berkeley's Commercial Areas and the Downtown</b>                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Policy LU-23 Transit-Oriented Development.</b> Encourage and maintain zoning that allows greater commercial and residential density and reduced residential parking requirements in areas with above-average transit service such as Downtown Berkeley.                                                                         | <b>Consistent.</b> The proposed project would facilitate up to 4,500 more units compared to the HEU in the Specific Plan Area, which is in a TPA. Specifically, AC Transit bus routes 72, 72L, 72M, 72R, and 802 are located along San Pablo Avenue. San Pablo Avenue is located within 0.5 mile of the Ashby BART station at its southern end and within 0.5 mile of the North Berkeley BART station at its northern end. The project area also includes bicycle and pedestrian facilities to facilitate walking and biking. This would further reduce reliance on personal vehicles and encourage usage of alternative modes of transport.                                                                                                                                                       |
| <b>Policy LU-27 Avenue Commercial Areas.</b> Maintain and improve Avenue Commercial areas, such as University, San Pablo, Telegraph, and South Shattuck, as pedestrian-friendly, visually attractive areas of pedestrian scale and ensure that Avenue areas fully serve neighborhood needs as well as a broader spectrum of needs. | <b>Consistent.</b> The proposed project would facilitate the development of up to 4,500 more units in the San Pablo Avenue corridor compared to the HEU. The proposed project would streamline housing development by providing an objective set of development standards, such as building height and setbacks. This would ensure that future development is compatible with the character and scale of Berkeley according to the City's standards. The increase in residential density and mixed-use development within the Specific Plan Area would enhance the pedestrian environment by supporting a larger, more consistent customer base for local businesses. Added activity would create a more vibrant, walkable streetscape with improved visibility and overall street-level vitality. |
| <b>Transportation Element</b>                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Automobile Use Reduction</b>                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Policy T-10 Trip Reduction.</b> To reduce automobile traffic and congestion and increase transit use and                                                                                                                                                                                                                        | <b>Consistent.</b> The proposed project would facilitate up to 4,500 more units compared to the HEU in the Specific Plan Area, which                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| Measure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Proposed Project General Plan Consistency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>alternative modes in Berkeley, support, and when appropriate require, programs to encourage Berkeley citizens and commuters to reduce automobile trips, such as:</p> <ol style="list-style-type: none"> <li>1. Participation in a citywide Eco-Pass Program (also see Transportation Policy T-3).</li> <li>2. Participation in the Commuter Check Program.</li> <li>3. Carpooling and provision of carpool parking and other necessary facilities.</li> <li>4. Telecommuting programs.</li> <li>5. “Free bicycle” programs and electric bicycle programs.</li> <li>6. “Car-sharing” programs.</li> <li>7. Use of pedal-cab, bicycle delivery services, and other delivery services.</li> <li>8. Programs to encourage neighborhood-level initiatives to reduce traffic by encouraging residents to combine trips, carpool, telecommute, reduce the number of cars owned, shop locally, and use alternative modes.</li> <li>9. Programs to reward Berkeley citizens and neighborhoods that can document reduced car use.</li> <li>10. Limitations on the supply of long-term commuter parking and elimination of subsidies for commuter parking.</li> <li>11. No-fare shopper shuttles connecting all shopping districts throughout the city.</li> </ol> | <p>is in a TPA. Specifically, AC Transit bus routes 72, 72L, 72M, 72R, and 802 are located along San Pablo Avenue. San Pablo Avenue is located within 0.5 mile of the Ashby BART station at its southern end and within 0.5 mile of the North Berkeley BART station at its northern end. The project area also includes bicycle and pedestrian facilities to facilitate walking and biking. This would further reduce reliance on personal vehicles and encourage usage of alternative modes of transport. In addition, future development would be required to comply with Chapter 23.334 of the BMC, which requires development and implementation of a Transportation Demand Management program.</p> |
| <b>Urban Design &amp; Preservation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p><b>Policy UD-33 Sustainable Design.</b> Promote environmentally sensitive and sustainable design in new buildings.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p><b>Consistent.</b> As discussed in Section 5.5, Energy, and Section 5.7, Greenhouse Gas Emissions, future development projects would be required to be constructed in accordance with the latest iteration of CALGreen and the California Energy Code, which include requirements for environmentally sensitive and sustainable design practices. In addition, all future residential customers would be placed in Ava’s Renewable 100 Plan which utilizes 100 percent renewable and carbon free energy.</p>                                                                                                                                                                                         |

Source: General Plan. City of Berkeley. 2021.

As a result, the proposed project would be consistent with the applicable goals and policies from the BMC, Plan Bay Area 2050 and the City’s General Plan as analyzed in the 2023 HEU EIR, and impacts would be less than significant.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to land use and planning, and no new mitigation measures are required.

### 4. Conclusion

The proposed project would have less than significant impacts with respect to land use and planning, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to land use and planning than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## K. Noise

### 1. Impacts Identified in the 2023 HEU EIR

According to the Berkeley General Plan Environmental Management Element, noise-sensitive uses include but are not limited to residences, child-care centers, hospitals, and nursing homes.<sup>28</sup> As discussed in Section 4.11, *Noise*, of the 2023 HEU EIR, the HEU could expose noise-sensitive receptors to combined noise levels from construction equipment of 84 dBA Leq at 50 feet without a pile driver, and 95 dBA Leq at 50 feet with a pile driver. Development facilitated by the HEU would be required to comply with the City's Standard COAs related to construction hours, construction noise reduction, construction noise management, and noise reduction plans. Nonetheless, construction noise levels could still exceed the City's standards for stationary equipment in both multi-family residential and commercial zones and could still exceed the City's standards at multiple sites. Therefore, construction noise impacts were found to be significant and unavoidable.

Operation of projects facilitated by the HEU would include mechanical equipment such as heating, ventilation, and air conditioning (HVAC) equipment, delivery and trash trucks, and other noise-generating activities. However, such activities would be similar to the existing noise environment, and development would be required to comply with Section 13.40.070 of the BMC, which states that stationary machines and other devices located on the exterior of structures which generate sounds perceptible outside the perimeters of the lot on which the machine or other device is located must be installed with such sound transmission control measures to

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<sup>28</sup> Berkeley, City of. 2001. General Plan. <https://berkeleyca.gov/your-government/our-work/adopted-plans/general-plan>

adequately minimize or eliminate the transmission of the sound to a level not to exceed 60 dBA on weekdays and 50 dBA on weekends for single family residential beyond property perimeters; Section 23130 of the California Motor Vehicle Code which establishes maximum sound levels of 86 dBA Leq at 50 feet for trucks operating at speeds less than 35 miles per hour; Section 13.40.070 of the BMC which prohibits operating or permitting the operation of a mechanically powered saw, sander, drill, grinder, lawn or garden tool, or similar tool before 7:00 a.m. on a weekday (or before 9:00 a.m. on a weekend or holiday) or after 7:00 p.m. on a weekday (or after 8:00 p.m. on a weekend or holiday) such that the sound therefrom across a residential or commercial real property line violates BMC Section 13.40.050 or 13.40.060; and Section 19.29 of the BMC which includes the 2019 California Residential Code, as adopted in Title 24 Part 2.5 of the California Code of Regulations, which would reduce operational noise impacts to a less than significant level. As discussed in the 2023 HEU EIR, daily VMT from the HEU would increase by approximately 6 percent over existing 2020 conditions by the year 2031. A 6 percent increase in traffic on a roadway would equate to an increase in noise of 0.2 dBA, which would not double the existing mobile noise source and would not increase noise levels by even the most conservative threshold of 3 dBA, which is considered a barely perceptible noise increase. Off-site traffic noise impacts were therefore found to be less than significant.

The 2023 HEU EIR found that construction activities related to development facilitated by the HEU would not result in significant vibration impacts with adherence to the City's Standard COA related to construction vibration. The 2023 HEU EIR also found that ground-borne vibration in the vicinity of development facilitated by the HEU would be primarily generated by vehicular travel on the local roadways. However, the HEU would not increase traffic trips such that it would be perceptible to nearby noise-sensitive receptors, and impacts would be less than significant.

As discussed in 2023 HEU EIR Section 4.11, development facilitated by the HEU would not be exposed to intermittent noise levels from overhead flight patterns from airports in the city, because there are none located within Berkeley. In addition, residential development would be required to incorporate noise insulation features consistent with achieving State and local standards to reduce interior noise levels to below 45 dBA. Therefore, impacts would be less than significant.

## **2. Impacts of the Proposed Project**

### **Construction Noise**

The proposed project would increase the potential number of units in Specific Plan Area by up to 4,500 units compared to the adopted HEU, and would allow increased building heights and density, which could require deeper foundations and/or increase the likelihood of sub-grade parking, and thereby result in additional demolition and construction activity that would generate

temporary increases in ambient noise levels. It is also possible that concurrent construction activity on nearby development sites could result in a higher combined temporary increase in ambient noise at sensitive receptors in the vicinity, and result in an adverse impact on nearby noise-sensitive receptors. As discussed in the 2023 HEU EIR, construction noise levels would vary depending on the type of equipment, the duration of use, the distance to receivers, and the potential for pile driving. Noise associated with construction of most development facilitated by the proposed project would be typical of residential construction in urban areas, but could exceed the eight-hour 80 dBA  $L_{eq}$  daytime significance threshold at residences. Similar to the HEU, the proposed project could facilitate larger projects that may include relatively lengthy construction durations (i.e., longer than 18 months), two or more subterranean levels, use of multiple pieces of heavier equipment (i.e., cranes, excavators, dozers), simultaneous use of multiple pieces of equipment, and generally noisier activities, such as the potential for pile driving. This could potentially result in significant noise impacts, in particular to adjacent residential zones or other nearby noise-sensitive receivers, and would temporarily increase ambient noise levels above Federal Transit Administration (FTA) noise limits. Development facilitated by the proposed project would be required to comply with the City's Standard COA related to construction hours, construction noise reduction programs, construction noise management, and noise reduction plans, which would reduce construction noise to the extent feasible.

**Construction Hours (Residential Zoning Districts).** Construction activity shall be limited to between the hours of 8:00 AM and 6:00 PM on Monday through Friday, and between 9:00 AM and Noon on Saturday. No construction-related activity shall occur on Sunday or any Federal Holiday.

**Construction Hours (Non-Residential Zoning Districts).** Construction activity shall be limited to between the hours of 7:00 AM and 6:00 PM on Monday through Friday, and between 9:00 AM and 4:00 PM on Saturday. No construction-related activity shall occur on Sunday or any Federal Holiday.

**Construction Noise Reduction Program.** The applicant shall develop a site specific noise reduction program prepared by a qualified acoustical consultant to reduce construction noise impacts to the maximum extent feasible, subject to review and approval of the Zoning Officer. The noise reduction program shall include the time limits for construction listed above, as measures needed to ensure that construction complies with BMC Section 13.40.070. The noise reduction program should include, but shall not be limited to, the following available controls to reduce construction noise levels as low as practical:

- A. Construction equipment should be well maintained and used judiciously to be as quiet as practical.



- B. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.
- C. Utilize “quiet” models of air compressors and other stationary noise sources where technology exists. Select hydraulically or electrically powered equipment and avoid pneumatically powered equipment where feasible.
- D. Locate stationary noise-generating equipment as far as possible from sensitive receptors when adjoining construction sites. Construct temporary noise barriers or partial enclosures to acoustically shield such equipment where feasible.
- E. Prohibit unnecessary idling of internal combustion engines.
- F. If impact pile driving is required, pre-drill foundation pile holes to minimize the number of impacts required to seat the pile.
- G. Construct solid plywood fences around construction sites adjacent to operational business, residences or other noise-sensitive land uses where the noise control plan analysis determines that a barrier would be effective at reducing noise.
- H. Erect temporary noise control blanket barriers, if necessary, along building facades facing construction sites. This mitigation would only be necessary if conflicts occurred which were irresolvable by proper scheduling. Noise control blanket barriers can be rented and quickly erected.
- I. Route construction related traffic along major roadways and away from sensitive receptors where feasible.

**Construction Noise Management – Public Notice Required.** At least two weeks prior to initiating any construction activities at the site, the applicant shall provide notice to businesses and residents within 500 feet of the project site. This notice shall at a minimum provide the following: (1) project description, (2) description of construction activities, (3) daily construction schedule (i.e., time of day) and expected duration (number of months), (4) the name and phone number of the Project Liaison for the project that is responsible for responding to any local complaints, (5) commitment to notify neighbors at least four days in advance of authorized extended work hours and the reason for extended hours, and (6) that construction work is about to commence. The liaison would determine the cause of all construction-related complaints (e.g., starting too early, bad muffler, worker parking, etc.) and institute reasonable measures to correct the problem. A copy of such notice and methodology for distributing the notice shall be provided in advance to the City for review and approval.

**Noise Reduction Plan.** Applicants are required to develop a site-specific noise reduction program prepared by a qualified acoustical consultant to reduce construction noise impacts to the

maximum extent feasible. The noise reduction program would include several elements that would reduce the exposure of sensitive receptors to construction noise, such as the following:

- Equipping all internal combustion engine-driven equipment with mufflers in good condition.
- Pre-drilling foundation pile holes to minimize the use of pile drivers.
- Installing solid plywood fences around construction sites adjacent to sensitive receptors.
- Erecting temporary noise control blanket barriers along building façades facing construction sites.

However, as discussed in the 2023 HEU EIR, the Standard COAs would include the installation of temporary sound barriers where warranted, which are the most effective advanced measure to reduce noise from construction sites adjacent to noise-sensitive receptors, and no further measures are available to provide additional reductions in construction noise. Therefore, construction noise levels could still exceed the City's standards for stationary equipment in both multi-family residential and commercial zones. Furthermore, construction noise levels could exceed the City's standards at multiple sites where the proposed project would facilitate development in the Specific Plan Area. This impact would be significant and unavoidable, consistent with the 2023 HEU EIR findings.

### **Operational Noise**

The additional 4,500 units facilitated under the proposed project would generate noise associated with the operation of residences. Typical noise sources associated with residential uses include stationary HVAC equipment, vehicle movement (e.g., delivery and trash hauling), outdoor activities, and traffic on area roadways. These impacts are discussed below.

### **HVAC Equipment**

Because of the proposed increased density of development in the Specific Plan Area, this analysis includes the conservative assumption that new HVAC equipment could be installed as close as 20 feet from noise-sensitive receptors on adjacent properties. Typical residential HVAC units are anticipated to generate noise levels ranging from 50 to 60 dBA Leq at a distance of 50 feet from the source, if unshielded by equipment enclosures.<sup>29</sup> Based on a standard attenuation rate of 6 dBA per doubling of distance from stationary noise sources, it is estimated that new HVAC equipment in the Specific Plan Area would generate noise levels reaching 68 dBA at 20 feet from the source. This estimate does not account for the shielding effect of equipment enclosures or

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<sup>29</sup> Illingworth & Rodkin, Inc. 2019. Noise and Vibration Impacts from Residences Proposed at 325 Yolanda Avenue, Santa Rosa, CA. January 2019. [https://files.ceqanet.opr.ca.gov/251916-2/attachment/m3VESveoKy6z2njK58vk2yOfZP3inTgJtvC2\\_VPKqEoPle\\_\\_ZYeJyIgz1Vy\\_7PGcsn5TXslqZP49OpMGo](https://files.ceqanet.opr.ca.gov/251916-2/attachment/m3VESveoKy6z2njK58vk2yOfZP3inTgJtvC2_VPKqEoPle__ZYeJyIgz1Vy_7PGcsn5TXslqZP49OpMGo)

rooftop parapets, which could block line of sight between the source and noise-sensitive receptors, reducing noise levels by at least 10 dBA. However, as discussed in the 2023 HEU EIR, the design and placement of new HVAC equipment would be required to comply with Section 13.40.070 of the BMC, which states that stationary machines and other devices located on the exterior of structures which generate sounds perceptible outside the perimeters of the lot on which the machine or other device is located must be installed with such sound transmission control measures to adequately minimize or eliminate the transmission of the sound to a level not to exceed 60 dBA on weekdays and 50 dBA on weekends for single family residential beyond property perimeters. Stationary equipment shall not exceed 65 dBA on weekdays and 55 dBA on weekends for multi-family residential areas. Furthermore, a motor, machinery, pump, such as swimming pool equipment, etc., must be sufficiently enclosed or muffled and maintained so as not to create a Noise Disturbance in accordance with Section 13.40.050 or 13.40.060 of the BMC. Therefore, impacts related to HVAC equipment would be less than significant, similar to the 2023 HEU EIR findings.

#### **Vehicle Activity (Delivery and Trash Hauling)**

Maximum noise levels generated by movement of medium duty delivery trucks generally range from 61 to 70 dBA Leq at a distance of 25 feet, depending on the speed at which the truck is driving.<sup>30</sup> The average noise level for a single idling truck generally ranges from 72 to 77 dBA Leq at a distance of 25 feet. It is assumed that delivery and trash hauling trucks serving additional development in the Specific Plan Area could stop as close as 25 feet to adjacent residences. An increase of up to 4,500 units in the Specific Plan Area could result in a slightly higher volume of truck trips for delivery and trash hauling. However, truck activity would not substantially exceed existing activity in the already urbanized Specific Plan Area. For example, trash and recycling trucks already visit most existing properties that could be redeveloped under the proposed project. Additionally, as discussed in the 2023 HEU EIR, Section 23130 of the California Motor Vehicle Code establishes maximum sound levels of 86 dBA Leq at 50 feet for trucks operating at speeds less than 35 miles per hour, and solid waste pick-up operations are typically scheduled during daytime hours when people tend to be less sensitive to noise. Furthermore, these noise events from trucks are typically transient and intermittent, and do not occur for a sustained period of time. Therefore, similar to the 2023 HEU EIR findings, impacts related to delivery and trash hauling would be less than significant.

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<sup>30</sup> N. Olson; Survey of Motor Vehicle Noise. *J. Acoust. Soc. Am.* 1 November 1972; 52 (5A): 1291–1306. <https://doi.org/10.1121/1.1913246>

### Outdoor Activity Areas

Addition of up to 4,500 units in the Specific Plan Area would increase the number of residents and thereby increase noise generated by conversations, music, television, or other outdoor sound-generating equipment (e.g., leaf blowers), particularly in the event future residents open their windows or such activities take place on balconies or in common outdoor amenity areas. However, these noise-generating activities would be similar to those of the existing urban environment. Further, violations of the noise ordinance would be subject to BMC Chapter 13.40. This chapter prohibits noise disturbances such as loud equipment, amplified sound not associated with a permitted event, or yelling and sets forth procedures if violations occur. Section 13.40.070 of the BMC prohibits operating or permitting the operation of a mechanically powered saw, sander, drill, grinder, lawn or garden tool, or similar tool before 7:00 a.m. on a weekday (or before 9:00 a.m. on a weekend or holiday) or after 7:00 p.m. on a weekday (or after 8:00 p.m. on a weekend or holiday) such that the sound therefrom across a residential or commercial real property line violates Section 13.40.050 or 13.40.060 of the BMC. Furthermore, Chapter 19.29 of the BMC includes the 2019 California Residential Code, as adopted in Title 24 Part 2.5 of the California Code of Regulations. Therefore, similar to the 2023 HEU EIR findings, impacts related to outdoor activities would be less than significant.

### Roadway Vehicle Noise

The proposed project would allow for up to 4,500 more units in the Specific Plan Area compared to what was anticipated under the HEU. The proposed project could affect ambient traffic noise if the proposed project facilitated development in a way that would increase vehicle trips to and from the Specific Plan Area. As stated above in the “Impacts Identified in the 2023 HEU EIR,” a doubling of mobile noise sources would increase traffic noise levels by an estimated 3 dBA, which is considered a barely perceptible noise increase. Due to the nature of the project which is located along a major transit corridor it is not anticipated that the project would double the existing mobile noise sources along any one roadway and therefore would not increase noise levels by the most conservative threshold of 3 dBA, which is considered a barely perceptible noise increase. The HEU’s projected buildout of 19,098 units results in a 5.5 percent increase in vehicle trips, which equates to an increase of 0.2 dBA – well below the 3dBA threshold. The maximum buildout of the proposed project is 4,500 additional units over the HEU’s projected buildout, an approximately 24 percent increase in units. This increase in units would not result in a large enough increase in vehicle trips to exceed the 3 dBA threshold. Even under a conservative, proportional assumption (i.e., trips – and thus noise – scale with units), a ≤25 percent increase over 0.2 dBA would be ≤0.25 dBA, which remains well below the 3 dBA threshold. Therefore, the proposed project’s potential maximum buildout would not change the level of significance compared to the 2023 HEU EIR.

Therefore, overall, the project would not double the existing mobile noise source and would not increase noise levels by even the most conservative threshold of 3 dBA, which is considered a barely perceptible noise increase. Similar to the 2023 HEU EIR findings, impacts related to off-site operational noise would be less than significant.

### Operational Vibration

Similar to the HEU, it is not anticipated that operation of residential development would involve activities that would result in substantial vibration levels, such as use of heavy equipment or machinery. Based on the FTA Transit Noise and Vibration Impact Assessment<sup>31</sup> guidance document, rubber tires and suspension systems dampen vibration levels from vehicles on local roadways to a level that is rarely perceptible. Therefore, similar to the 2023 HEU EIR findings, the proposed project would have a less than significant impact related to operational vibration.

### Construction Vibration

The proposed project would allow for additional development in the Specific Plan Area, the construction of which could intermittently generate strong vibration. As discussed in the 2023 HEU EIR, general construction equipment such as a vibratory roller would generate vibration levels up to 0.21 in./sec. peak particle velocity (PPV) at 25 feet, while more intensive equipment such as pile driving could generate a vibration level of approximately 0.64 in./sec. PPV at 25 feet. According to Caltrans impact criteria, the damage threshold for historic sites (which are most sensitive to impacts from groundborne vibration) is 0.12 in./sec. PPV. Groundborne vibration from hoe rams, bulldozers, caisson drilling, loaded trucks, and jackhammers would not exceed the 0.1 in./sec. PPV threshold for sensitive historic sites. While groundborne vibration from vibratory rollers would only exceed the threshold for building damage for historic sites at 25 feet from the source, vibration levels from pile driving would exceed one or more of building damage thresholds for historic sites, general old buildings, and older and newer residential structures. Furthermore, vibration levels associated with pile driving would also exceed the threshold of 0.25 in./sec. PPV for human annoyance at various distances up to 75 feet. Future development facilitated by the proposed project would be required to comply with the City's Standard COA related to construction vibration, which would ensure groundborne vibration from vibratory rollers and vibration levels from pile driving would not occur in a manner that would damage buildings.

**Damage Due to Construction Vibration.** The project applicant shall submit screening level analysis prior to, or concurrent with demolition building permit. If a screening level analysis shows

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<sup>31</sup> Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_o.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_o.pdf)

that the project has the potential to result in damage to structures, a structural engineer or other appropriate professional shall be retained to prepare a vibration impact assessment (assessment). The assessment shall take into account project specific information such as the composition of the structures, location of the various types of equipment used during each phase of the project, as well as the soil characteristics in the project area, in order to determine whether project construction may cause damage to any of the structures identified as potentially impacted in the screening level analysis. If the assessment finds that the project may cause damage to nearby structures, the structural engineer or other appropriate professional shall recommend design means and methods of construction that to avoid the potential damage, if feasible. The assessment and its recommendations shall be reviewed and approved by the Building and Safety Division and the Zoning Officer. If there are no feasible design means or methods to eliminate the potential for damage, the structural engineer or other appropriate professional shall undertake an existing conditions study (study) of any structures (or, in case of large buildings, of the portions of the structures) that may experience damage. This study shall establish the baseline condition of these structures, including, but not limited to, the location and extent of any visible cracks or spalls; and include written descriptions and photographs.

Therefore, similar to the 2023 HEU EIR findings, construction vibration impacts would be less than significant.

### **Airport Noise**

As discussed in the 2023 HEU EIR, the closest airport to Berkeley is the Oakland San Francisco Bay Airport. According to the Oakland International Airport Land Use Compatibility Plan, Berkeley is located outside of the airport's noise contours and the airport influence area illustrated in Figure 3-1 of the Airport Land Use Compatibility Plan.<sup>32</sup> Therefore, similar to the 2023 HEU EIR findings, the proposed project would not expose people residing or working in the plan area to excessive noise levels, and impacts would be less than significant.

The proposed project would increase the intensity/density of development along the San Pablo Avenue beyond what was evaluated in the 2023 HEU EIR and the level of impact may incrementally increase but not to the levels that will change the level of significance. The same regulations and Standard COAs would apply to development under the proposed project. Impacts related to noise would be the same as for the program studied in the 2023 HEU EIR and would be significant and unavoidable.

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<sup>32</sup> Alameda County Community Development Agency. 2010. Oakland International Airport Land Use Compatibility Plan. [https://www.acgov.org/cda/planning/generalplans/documents/OAK\\_ALUCP\\_122010\\_FULL.pdf](https://www.acgov.org/cda/planning/generalplans/documents/OAK_ALUCP_122010_FULL.pdf)

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to noise and vibration, and no new mitigation measures are required. Berkeley's Standard COAs related to construction hours, construction noise reduction, construction noise management, noise reduction plans, and construction vibration, as referenced in the 2023 HEU EIR, would remain applicable.

### 4. Conclusion

The City's Standard Conditions of Approval for construction noise reduction and management and BMC requirements would still be applicable to development under the proposed project. However, even with implementation of these conditions, impacts related to construction noise would remain significant and unavoidable, similar to the 2023 HEU EIR findings. Nonetheless, no substantial changes have occurred that require major revisions to the 2023 HEU EIR. The proposed project may incrementally increase impacts with respect to noise, but would have no new significant impacts or substantially more severe significant impacts with respect to noise than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## L. Population and Housing

### 1. Impact Identified in the 2023 HEU EIR

As discussed in Section 4.12, *Population and Housing*, of the 2023 HEU EIR, the HEU would add housing sites with a potential for up to 19,098 additional residential units and 47,443 additional residents by the year 2031. The 2023 HEU EIR found that the HEU would be consistent with State requirements for the RHNA and would be within the growth forecasts for Northwest Alameda County in Plan Bay Area 2050, which projected a 57 percent increase in population for Northwest Alameda County. The 2023 HEU EIR found that the HEU would not directly or indirectly result in substantial unplanned population growth and would not result in the displacement of substantial numbers of people or housing. Therefore, impacts were found to be less than significant.

### 2. Impacts of the Proposed Project

The HEU buildout estimates a population increase of 47,443 (or a 38 percent increase over the 2020 population of 124,563). Utilizing the same persons per unit assumption from the HEU of 2.5 for multi-family, the proposed project's maximum buildout of 4,500 additional units over the HEU's projected buildout would result in a population increase of 11,250. The HEU and the proposed project would result in a population increase of 58,693 or a 47 percent increase over the

2020 population by 2031 (buildout year of 2023 HEU). The Specific Plan and HEU population increase is consistent with State requirements for the Regional Housing Needs Assessment and would be within the growth forecasts for Northwest Alameda County in Plan Bay Area 2050, which projects a 57 percent increase in population. Given that the State is currently in an ongoing housing crisis due to an insufficient housing supply, the additional units under the proposed project would also assist in addressing the existing crisis and meeting Berkeley's housing needs.

Similar to what was analyzed in the 2023 HEU EIR, this analysis is conservative because it assumes a maximum buildout scenario. The proposed project's actual contribution to population growth may be less than estimated. In addition, the proposed project would not involve the extension of roads or other infrastructure that could indirectly lead to population growth. As discussed in Sections 5.13, *Public Services and Recreation*, and Section 5.16, *Utilities and Service Systems*, of the 2023 HEU EIR, the city is mostly developed and is supported by existing public services and infrastructure which are sufficient to serve the additional housing units. Therefore, the proposed project would not result in substantial unplanned population growth, either directly or indirectly, and impacts would be less than significant, same as the impact analyzed in the 2023 HEU EIR.

While the proposed project would have no direct physical effects, subsequent development allowed by the proposed project could involve the demolition of existing housing units in the Specific Plan Area. Because the addition of up to 4,500 more housing units than analyzed in the 2023 HEU EIR would more than offset the potential loss of housing units, the proposed project would not require the construction of additional housing elsewhere. Future applicants would be required to comply with the City's Inclusionary Housing Ordinance, which would require developers of market-rate ownership housing to include affordable ownership units or pay a fee, as well as the Affordable Housing Mitigation Fee Ordinance, which would require developers of market-rate rental housing to pay a fee to the Housing Trust Fund (which is used as funding for affordable housing production) or include affordable units in developments. In addition, SB 330 would require that replacement housing be either rent-controlled or below market rate. Moreover, deed restrictions may run with individual properties to maintain long-term affordability. The BMC also places conditions on the loss of housing units and includes tenant protections for displaced residents. Projects that involve demolition or elimination of dwelling units would be subject to BMC Chapter 13.79.060, which includes tenant protections for displaced residences. When demolition of an occupied unit is approved, the project applicant is required to provide assistance with moving expenses and subsidize the rent differential for a comparable replacement unit. If a tenant is displaced due to the owner withdrawing the building from rent or lease or for repairs to bring the unit into compliance, BMC Section 13.77.055 and Chapter 13.84 entitle the tenant to relocation compensation and certain protections. In addition, BMC Section 13.76.130 requires landlords to have good cause for evictions and provide relocation assistance to households as specified in Section 13.76.130A(8). Therefore, similar to the 2023 HEU EIR findings,



the proposed project would not result in the net loss or displacement of housing, necessitating the construction of replacement housing elsewhere, and impacts would be less than significant.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to population and housing, and no new mitigation measures are required.

### 4. Conclusion

The proposed project would have less than significant impacts with respect to population and housing, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to population and housing than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## M. Public Service and Recreation

### 1. Impact Identified in the 2023 HEU EIR

As discussed in Section 4.13, *Public Services and Recreation*, of the 2023 HEU EIR, the HEU would increase demand for fire and police protection services, school facilities, and parks and recreational facilities. However, compliance with Government Code 65995 (b) as well as policies in the City's General Plan and BMC would reduce impacts to a less than significant level.

### 2. Impacts of the Proposed Project

#### Fire Protection

Fire protection in the city is provided by the Berkeley Fire Department (BFD). The proposed project would facilitate development that would increase population in Specific Plan Area and in Berkeley by adding the potential for up to 4,500 new units. Using the 2023 HEU EIR estimate of 2.5 persons per household, the proposed project's changes to the HEU would result in 11,250 new residents in addition to the 47,443 new residents estimated to be added in the HEU as analyzed in the 2023 HEU EIR. The additional increase in residents associated with the proposed project could increase demand for fire protection and emergency medical services such that additional staff, equipment or facilities would be needed to meet response time goals. However, future development would be facilitated on underutilized sites in urbanized areas in the Specific Plan Area which are already served by existing fire stations. The Specific Plan Area is served by two fire districts and their associated BFD Fire Stations. The Specific Plan Area north of University Avenue

is served by the BFD Fire Station 6 and south of University Avenue is served by the BFD Fire Station 1. The continued implementation of policies and actions in the Berkeley General Plan would improve the ability of fire protection facilities to serve this additional future development and allow fire protection services to maintain response time goals. As discussed in the 2023 HEU EIR, the BFD has an average response time of five minutes and fifteen seconds (5:15) from when the station receives the call to the first unit arriving on the scene. The median response time is 4:46. Policy S-22 in the City's Disaster Preparedness and Safety Element of the General Plan calls for the City to provide adequately staffed and equipped Fire Stations and to pursue a response time goal of four minutes from the nearest station to all parts of Berkeley. Although the City's response time goal of four minutes has not been met, new residential projects would be reviewed for compliance with these requirements and compliance with other building and safety regulations several times during different phases of project development, such as the entitlement and pre-application phase, during the building permit process, and during the construction process.

Future development would be required to comply with basic building designs and standards for residential buildings as mandated by the Berkeley Fire Code under BMC Chapter 19.48. In some cases, older buildings not constructed to today's more stringent levels of fire-safety regulation would be replaced by new buildings compliant with existing regulations, improving fire safety on those sites. Compliance with designs and standards and other fire safety requirements would reduce the demand for fire protection services and thereby reduce the need for new fire stations. Future development would also be required to comply with abatement of fire-related hazards and pre-fire management prescriptions as contained in the California Health and Safety Code and the California Fire Plan. The City's Measure FF, passed in November 2020, is estimated to generate \$8.5 million annually, and would be used to implement a state-of-the-art 911 dispatch system to ensure rapid assistance to emergency medical calls, increase ambulance and paramedic capacity, to better meet the needs of all residents, and strengthen wildfire, earthquake and other disaster prevention and preparedness with new, expanded emergency warning systems, fire fuel reduction and evacuation planning. These funds will allow the Fire Department to address increased call volumes and emergency medical service needs that result from city-wide increases in residential density, including the anticipated increase allowed under the proposed project. Future remodeling or expansion of BFD facilities to accommodate new equipment would not be needed to specifically to serve the additional residential units, which would be added incrementally in various locations in the city and served by more than one fire station. Should a new fire station be required, the environmental impacts of constructing a fire station would be consistent with the construction-related impacts discussed in other sections of this Addendum and the 2023 HEU EIR. Should the Fire Department and the City determine that additional facilities are needed to provide fire protection services to the Specific Plan Area, it is not known whether such facilities would be located within the Specific Plan Area or elsewhere in

the city. If and when the BFD proposes a new station and identifies an appropriate site and funding, the City will conduct a complete a site-specific evaluation of the station's environmental impacts under CEQA. Therefore, impacts to fire services would be less than significant, similar to the 2023 HEU EIR findings.

### **Police Protection**

Police protection in the city is provided by the Berkeley Police Department (BPD). Although the proposed project would increase potential buildout in the Specific Plan Area compared to what was analyzed in the 2023 HEU EIR by up to 4,500 units, future development would be facilitated on underutilized sites in urbanized areas which are already served by the BPD. Nonetheless, the additional population growth facilitated by the proposed project could result in an increase in reported incidents, leading to longer response times unless the BPD increases staffing. The Disaster Preparedness and Safety Element, the Transportation Element and the Economic Development & Employment Element of the City's General Plan include policies that would ensure police services are adequate to accommodate an increase in population. Specifically, Policy S-1 and Action G would ensure that the City's emergency response plans are current and incorporate the latest information on hazards, vulnerability and resources; Policy T-28 and Action A would ensure emergency access be provided to all parts of the city which would not significantly increase emergency response times or hinder effective evacuation; and Policy ED-4 and Action A would ensure there are adequate levels of police presence in neighborhood and avenue commercial zones. Should the BPD and the City determine that additional facilities are needed to provide police protection services to the Specific Plan Area, it is not known whether such facilities would be located within the Specific Plan Area or elsewhere in the city. If and when the BPD proposes a new station and identifies an appropriate site and funding, the City will conduct a complete a site-specific evaluation of the station's environmental impacts under CEQA. Therefore, similar to the 2023 HEU EIR findings, impacts to police services would be less than significant.

### **Schools**

As discussed in the 2023 HEU EIR, in a study prepared for Berkeley Unified School District's (BUSD) adopted School Facilities Fee on new residential and commercial/industrial development, the District used a blended student generation rate of 0.191 for all housing types.<sup>33</sup> Based on this generation rate, development under the proposed project would add an estimated total of 860 new students over time. This number is highly conservative, however, the proposed project could

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<sup>33</sup> Berkeley Unified School District (BUSD). 2016. School Facility Fee Justification Report for Residential, Commercial & Industrial Development Projects for the Berkeley Unified School District. Berkeley, CA. September 2016. <https://www.berkeleyschools.net/wp-content/uploads/2016/11/Berkeley-USD-Level-I-2016-FINAL-10-10-2016.pdf>

encourage housing that would add more school-aged children to BUSD schools. These students would be distributed throughout the schools that serve Berkeley depending on their grade level, their location, and their school preferences. The addition of 860 students under the proposed project would result in an increase of 9 percent compared to the BUSD enrollment of 9,342 students in the 2023-24 school year.<sup>34</sup> However, as discussed in the 2023 HEU EIR, future development facilitated by proposed project would be required to pay school impact fees pursuant to Section 65995(3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), which BUSD would use to maintain the desired school capacity and the maintenance and/or development of new school facilities. Furthermore, if and when the City proposes new facilities and identifies an appropriate site and funding, the City will conduct an evaluation of the site-specific environmental impacts of the new school facility under CEQA. Therefore, impacts related to school capacity would be less than significant, similar to the 2023 HEU EIR findings.

### Parks and Recreation

Similar to the HEU, the proposed project would not include the provision of new parks or the physical alteration of existing parks or recreation centers. Full buildout of the proposed project would further increase the number of residents in the Specific Plan Area compared to the HEU by 11,250 people, which would increase the use of parks and recreational facilities. As discussed in the 2023 HEU EIR, the ratio of parkland per resident is approximately 25.5 acres per 1,000 residents. Although the proposed project would decrease the ratio of parkland per resident from 25.5 acres per 1,000 residents to 23.9 acres per 1,000 residents, in accordance with General Plan policies, the City continually evaluates and plans for expansion or renovations of parks and recreation facilities as need to accommodate demand. Compliance with General Plan policies, particularly Policies OS-1, OS-2, OS-6, would ensure park facilities are kept up to date and park acreage to population ratio is maintained within Berkeley. Compliance with General Plan policies and actions would potentially result in development of new recreational opportunities including parks. Should future park or recreational facilities be identified for construction, it is not known where such facilities would be located. If and when the Parks Department proposes new facilities and identifies an appropriate site and funding, the City will conduct an evaluation of the site-specific environmental impacts of the new park or recreation facility under CEQA. Future residents in the Specific Plan Area would also be able to access existing City parks and regional recreational facilities; including the Bay Trail and Eastshore State Park and Tilden Regional Park and Claremont Canyon Regional Preserve. Therefore, the proposed project would not result in substantial overuse of existing City parks which may cause physical deterioration of these facilities or require the construction or expansion of facilities which may have an adverse physical

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<sup>34</sup> Ed-data.org. 2022. "District Summary, Berkeley Unified." <https://www.ed-data.org/district/Alameda/Berkeley-Unified>

effect on the environment. Therefore, impacts related to parks and recreational facilities would be less than significant, similar to the 2023 HEU EIR findings.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to public services and recreation, and no new mitigation measures are required.

### 4. Conclusion

The proposed project would have less than significant impacts with respect to public services and recreation, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to public services and recreation than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## N. Transportation

### 1. Impact Identified in the 2023 HEU EIR

As discussed in Section 4.14, *Transportation*, of the 2023 HEU EIR, the HEU would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Although the HEU would increase ridership for AC Transit and BART, AC Transit and BART monitor and plan for anticipated changes in local and regional ridership levels and increased demand through their ongoing evaluation of routes, schedules, ridership, and capacity availability. The HEU would also be consistent with the City's 2026 Bicycle Plan and development would be required to provide long-term and short-term bicycle parking in accordance with BMC Section 23.322.090 as well as meet applicable requirements for pedestrian access under BMC Section 23.304.100.

The 2023 HEU EIR found that the HEU would decrease VMT per capita by 3 percent, from 11.22 to 10.86, which would be below the City of Berkeley VMT threshold of 19.38 (15 percent below regional average household VMT per capita of 22.80). Therefore, VMT impacts were found to be less than significant.

As found in the 2023 HEU EIR, the HEU would not include hazardous geometric design features or incompatible uses, and circulation components and geometric design features for individual projects would be reviewed by the City Engineering division and would be in accordance with all

applicable City standards and the building plan check process to minimize design hazards. Therefore, this impact was determined to be less than significant.

The HEU also would not result in inadequate emergency access. The 2023 HEU EIR determined that development under the HEU would be required to comply with basic building designs and standards for residential buildings as mandated by the Berkeley Fire Code, under BMC Chapter 19.48. As a part of development review, representatives from several City departments and representatives, including the Building and Safety Division, the Transportation Division, and the Fire Department, would review the entitlement plan set to ensure compliance with egress requirements and other fire safety features. Individual projects would be required to incorporate all applicable design and safety requirements as set forth in the most current adopted building codes and fire and life safety standards. Compliance with these standards is ensured through the City review and building plan check process. Based on the preceding, impacts related to emergency access were found to be less than significant.

## **2. Impacts of the Proposed Project**

The proposed project would allow for up to 4,500 more units in the Specific Plan Area, which are areas served by BART and AC Transit, and therefore would increase the transit ridership for AC Transit and BART. However, AC Transit and BART monitor and plan for anticipated changes in local and regional ridership levels and increased demand through their ongoing evaluation of routes, schedules, ridership, and capacity availability. Therefore, similar to the 2023 HEU EIR findings, the proposed project would not conflict with AC Transit's or BART's ongoing efforts for facility improvement or capital improvement project planning.

The proposed project would concentrate development in Specific Plan Area with is entirely in a TPA, and would place residents in proximity to jobs, services, and transit, which would encourage walking, bicycling, and the use of alternative modes of transportation. Future development would be reviewed in accordance with the City's Public Works Department Transportation Program standards, which would provide oversight engineering review to ensure that the project is constructed according to City standards. Thus, the proposed project would also be consistent with the City's 2026 Berkeley Bicycle Plan Update. The proposed project does not include modifications to the public right-of-way and, therefore, would not preclude the installation of the planned or proposed bicycle facilities on the streets in the city. Development facilitated by the proposed project would provide long-term and short-term bicycle parking in accordance with BMC Section 23.322.090 requirements to accommodate the bicycle parking demand generated by the project residents and would also be required to meet applicable requirements for pedestrian access under BMC Section 23.304.100 or other requirements as applicable. Therefore, the proposed project would not conflict with the City's Bicycle Plan Update or the City's Pedestrian Plan, and impacts would be less than significant, similar to the adopted HEU.

As discussed in the 2023 HEU EIR, the City of Berkeley has adopted thresholds to evaluate significant impacts for VMT. For residential uses, the City of Berkeley adopted a threshold of significance for VMT analysis based on the guidance from the California's Office of Planning and Research (OPR) that a residential project's VMT impact is considered less than significant if its household VMT per capita is at least 15 percent below the regional average household VMT per capita. Therefore, an increase in VMT per capita above 16.71 VMT (15 percent below the regional average of 19.67) would be considered a significant impact. However, the Specific Plan Area would satisfy the City's VMT screening criteria since the entire Specific Plan Area is located within a TPA and is proximate to high-quality transit. Moreover, the HEU VMT per capita of 10.86 assumes the addition of 19,098 housing units and 47,500 residents and remains well below the significance threshold of 19.38. The proposed project would add approximately 4,500 additional units and 11,250 additional residents—an increase of less than 25 percent relative to the HEU assumptions. Given that the HEU VMT per capita is substantially below the threshold, this proportional increase would not be expected to raise VMT per capita above the 19.38 threshold. Therefore, the proposed project would result in VMT per capita below applicable thresholds and impacts would be less than significant, similar to the 2023 HEU EIR findings.

Similar to the HEU, the proposed project's changes would not include hazardous geometric design features or incompatible uses. Each housing application would be evaluated at the project-specific level. Circulation components and geometric design features would be reviewed by the City Engineering division and would be in accordance with all applicable City standards and the building plan check process to minimize design hazards. Design review standards include standards for project access points, location, design, sight lines, roadway modifications, provisions for bicycle and pedestrian transportation connections, and emergency access. The proposed project includes policies to incentivize developers to create pedestrian plazas by partially or fully closing minor side streets that intersect with San Pablo Avenue to vehicular traffic, while maintaining emergency access. However, prior to any streets being closed, the selected streets would be reviewed by the Fire and Public Works Departments to ensure that there are no significant emergency access or safety impacts. Additionally, future development facilitated by the proposed project would be required to comply with basic building designs and standards for residential buildings as mandated by the Berkeley Fire Code, pursuant to BMC Chapter 19.48. As part of the development review process, representatives from several City departments and representatives, including the Building and Safety Division, the Transportation Division, and the Fire Department, would review the proposed development plan set to ensure compliance with emergency access requirements and other fire safety features. Future projects would be required to incorporate all applicable design and safety requirements as set forth in the most current building codes and fire and life safety standards, which would reduce impacts related to emergency access. Therefore, as was found in the 2023 HEU EIR, the proposed project would have less than significant impacts related to safety hazards and emergency access.



### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to transportation and circulation, and no new or revised mitigation measures are required.

### 4. Conclusion

The proposed project would have less than significant impacts with respect to transportation, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to transportation than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## O. Tribal Cultural Resources

### 1. Impact Identified in the 2023 HEU EIR

As discussed in Section 4.15, *Tribal Cultural Resources*, of the 2023 HEU EIR, ground-disturbing activities associated with the HEU could expose and adversely affect previously unidentified subsurface archaeological resources that may qualify as tribal cultural resources. However, impacts would be less than significant with adherence to the City's Standard COAs related to archaeological resources and human remains set forth above under Section 4.4, *Cultural Resources*, as well as Mitigation Measure TCR-1, which was adopted and incorporated into the HEU and would require tribal cultural monitoring.

### 2. Impacts of the Proposed Project

Based on the results of AB 52 and SB 18 consultation conducted as part of preparation of the 2023 HEU EIR, tribal cultural resources were found to be potentially present in areas near the waterfront and near Indian Rock. Although the proposed project would increase potential buildout in the Specific Plan Area compared to what was analyzed in the 2023 HEU EIR by up to 4,500 units, development facilitated by the proposed project would be concentrated on developed sites and would not be within the areas determined by consulting tribes to be sensitive for tribal cultural resources. The project includes amendments to the General Plan, and therefore required Tribal Consultation, pursuant to AB 52. The California Native American Heritage Commission provided contact information for tribes potentially affected by the project, and the City sent letters to these tribes. No tribes requested consultation within the deadline. Similar to what was concluded in the 2023 HEU EIR, it can be assumed that no tribal cultural resources have been identified. Nonetheless, similar to the HEU, ground-disturbing activities associated with



individual development projects under the proposed project could expose previously unidentified subsurface archaeological resources that may qualify as tribal cultural resources and could be adversely affected by construction. Additionally, the proposed project would allow increased building heights, which could require deeper foundations and thereby increase the likelihood of encountering tribal cultural resources. Future projects subject to CEQA and SB 35 would require project-specific tribal cultural resource identification and consultation and incorporation of the appropriate avoidance, minimization, or mitigation identified through the consultation process. In addition, the City's Standard COA related to the protection of archaeological resources and human remains (including remains that are determined to be of Native American origin) would apply to future development. In addition to the City's Standard COAs related to the protection of archaeological resources and human remains set forth in full in Addendum Section 5.4, *Cultural Resources*, previously adopted Mitigation Measure TCR-1 would be required to be implemented and would reduce impacts to tribal cultural resources a less than significant level.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to Tribal Cultural Resources, and no new mitigation measures are required. Berkeley's Standard COAs related to archaeological resources and human remains, set forth above in *Section 4.4, Cultural Resources*, which apply to the HEU as a whole, would remain applicable. Previously adopted 2023 HEU EIR Mitigation Measure TCR-1, incorporated in the City's Standard COAs, also would remain applicable and would continue to be implemented and monitored.

TCR-1: Tribal Cultural Monitoring. For future projects that are determined through tribal consultation to potentially affect tribal cultural resources, in order to mitigate potential adverse impacts to Native American cultural objects and human remains discovered during construction, tribal cultural monitors will be retained to monitor work done in areas of Tribal concern, as determined through tribal consultation. If Native American cultural objects and/or human remains are discovered during construction, work shall be halted within 100 feet of the discovery until the objects have been inspected and evaluated by tribal cultural monitors and a qualified archaeologist meeting the Professional Qualifications Standards of the Secretary of the Interior (36 CFR Part 61). The archaeologist shall, in accordance with the appropriate Guidelines, identify and evaluate the significance of the discovery and develop recommendations for treatment in consultation with the affected Tribe to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, project impacts shall be mitigated in consultation with the affected Tribe consistent with the CEQA Guidelines for Determining the Significance of and Impacts to Cultural Resource, Archaeological Historic and Tribal Cultural Resources. Such mitigation may include, but is not limited to, additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall

be retained to monitor the ground disturbance when it is suspected that a TCR might be encountered.

#### 4. Conclusion

The proposed project would have less than significant impacts with mitigation with respect to tribal cultural resources, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to tribal cultural resources than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

#### P. Utilities and Service Systems

##### 1. Impact Identified in the 2023 HEU EIR

As discussed in *Section 4.16, Utilities and Service Systems*, of the 2023 HEU EIR, HEU would increase water demand in the City by an estimated 0.96 mgd, or approximately 0.5 percent, above the 2030 EBMUD water service area demand estimate of 190 mgd. The increase of 0.5 percent from the projected 2030 water demand in EBMUD's Urban Water Management Plan (UWMP) would also increase the gallons per capita per day (gpcd) from 121 gpcd to 127 gpcd. However, this would still be well below the EBMUD service area water reduction goal of 153 gpcd by 2020. Therefore, EBMUD infrastructure and facilities would have adequate capacity to service the HEU, and construction and operation of development facilitated by the HEU would not require new or expanded water supply facilities. With demand management during multi-year droughts, as required by EBMUD, impacts of HEU related to water supply would be less than significant.

As discussed in *Section 4.16, Utilities and Service Systems*, of the 2023 HEU EIR, development facilitated by the HEU would generate approximately 765,688 gallons per day (gpd) of wastewater. EBMUD projects that 61 mgd of wastewater will be collected and treated in the EBMUD Special District No.1 by 2040. Therefore, the HEU would generate approximately 1.3 percent of the wastewater collected and treated in the district by 2040. The increased wastewater generation would be within the remaining capacity of EBMUD's Main Wastewater Treatment Plant (MWWTP), and the plant's existing wastewater treatment capacity would be sufficient to accommodate the increase in population facilitated by the HEU. Additionally, as discussed in the 2023 HEU EIR, although the construction of new or expanded sewer mains may be necessary to accommodate additional wastewater flow, development would be required to

comply with the City's Private Sewer Lateral Ordinance<sup>35</sup> (BMC Section 17.24.130) and impacts related to individual new sewer main construction projects would be less than significant due to their temporary nature, adherence to existing requirements, and the already developed nature of wastewater conveyance corridors. Development facilitated by the HEU would be required to comply with BMC Title 17 which establishes City standards related to wastewater discharge, peak flow, and sewer capacity. Every person, firm, corporation or entity desiring to construct a new connection to sewer services to the City's sanitary sewer system would be required to pay a connection fee in the amount as established by City Council resolution. With adherence to City regulations and General Plan policies, impacts related to wastewater conveyance and the construction of new or expanded wastewater facilities were found to be less than significant.

As discussed in the 2023 HEU EIR, existing stormwater infrastructure, electricity and natural gas facilities, and telecommunications infrastructure would be able to accommodate the increased demand under the HEU, and the construction or relation of facilities would be required.

Lastly, the 2023 HEU EIR found that the HEU would generate 23.7 cubic yards of solid waste per day or 8,651 cubic yards of solid waste per year, which would be 0.013 percent of the total remaining capacity of 65.4 million cubic yards of the Altamont Landfill. Therefore, impacts to solid waste were found to be less than significant.

## **2. Impacts of the Proposed Project**

The City's wastewater treatment capacity is 320 million gallons per day (mgd). The existing average daily flow is 63 mgd and the HEU buildout would add an additional 0.77 mgd. Based on the HEU wastewater generation assumption of 40 gallons per day (gpd) for a multi-family unit, the proposed project buildout of 4,500 units above the Housing Element maximum buildout would add 180,000 gpd, which is 0.18 mgd and well within the City's treatment capacity of 320 mgd. New development would be required to comply with the City's Private Sewer Lateral Ordinance, by eliminating wet-weather infiltration and inflow to private sewer laterals, which would regulate wet-weather contribution from the proposed project. Although construction of new or expanded sewer mains may be necessary to accommodate additional wastewater flow, the precise sizing of new wastewater conveyance pipes would be determined at the time of installation and would be subject to the approval of the City to ensure that the system would be adequate. The impacts of sewer main construction projects would be less than significant due to their temporary nature, adherence to existing requirements, and the already developed nature of wastewater conveyance corridors. Impacts of construction of projects facilitated by the proposed project are analyzed comprehensively throughout this Addendum and the 2023 HEU. Future

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<sup>35</sup> City of Berkeley.2023. Private Sewer Lateral website. <https://berkeleyca.gov/city-services/streets-sidewalks-sewers-and-utilities/private-sewer-lateral>

development facilitated by the proposed project would also be required to comply with BMC Title 17 which establishes City standards related to wastewater discharge, peak flow, and sewer capacity, and future applicants desiring to construct a new connection the City's sanitary sewer system would be required to pay a connection fee in the amount as established by City Council resolution. Therefore, similar to the 2023 HEU EIR findings, impacts related to wastewater would be less than significant.

The HEU projected increase in water demand is 0.96 mgd, which is a 0.5 percent increase over the 2030 EBMUD service area demand of 190 mgd. Based on the HEU water use assumption of 50 gpd per multi-family unit, the proposed project buildout would add 225,000 gpd, which is 0.25 mgd. The HEU and proposed project buildout would increase demand in the City by an estimated 1.21 mgd or 0.64 percent increase to the 2030 EBMUD service area demand.

Similar to the HEU, the EBMUD Urban Water Management Plan (UWMP) is used to project water demand with the proposed project. The EBMUD service area reduction goal is 153 gallons per capita per day (gpcd) by 2020. As discussed in the 2023 HEU EIR, the EBMUD service area has a water reduction goal of 153 gallons per capita per day (gpcd) by 2020, and in 2020 the Mid-Peninsula Water District (MPWD) reported its gpcd was 121 gpcd which met the target. Based on the increase of approximately 0.64 percent from the projected 2030 water demand in EBMUD's UWMP, estimated gpcd with implementation of the proposed project would be 129 gpcd, which would still be well below the targeted 153 gpcd. Future development facilitated by the project would be required to comply with water conservation regulations and policies which would help maintain sufficient supplies, such as California Code of Regulations (CCR) Title 24, Part 11 (CALGreen), the State's Water Efficient Landscaping Ordinance (WELO) and EBMUD's Section 31. Therefore, similar to the 2023 HEU EIR findings, there would be sufficient water supplies available to serve development facilitated by the proposed project, and impacts would be less than significant.

Based on the HEU solid waste generation rate of 4/lbs/unit/day, and conversion factor of 1,000 pounds per cubic yard, the proposed project buildout would generate 18 cubic yards of solid waste per day. With Berkeley's 69 percent diversion rate, the proposed project buildout would generate an additional 5.58 cubic yards of solid waste per day, which equates to 2,037 cubic yards per year. The landfill has a remaining capacity of 52.3 million cubic yards (as of October, 2025), meaning the proposed project's potential maximum buildout would generate 0.0039 percent of the current total remaining landfill capacity per year which is an insignificant increase compared to the 0.013 percent as analyzed in the 2023 HEU EIR. Therefore, impacts related to solid waste would be less than significant, similar to the 2023 HEU EIR findings.

As discussed above, impacts related to utilities and service systems, including water demand, wastewater and stormwater generation, solid waste generation, and electricity, natural gas and

telecommunications service, may incrementally increase, but would be within those disclosed in the 2023 HEU EIR.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur to utilities and service systems, and no new mitigation measures are required.

### 4. Conclusion

The proposed project would have less than significant impacts with respect to utilities and service systems, similar to the 2023 HEU EIR. No substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to utilities and service systems than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## Q. Wildfire

### 1. Impact Identified in the 2023 HEU EIR

As discussed in *Section 4.17, Wildfire*, of the 2023 HEU EIR, 82 units of the HEU would be located in Fire Zones 2 and 3, which are considered Very High Fire Hazard Severity Zones (VHFHSZ). The HEU would also facilitate increased residential development in the R-1, R-2, and R-2A districts, which include portions within the VHFHSZ. Development facilitated by the HEU would be subject to the City's Standard COA to prepare a Transportation Construction Plan, which would limit the extent to which development would impair or physically interfere with adopted emergency response or evacuation procedures. Development also would be required to comply with existing City regulations and prepare a Fire Protection Plan for housing projects in the Wildland-Urban Interface Fire Area, which would reduce the potential to exacerbate wildfire risk during construction and after projects are constructed. This would also reduce the severity of potential impacts related to exposure to pollutant concentrations from a wildfire or the likelihood of wildfire ignition. Furthermore, the BMC requires site-specific geotechnical investigations which would reduce potential impacts related to landslides, post-fire slope instability, or drainage changes following a potential wildfire for individual future development projects. Nonetheless, for some development projects, impacts may result from the potential for unusual site-specific or road conditions, project characteristics, and the general ongoing fire risk in the Berkeley Hills; therefore, impacts were found to be significant and unavoidable.

The 2023 HEU EIR found that new development could require the installation and maintenance of new or improved roads, emergency water sources, power lines or other utilities, the construction and operation of which could introduce potential sources of wildfire ignition, such as the sparking of an overhead power line or construction equipment or the operation of resident vehicles.

Although Mitigation Measure W-1, which was adopted and incorporated into the HEU and would reduce potential risks by requiring power lines to be placed underground in areas subject to wildfire risk, it may not be feasible to impose the requirement on all projects. Potentially unusual site-specific conditions or aspects of a specific infrastructure project, including power line installation, may result in wildfire impacts from the installation or maintenance of infrastructure required by buildout of the HEU. Therefore, this impact was also found to be significant and unavoidable.

## **2. Impacts of the Proposed Project**

The proposed project would increase the intensity/density of development in the Specific Plan Area compared to what was evaluated in the 2023 HEU EIR, however no portion of the Specific Plan Area is within the VHFHSZ. The impacts from the potential allowed land uses, potential increase in residential density, and total number of potential new units that would be facilitated by the proposed project would no greater than those studied in the 2023 HEU EIR. The same regulations and standard conditions of approval would apply. Impacts related to wildfire would be similar compared to those disclosed in the 2023 HEU EIR but would remain significant and unavoidable as part of overall Housing Element implementation.

## **3. Effects and Mitigation Measures**

No new or substantially more severe significant effects would occur to wildfire, and no new mitigation measures are required. Berkeley's Standard COA requiring preparation of a Transportation Construction Plan, as referenced in the 2023 HEU EIR and shown below, would remain applicable.

## **4. Conclusion**

Similar to the HEU, wildfire impacts would remain significant and unavoidable. Nonetheless, no substantial changes have occurred that require major revisions to the 2023 HEU EIR. There is no new information indicating that the proposed project would have new significant impacts or substantially more severe significant impacts with respect to wildfire than were identified in the 2023 HEU EIR. None of the conditions listed in CEQA Guidelines Section 15162 that would indicate that the project is not consistent with the HEU and its impacts as studied in the 2023 HEU EIR have been met.

## R. Cumulative Impacts

In addition to the specific impacts of individual projects, CEQA requires consideration of potential cumulative impacts of the proposed project. CEQA defines “cumulative impacts” as two or more individual impacts that, when considered together, are substantial or will compound other environmental impacts. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed project and other past, present, and probable future projects producing related or cumulative impacts. For example, noise impacts of two nearby projects may be less than significant when analyzed separately, but could have a significant impact when analyzed together. The cumulative impact analysis provides a reasonable forecast of future environmental conditions and can more accurately gauge the effects of a series of projects.

CEQA Guidelines Section 15130 requires cumulative impact analysis in EIRs to consider either a list of planned and pending projects that may contribute to cumulative effects or a summary of projections contained in an adopted planning document such as a general plan.

### 1. Cumulative Significant Impacts Identified in the 2023 HEU EIR

The cumulative setting for the analysis in the 2023 HEU EIR is explained in Section 3, Environmental Setting, of the 2023 HEU EIR. As stated in that section, some analyses including air quality, energy, greenhouse gas emissions, transportation, and population and housing rely on larger geographic areas, such as the Bay Area region. For issues that may have regional cumulative effects, the cumulative impact analysis in the 2023 HEU EIR was based on Plan Bay Area 2040, the Bay Area’s most recent Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Based on the forecasts in Plan Bay Area 2040, in 2040 Berkeley is estimated to have a population of 140,900, 55,400 housing units, and 121,700 jobs. Development under the HEU in conjunction with development forecasted in Plan Bay Area 2040 is accounted for in the cumulative impacts analysis.

For analyses that may have more localized or neighborhood implications (biological resources, cultural resources, noise, public services, utilities, wildfire), the 2023 HEU EIR’s cumulative impact analysis includes development proposed under UC Berkeley’s LRDP and Housing Projects #1 and #2 as described in the University’s Draft EIR dated March 8, 2021.<sup>36</sup> The 2021 LRDP planning assumption for the campus population is 48,200 students and 19,000 faculty and staff in the 2036-37 academic year compared to 39,300 students and 15,400 faculty and staff in the 2018-19 academic year. The LRDP also assumes 9,325,88 square feet of development on non-campus

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<sup>36</sup> University of California, Berkeley. 2021. UC Berkeley 2021 Long Range Development Plan and Housing Projects #1 and #2 Draft Environmental Impact Report. <https://berkeley.app.box.com/s/rbb4buhz5b3w7yz8gk7ot2n759fpqbrs>



University properties throughout Berkeley (including Housing Projects #1 and #2) compared to 4,640,769 square feet of development in 2018-2019.

Cumulative impacts associated with the HEU in combination with cumulative development were analyzed in Sections 4.1 through 4.17 of the 2023 HEU EIR. The 2023 HEU EIR found that cumulative development pursuant to the HEU and the LRDP would have the potential to impact historical resources. Historic-period resources could be vulnerable to development activities that could result in damage to or demolition of cultural resources. The HEU would result in significant and unavoidable impacts to historical resources. Implementation of previously-adopted Mitigation Measures CUL-1 and CUL-2, which were adopted and incorporated into the HEU, would reduce or avoid some but not all potential impacts to historical resources in Berkeley. Therefore, cumulative impacts to historical resources would be significant, and the HEU's contribution would be cumulatively considerable.

According to the Berkeley General Plan Environmental Management Element, noise-sensitive uses include but are not limited to residences, child-care centers, hospitals, and nursing homes (City of Berkeley 2001). The 2023 HEU EIR found that construction of future development projects in Berkeley would produce temporary noise impacts that would be localized to a project site and could affect noise-sensitive receptors within the immediate vicinity. Therefore, only sensitive receptors located in proximity to each construction site would be potentially affected by each activity. However, construction activities associated with individual housing development projects accommodated under the HEU may overlap for some time with construction activities for other development projects. Based on the locations of the potential housing sites included in the HEU and shown in Figure 2-4 of *Section 2, Project Description*, of the 2023 HEU EIR this could substantially increase noise levels at specific neighboring noise-sensitive receivers since many sites are located in proximity to each other. Therefore, concurrent construction of development projects facilitated by the HEU could result in cumulatively considerable impacts.

The 2023 HEU EIR also found that in and near Berkeley, the VHFHSZs are located largely along the WUI borders within the hilly northwestern areas. Within the geographic scope for this cumulative analysis wildfire-related impacts could be significant if development is in or near Berkeley's VHFHSZ. The University's proposed LRDP update would involve improvements and development in Campus Park, the Hill Campus West, the Hill Campus East, the Clark Kerr Campus, and the City Environs Properties, areas of which fall within the VHFHSZ. Development within this area could exacerbate wildfire risks. Like development under the HEU, new development under the LRDP would be subject to statewide standards for fire safety in the California Fire Code. Nonetheless, because the proposed HEU could exacerbate wildfire risk in a VHFHSZ and development under the proposed LRDP update could also exacerbate such risks, a cumulative impact would occur and the HEU's contribution would be cumulatively considerable.



For all other impact areas, the 2023 HEU EIR found that the HEU would not result in cumulatively considerable impacts.

## **2. Impacts of the Proposed Project**

The proposed project would have no new or substantially more severe significant effects than those analyzed and disclosed in the 2023 HEU EIR. The 2023 HEU EIR found significant and unavoidable impacts related to cultural resources, noise and wildfire. Like the HEU, the proposed project would result in impacts related to historical resources and construction noise. Unlike the HEU, the proposed project would not result in impacts related to wildfire.

For impacts related to cultural resources, implementation of previously adopted Mitigation Measures CUL-1, CUL-2, and W-1, as well as the City's standard conditions of approval related to historical resources, would reduce impacts. Although impacts to historical resources would remain significant and unavoidable, consistent with the conclusions of the adopted HEU EIR, the Specific Plan Area contains only approximately 1.7 percent of the City's identified historic resources. While individual resources within the Specific Plan Area may vary in sensitivity, the area's limited share of the City's total historic resources supports the conclusion that the project's incremental contribution to cumulative impacts would not be substantially greater than that evaluated in the 2023 HEU EIR. The proposed project would not result in new significant impacts or substantially more severe impacts related to historical resources than those identified in the 2023 HEU EIR.

For impacts related to noise, the City's standard conditions of approval for construction noise reduction and management, as well as applicable provisions of the Berkeley Municipal Code (BMC), would continue to apply to development under the proposed project. These measures would reduce construction-related noise impacts; however, even with their implementation, impacts related to construction noise would remain significant and unavoidable, consistent with the conclusions of the HEU EIR. While the proposed project would result in an incremental increase in construction activity and associated noise due to the addition of approximately 4,500 housing units, these impacts are within the range of construction noise impacts previously analyzed in the 2023 HEU EIR and do not represent new or substantially more severe impacts beyond those disclosed in that analysis.

For impacts related to wildfire, unlike the HEU, no portion of the Specific Plan Area is within the VHFHSZ and therefore the proposed project would not contribute to cumulatively considerable impacts related to wildfire.

Similar to the HEU, the proposed project would result in less than significant cumulative impacts related to all other impact areas with adherence to State and local regulations as well as the City's

Standard COAs. Therefore, the proposed project would not result in a cumulatively considerable contribution to a cumulative impact.

### 3. Effects and Mitigation Measures

No new or substantially more severe significant effects would occur related to cumulative impacts, and no new mitigation measures are required.

### S. Conclusion

This CEQA Review Document demonstrates that the proposed project and the potential impacts associated with the proposed project are consistent with potential impacts characterized in and mitigation measures developed for the 2023 HEU EIR. Substantive revisions to the 2023 HEU EIR are not necessary because no new significant impacts or impacts of substantially greater severity than previously described would occur as a result of the proposed project. Therefore, the following determinations are applicable:

- No further evaluation of environmental impacts is required for the proposed project
- No Subsequent EIR or negative declaration is necessary per CEQA Guidelines Section 15162
- An Addendum to the Housing Element EIR is the appropriate level of environmental analysis and documentation for the proposed project in accordance with CEQA Guidelines Section 15168(c).

Pursuant to CEQA Guidelines Section 15168(c), this CEQA Review Document will be included in the public record and will be considered as part of the deliberations on the proposed project. Documents related to this Addendum will be available at the City of Berkeley Planning and Development Department.

**APPENDIX A: COMPARISON MATRIX OF HOUSING ELEMENT UPDATE AND  
SPECIFIC PLAN IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

## Comparison Matrix of HEU and Specific Plan Impacts, Mitigation Measures, and Residual Impacts

**TABLE 1 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                         | Mitigation Measure(s) | HE Residual Impact | Specific Plan Analysis |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|------------------------|
| <b>Aesthetics</b>                                                                                                                                                                                                                                                                                                                                                                                                              |                       |                    |                        |
| <b>Impact AES-1.</b> Implementation of the proposed HEU would alter the development pattern of the city such that scenic views of and from public viewpoints could be adversely affected. Potential future new development throughout the city could block views of a scenic vista from some public viewpoints. However, this would occur on individual sites and would be limited. This impact would be less than significant | None required.        | LTS                | =                      |
| <b>Impact AES-2.</b> There are no designated or eligible Scenic Highways in Berkeley or with substantial views of Berkeley. Implementation of the proposed HEU not damage scenic resources visible from a Scenic Highway. No impact would occur.                                                                                                                                                                               | None required.        | None               | =                      |
| <b>Impact AES-3.</b> Berkeley is urbanized and future development under the proposed HEU would not conflict with applicable zoning and other regulations governing scenic quality. This impact would be less than significant.                                                                                                                                                                                                 | None required.        | LTS                | =                      |
| <b>Impact AES-4.</b> Development facilitated by the proposed HEU would create new                                                                                                                                                                                                                                                                                                                                              | None required.        | LTS                | =                      |

| Impact                                                                                                                                                                                                                                                                                                                                                                        | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | HE Residual Impact | Specific Plan Analysis                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| sources of light or glare that could adversely affect daytime or nighttime views in the area. However, Berkeley is already largely built out with sources of light and glare throughout the city and development would not substantially add to existing light and glare. With compliance with existing regulations, this impact would be less than significant               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                                                                                                                                                                                     |
| <b>Air Quality</b>                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                                                                                                                                                                                     |
| <b>Impact AQ-1.</b> The proposed HEU would not conflict with the control measures within the 2017 Clean Air Plan, and VMT increase from the project would be less than the project's project population increase. Therefore, this impact would be less than significant.                                                                                                      | None required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | LTS                | =                                                                                                                                                                                                                   |
| <b>Impact AQ-2 (Construction).</b> Construction facilitated by the project would temporarily increase air pollutant emissions, which would affect local air quality.<br><br>Adherence to Mitigation Measure AQ-1 and the City's Standard Conditions of Approval would reduce construction emissions. This impact would be less than significant with mitigation incorporated. | <b>AQ-1 Construction Emissions Reduction Measures.</b> As part of the City's development approval process, the City shall require applicants for future development projects within the project sites to comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM10 (Table 8-2, Basic Construction Mitigation Measures Recommended for All Proposed Projects, of the May 2017 BAAQMD CEQA Guidelines), outlined below. | LTS                | =<br><br>The potential additional units from the proposed project could incrementally increase the impact, however the Mitigation Measure would not change. With MM AQ-1 the impact would be less than significant. |

| Impact | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | HE Residual Impact | Specific Plan Analysis |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------|
|        | <p>All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times a day. All haul trucks transporting soil, sand, or other loose material off- site shall be covered. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.</p> <p>All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</p> <p>Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.</p> <p>All construction equipment shall be maintained and properly tuned in accordance with manufacture's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper conditions prior to operation.</p> |                    |                        |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | HE Residual Impact | Specific Plan Analysis                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's number shall also be visible to ensure compliance with applicable regulations.                                                                                                                                                                                                                                                                                                                                    |                    |                                                                                                                                                                                                                                                                                                               |
| <b>Impact AQ-2 (Operation).</b> VMT from the project would increase at a lower rate compared to population growth facilitated by the project. Therefore, operational impacts related to criteria pollutants would be less than significant.                                                                                                                                                                                                                                | None required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                    | =<br>The Specific Plan could result in an increase of up to 11,250 in population over that assumed in the 2023 HEU EIR, however, as discussed in TRA-2, the Specific Plan Area is entirely located within a Low VMT Area and Transit Priority Area, which would result in a less-than-significant VMT impact. |
| <b>Impact AQ-3.</b> Construction activities for individual projects lasting longer than two months or located within 1,000 feet of sensitive receptors could expose sensitive receptors to substantial pollutant concentrations. Additionally, development facilitated by the project would site new sensitive land uses near Interstate 580/80 which may expose them to substantial pollutant concentrations. This impact would be less than significant with mitigation. | <b>AQ-2 Construction Health Risk Assessment.</b> For individual projects (excluding ADUs, single-family residences, and duplexes) where construction activities would occur within 1,000 feet of sensitive receptors, would last longer than two months, and would not utilize Tier 4 and/or alternative fuel construction equipment, the project applicant shall prepare a construction health risk assessment (HRA). The HRA shall determine potential risk and compare the risk to the following BAAQMD thresholds: <ul style="list-style-type: none"> <li>Non-compliance with Qualified Community Risk Reduction Plan;</li> </ul> | LTS                | =                                                                                                                                                                                                                                                                                                             |

| Impact | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | HE Residual Impact | Specific Plan Analysis |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------|
|        | <ul style="list-style-type: none"> <li>Increased cancer risk of &gt; 10.0 in a million;</li> <li>Increased non-cancer risk of &gt; 1.0 Hazard Index (Chronic or Acute); or</li> <li>Ambient PM<sub>2.5</sub> increase of &gt; 0.3 µg/m<sup>3</sup> annual average</li> </ul> <p><b>AQ-3 TAC Exposure Reduction Building Measures.</b> The following design features shall be incorporated for residential development located within 1,000 feet of I-580/80 or on a lot that fronts on a section of roadway with 10,000 vehicles per day or more in order to reduce exposure of proposed residences to TACs from vehicles and stationary combustion engines (i.e., generators):</p> <p>If the proposed buildings would use operable windows or other sources of infiltration of ambient air, the development shall install a central HVAC system that includes high efficiency particulate filters (HEPA). These types of filters are capable of removing approximately 99.97 percent of the DPM emissions from air introduced into the HVAC system (U.S. EPA 2022). The system may also include a carbon filter to remove other chemical matter. Filtration systems must operate to maintain positive pressure within the building interior to prevent entrainment of outdoor air indoors.</p> <p>If the development limits infiltration through non-operable windows, a suitable ventilation</p> |                    |                        |



| Impact | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | HE Residual Impact | Specific Plan Analysis |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------|
|        | <p>system shall include a ventilation system with filtration specifications equivalent to or better than the following: (1) American Society of Heating, Refrigerating and Air- Conditioning Engineers MERV-13 supply air filters, (2) greater than or equal to one air exchanges per hour of fresh outside filtered air, (3) greater than or equal to four air exchanges per hour recirculation, and (4) less than or equal to 0.25 air exchanges per hour in unfiltered infiltration. These types of filtration methods are capable of removing approximately 90 percent of the DPM emissions from air introduced into the HVAC system.</p> <p>Windows and doors shall be fully weatherproofed with caulking and weather-stripping that is rated to last at least 20 years. Weatherproof should be maintained and replaced by the property owner, as necessary, to ensure functionality for the lifetime of the project.</p> <p>Where appropriate, install passive (drop-in) electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).</p> <p>Prepare an ongoing maintenance plan for the HVAC and filtration systems, consistent with manufacturers' recommendations.</p> |                    |                        |

| Impact                                                                                                                                                                                                                                                                                                                                                                                | Mitigation Measure(s)                                                                                 | HE Residual Impact | Specific Plan Analysis |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------|------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                       | The applicant shall inform occupants regarding the proper use of any installed air filtration system. |                    |                        |
| <b>Impact AQ-4.</b> Development facilitated by the project would not create objectionable odors that could affect a substantial number of people. This impact would be less than significant                                                                                                                                                                                          | None required.                                                                                        | LTS                | =                      |
| <b>Biological Resources</b>                                                                                                                                                                                                                                                                                                                                                           |                                                                                                       |                    |                        |
| <b>Impact BIO-1.</b> Development facilitated by the proposed HEU may result in direct or indirect impacts to special-status species or their associated habitats, and impacts to nesting birds. This impact would be less than significant.                                                                                                                                           | No MM required.<br>COA Nesting Bird                                                                   | LTS                | =                      |
| <b>Impact BIO-2.</b> Implementation of the proposed HEU may directly or indirectly impact riparian habitat, sensitive natural communities, or protected wetlands in the City of Berkeley. Implementation of federal, State, and local regulations and policies would ensure riparian habitat and wetlands are not significantly impacted. This impact would be less than significant. | No MM required.<br>BMC Ch. 17.08                                                                      | LTS                | =                      |
| <b>Impact BIO-3.</b> Implementation of the proposed HEU may result in impacts to state or federally protected wetlands. This impact would be less than significant.                                                                                                                                                                                                                   | No MM required.<br>BMC Ch. 17.08                                                                      | LTS                | =                      |

| Impact                                                                                                                                                                                                                                                                                                                               | Mitigation Measure(s)                                                                                                                                                                                                                                                                        | HE Residual Impact          | Specific Plan Analysis                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Impact BIO-4.</b> Implementation of the proposed HEU would not substantially impede the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors with compliance with existing and proposed regulations. This impact would be less than significant. | No MM required.<br>BMC Ch. 17.08                                                                                                                                                                                                                                                             | LTS                         | =                                                                                                                                     |
| <b>Impact BIO-5.</b> Implementation of the proposed HEU would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This impact would be less than significant.                                                                                           | None required.                                                                                                                                                                                                                                                                               | LTS                         | =                                                                                                                                     |
| <b>Impact BIO-6.</b> Implementation of the proposed HEU would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. No impact would occur.                                                           | None required.                                                                                                                                                                                                                                                                               | LTS                         | =                                                                                                                                     |
| <b>Cultural Resources</b>                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                              |                             |                                                                                                                                       |
| <b>Impact CUL-1.</b> Development accommodated by the proposed Housing Element Update could adversely affect known and previously unidentified historic-period resources. Impacts to historic-period resources would be                                                                                                               | <b>CUL-1 Historic Context Statement, Cultural Resources Survey and Designations.</b> During the period of this Housing Element, the City should conduct a citywide historic context statement and a cultural resource survey to identify historic resources, with priority given to sites in | Significant and Unavoidable | =<br>Consistent with MM CUL-2, assessments on individual sites will be required. Analysis for the subsequent projects can rely on the |

| Impact                                       | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | HE Residual Impact | Specific Plan Analysis                                           |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------------|
| significant and unavoidable with mitigation. | <p>the EIR Site Inventory, to determine if there are designed built environment features which are over 40 years of age proposed to be altered or demolished. Designation of historic or cultural resources should be conducted by the Landmarks Preservation Commission pursuant to 3.24.260 of the Berkeley Municipal Code.</p> <p><b>CUL-2 Historical Resources Discretionary Review.</b> For projects that are subject to discretionary review that occur during the Housing Element period where a historical-age building or structure that has not been previously evaluated is present, a historical resources assessment shall be performed by an architectural historian or historian who meets the Secretary of the Interior Professional Qualification Standards (PQS) in architectural history or history. The qualified architectural historian or historian shall conduct an intensive-level survey in accordance with the California Office of Historic Preservation guidelines to determine if the property qualifies for federal, state, or local historical resources designation. All age-eligible properties shall be evaluated within their historic context and documented in a technical memorandum with Department of Parks and Recreation Series 523 Forms. Should a property be found to be a qualifying historical resource, the project shall be subject</p> |                    | SU, if needed, and a project specific EIR would not be required. |

| Impact | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | HE Residual Impact | Specific Plan Analysis |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------|
|        | <p>to the City's regulations for permit review, including by the Preservation Landmarks Commission pursuant to Chapter 3.24.260, and/or by the Zoning Adjustments Board pursuant to Chapter 23.326 of the City of Berkeley Municipal Code. Efforts shall be made to the extent feasible to ensure that impacts are mitigated. Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place).</p> <p>In conjunction with a development application that may affect the historical resource, the historical resources built environment assessment shall also identify and specify the treatment of character-defining features and construction activities.</p> <p>Efforts shall be made to the greatest extent feasible to ensure that the relocation, rehabilitation, or alteration of the resource is consistent with the Secretary of the Interior's Standards for the Treatments of Historic Properties (Standards). In accordance with CEQA, a project that has been determined to conform with the Standards generally would not cause a significant adverse direct or indirect impact to historical resources (14 CCR § 15126.4(b)(1)).</p> |                    |                        |

| Impact                                                                                                                                                                            | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | HE Residual Impact | Specific Plan Analysis |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------|
|                                                                                                                                                                                   | <p>Application of the Standards shall be overseen by a qualified architectural historian or historic architect meeting the PQS. In conjunction with any development application that may affect the historical resource, a CEQA Review Document identifying and specifying the treatment of character-defining features and construction activities shall be provided to the City for review and concurrence. As applicable, the CEQA Review Document shall demonstrate how the project complies with the Standards and be submitted to the City for review and approval prior to the issuance of permits.</p> <p>If significant historical resources are identified on a development site and compliance with the Standards and or avoidance is not possible, appropriate site-specific mitigation measures shall be established and undertaken. These may include documentation of the resource in a manner consistent with the standards of the Historic American Building Survey (HABS). Documentation should include full descriptive and historical narrative, measured drawings, and medium format photographs, all in archivally stable format.</p> |                    |                        |
| <b>Impact CUL-2.</b> Development accommodated by the housing element update could adversely affect identified and previously unidentified archaeological Resources. Impacts would | <p>No MM required.</p> <p>Archaeological Resources COA.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | LTS                | =                      |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Mitigation Measure(s)                                 | HE Residual Impact                | Specific Plan Analysis |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------------|------------------------|
| be less than significant with required adherence to the City's Standard Conditions of Approval for archaeological resources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                       |                                   |                        |
| <b>Impact CUL-3.</b> Ground-disturbing activities associated with development under the housing element update could result in damage to or destruction of human burials. Impacts would be less than significant through adherence to state health and safety code section 7050.5 and public resources code section 5097.98.                                                                                                                                                                                                                                                                                                         | No MM required.<br>Human Remains COA.                 | LTS                               | =                      |
| <b>Cumulative Impact:</b> Development pursuant to the Housing Element Update and the LRDP would have the potential to impact historical resources. Historic-period resources could be vulnerable to development activities that could result in damage to or demolition of cultural resources. As noted above in CUL-2, the proposed project would result in significant and unavoidable impacts to historical resources. Adherence to Mitigation Measures CUL-1 and CUL-2 would reduce or avoid some but not all potential impacts to historical resources in Berkeley. Therefore, cumulative historical resources impacts would be | No feasible mitigation measures have been identified. | Cumulatively considerable impact. | =                      |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                 | Mitigation Measure(s) | HE Residual Impact | Specific Plan Analysis |
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| significant, and the project's contribution would be cumulatively considerable.                                                                                                                                                                                                                                                                                                                                        |                       |                    |                        |
| <b>Energy</b>                                                                                                                                                                                                                                                                                                                                                                                                          |                       |                    |                        |
| <b>Impact E-1.</b> Project construction and operation would require temporary and long-term consumption of energy resources. However, with adherence to State and local regulations, the project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. This impact would be less than significant.                                                                            | No MM required.       | LTS                | =                      |
| <b>Impact E-2.</b> The proposed HEU would be consistent with the State plans and General Plan policies related to energy efficiency and utilizing renewable energy. This impact would be less than significant.                                                                                                                                                                                                        | None required.        | LTS                | =                      |
| <b>Geology and Soils</b>                                                                                                                                                                                                                                                                                                                                                                                               |                       |                    |                        |
| <b>Impact GEO-1.</b> A portion of Berkeley is located within the Hayward Fault zone. Development facilitated by the proposed HEU is subject to seismically-induced ground shaking and other seismic hazards, including liquefaction and landslides, which could damage structures and result in loss of property and risk to human health and safety. However, implementation of State-mandated building standards and | No MM required.       | LTS                | =                      |



| Impact                                                                                                                                                                                                                                 | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                   | HE Residual Impact  | Specific Plan Analysis |
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| compliance with the Alquist-Priolo Act Earthquake Fault Act, the CBC, the Berkeley General Plan's policies and actions, and the BMC would reduce impacts to a less than significant level.                                             |                                                                                                                                                                                                                                                                                                                                                         |                     |                        |
| <b>Impact GEO-2.</b> With adherence to applicable laws and regulations, the proposed project would not result in substantial soil erosion or the loss of topsoil. Therefore, this impact would be less than significant.               | No MM required.                                                                                                                                                                                                                                                                                                                                         | LTS                 | =                      |
| <b>Impact GEO-3.</b> Portions of Berkeley are located on expansive soils. However, with required implementation of standard engineering practices, impacts associated with unstable or expansive soils would be less than significant. | No MM required.                                                                                                                                                                                                                                                                                                                                         | LTS                 | =                      |
| <b>Impact GEO-4.</b> The proposed project would not include septic tanks or alternative wastewater disposal systems. No impact would occur.                                                                                            | None required.                                                                                                                                                                                                                                                                                                                                          | No Impact           | =                      |
| <b>Impact GEO-5.</b> Development facilitated by the proposed HEU has the potential to impact paleontological resources. This impact would be less than significant with mitigation incorporated.                                       | <b>GEO-1 Protection of Paleontological Resources.</b> If ground disturbance below the level of prior disturbance and into native soils is proposed to occur in areas mapped as Pleistocene alluvial fan and fluvial deposits (Qpaf), Orinda Formation (Tor), or Knoxville Formation (Kjk), then the City shall require the following to be implemented: | LTS with Mitigation | =                      |

| Impact | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | HE Residual Impact | Specific Plan Analysis |
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|        | <p><b>Retention of Qualified Professional Paleontologist.</b> Prior to initial ground disturbance, the project applicant shall retain a Qualified Professional Paleontologist, as defined by Society of Vertebrate Paleontology (SVP) (2010), to determine the project's potential to significantly impact paleontological resources according to SVP (2010) standards.</p> <p>If underlying formations are found to have a high potential for paleontological resources, the Qualified Professional Paleontologist shall create a Paleontological Mitigation and Monitoring Program, which will be approved by the City and contain the following elements:</p> <p><b>Paleontological Worker Environmental Awareness Program (WEAP).</b> Prior to the start of construction, the Qualified Professional Paleontologist or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and procedures for notifying paleontological staff should fossils be discovered by construction staff.</p> <p><b>Paleontological Monitoring.</b> Full-time paleontological monitoring shall be conducted during ground disturbing construction activities (i.e., grading, trenching, foundation work) in</p> |                    |                        |

| Impact | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | HE Residual Impact | Specific Plan Analysis |
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|        | <p>sediments assigned a high paleontological sensitivity. Paleontological monitoring shall be conducted by a qualified Paleontological Resources Monitor, as defined by the SVP (2010). The duration and timing of the monitoring will be determined by the Qualified Professional Paleontologist based on the observation of the geologic setting from initial ground disturbance, and subject to the review and approval by the City. If the Qualified Professional Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions once the full depth of excavations has been reached, they may recommend that monitoring be reduced to periodic spot-checking or ceased entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Professional Paleontologist at that time. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Professional Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Professional Paleontologist shall complete the following conditions to mitigate impacts to significant fossil resources.</p> |                    |                        |

| Impact                                                                                                                                                                                                                                                                                                           | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | HE Residual Impact | Specific Plan Analysis                                                                                                                                                                                                                                                                                                                        |
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|                                                                                                                                                                                                                                                                                                                  | Upon completion of ground disturbing activity (and curation of fossils if necessary) the Qualified Professional Paleontologist shall prepare a final CEQA Review Document describing the results of the paleontological monitoring efforts associated with the project. The CEQA Review Document shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The CEQA Review Document shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the CEQA Review Document shall also be submitted to the designated museum repository. |                    |                                                                                                                                                                                                                                                                                                                                               |
| <b>Greenhouse Gas Emissions</b>                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                                                                                                                                                                                                                                                                                                               |
| <b>Impact GHG-1.</b> Future development under the proposed HEU would not directly or indirectly generate GHG emissions that would have a significant effect on the environment. GHG emissions from the project would not exceed BAAQMD 2031 interpolated thresholds. This impact would be less than significant. | None required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | LTS                | =<br>The GHG analysis was updated because BMC Section 12.80 was repealed on June 4, 2024 by Ordinance 7907-NS and to consider the potential increase in units and population from implementation of the proposed projects. The findings are summarized in the GHG section of this Report and the detailed analysis is included in Appendix B. |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Mitigation Measure(s)         | HE Residual Impact | Specific Plan Analysis |
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| <b>Impact GHG-2.</b> The proposed HEU would not conflict with GHG reduction goals and policies in the 2017 Scoping Plan, Plan Bay Area 2050, the City's General Plan, or the City's CAP. This impact would be less than significant.                                                                                                                                                                                                                                                                                                                                                                                                                                              | None required.                | LTS                | =                      |
| <b>Hazards and Hazardous Materials</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                               |                    |                        |
| <b>Impact HAZ-1.</b> Implementation of the proposed HEU would facilitate new residential development in Berkeley. Proposed new residential uses would not involve the routine transportation, use, or disposal of hazardous materials. However, construction of new residences could result in an increase in the overall routine, transport, use and disposal of hazardous materials in Berkeley for construction activities. Nonetheless, required compliance with applicable regulations related to hazardous materials and compliance with General Plan policies would minimize the risk of releases and exposure to these materials. Impacts would be less than significant. | No MM required.<br>Toxics COA | LTS                | =                      |
| <b>Impact HAZ-2.</b> Implementation of the proposed HEU may result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. However, compliance                                                                                                                                                                                                                                                                                                                                                                                                                                   | No MM required.<br>Toxics COA | LTS                | =                      |

| Impact                                                                                                                                                                                                                                                                                                                                                                            | Mitigation Measure(s)                                   | HE Residual Impact | Specific Plan Analysis |
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| with existing regulatory requirements would minimize risks to schools and students, resulting in a less than significant impact.                                                                                                                                                                                                                                                  |                                                         |                    |                        |
| <b>Impact HAZ-3.</b> Implementation of the proposed HEU would accommodate development on or near hazardous materials sites. However, compliance with applicable regulations and the City's Standard Conditions of Approval requiring site characterization and cleanup would minimize hazards from development on contaminated sites. This impact would be less than significant. | No MM required.<br>Toxics COA                           | LTS                | =                      |
| <b>Impact HAZ-4.</b> There are no airports within two miles of the Berkeley, and Berkeley is not within the influence area of an airport. No impact would occur.                                                                                                                                                                                                                  | None required.                                          | No Impact          | =                      |
| <b>Impact HAZ-5.</b> The proposed HEU would not result in physical changes that could interfere with or impair emergency response or evacuation. Therefore, the project would not result in interference with these types of adopted plans. This impact would be less than significant.                                                                                           | None required.                                          | LTS                | =                      |
| <b>Hydrology and Water Quality</b>                                                                                                                                                                                                                                                                                                                                                |                                                         |                    |                        |
| <b>Impact HYD-1.</b> Future development under the proposed HEU would involve ground-disturbing activities and the use of heavy machinery that could release materials,                                                                                                                                                                                                            | No MM required.<br>Municipal Regional Stormwater Permit | LTS                | =                      |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Mitigation Measure(s)                                   | HE Residual Impact | Specific Plan Analysis |
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| including sediments and fuels, which could adversely affect water quality. Operation of potential future development could also result in discharges to storm drains that could be contaminated and affect downstream waters. However, compliance with required permits and existing regulations, and implementation of Best Management Practices contained therein, would ensure that potential water quality impacts would be less than significant.                                                                                                                       |                                                         |                    |                        |
| <b>Impact HYD-2.</b> Future development facilitated under the proposed HEU would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. Further, implementation of low impact development measures and on-site infiltration required under the C.3 provisions of the MRP, and compliance with the Berkeley Municipal Code would increase the potential for groundwater recharge. Impacts would be less than significant. | No MM required.<br>Municipal Regional Stormwater Permit | LTS                | =                      |
| <b>Impact HYD-3.</b> Development under the proposed HEU would not substantially                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No MM required.                                         | LTS                | =                      |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Mitigation Measure(s) | HE Residual Impact | Specific Plan Analysis |
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| alter the existing drainage pattern of future development sites, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in flooding or exceed the capacity of stormwater drainage systems. Impacts related to drainage patterns would be less than significant. |                       |                    |                        |
| <b>Impact HYD-4.</b> Development under the proposed HEU would place housing and other structures within FEMA-designated Flood Hazard Areas and tsunami zones. However, compliance with the General Plan, the BMC, and the California Health and Safety Code would reduce potential effects associated with flood events. This impact would be less than significant.                                                                                           | No MM required.       | LTS                | =                      |
| <b>Land Use and Planning</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |                    |                        |
| <b>Impact LU-1.</b> The proposed HEU includes policies and programs to encourage housing development on underutilized and vacant sites and along established commercial corridors and neighborhoods. Development under the proposed HEU would not physically divide an established community. No impact would occur.                                                                                                                                           | None required.        | No Impact          | =                      |



| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Mitigation Measure(s)                                 | HE Residual Impact          | Specific Plan Analysis |
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| <b>Impact LU-2.</b> The proposed HEU would be consistent with the goals and policies of Plan Bay Area 2050, the Berkeley General Plan, and the BMC. This impact would be less than significant.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | No MM required.                                       | LTS                         | =                      |
| <b>Noise</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                       |                             |                        |
| <b>Impact NOI-1.</b> Construction associated with housing development accommodated under the proposed HEU would be required to comply with the allowed daytime construction hours as set forth in the Berkeley Municipal Code and therefore, would not occur during nighttime hours when people are more sensitive to noise. Larger developments could involve construction with lengthy durations, substantial soil movement, use of large, heavy-duty equipment, and/or pile driving near noise-sensitive land uses that would exceed the applicable FTA daytime noise limits. Implementation of City Standard Conditions of Approval for construction noise would reduce construction noise levels, but may not reduce them to below thresholds for every project. Therefore, impacts generated by temporary construction noise would be significant and unavoidable. | No feasible mitigation measures have been identified. | Significant and Unavoidable | =                      |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Mitigation Measure(s)                         | HE Residual Impact | Specific Plan Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <b>Impact NOI-2.</b> Housing development accommodated under the proposed HEU could include mechanical equipment (i.e., HVAC), delivery and trash trucks, and other noise-generating activities. However, such activities would be similar to the existing noise environment. In addition, on-site activities would be required to comply with applicable noise standards in the Berkeley Municipal Code. Furthermore, while housing development would generate vehicle trips in the city, the increase in mobile noise would not result in a perceptible (3-dBA or greater) noise increase. Permanent noise increases due to operation of new development under the proposed HEU would be less than significant. | No MM required.                               | LTS                | The HEU's projected buildout of 19,098 units results in a 5.5% increase in vehicle trips, which equates to an increase of 0.2 dBA – well below the 3dBA threshold. The maximum Specific Plan buildout of 4,500 additional units over the HEU's projected buildout, is approximately a 24% increase in units. This increase in units would not result in a large enough increase in vehicle trips to exceed the 3 dBA threshold. Even under a conservative, proportional assumption (i.e., trips – and thus noise – scale with units), a $\leq 25\%$ increase over 0.2 dBA would be $\leq 0.25$ dBA, which remains well below the 3 dBA threshold. |
| <b>Impact NOI-3.</b> Housing development accommodated under the proposed HEU would not involve operational activities that would result in substantial vibration levels (e.g., use of heavy equipment or machinery). Construction activities would be required to implement the City's Standard Conditions of Approval that control vibration. This impact would be less than significant.                                                                                                                                                                                                                                                                                                                       | No MM required.<br>Construction vibration COA | LTS                | =                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Mitigation Measure(s)                                 | HE Residual Impact                | Specific Plan Analysis |
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| <b>Impact NOI-4.</b> Housing developments accommodated under the proposed HEU would not be exposed to intermittent noise levels from overhead flight patterns from airports in the city as there are none located within the City. Furthermore, while the project would not emphasize building housing in the immediate vicinity of the airport, all residential development would, nonetheless, be required to incorporate noise insulation features per State and local standards to reduce interior noise levels to below 45 dBA. Therefore, the impact of airport or airstrip operations on new development would be less than significant. | None required.                                        | LTS                               | =                      |
| <b>Cumulative Impact:</b> Construction of future development projects in Berkeley would produce temporary noise impacts that would be localized to a project site and sensitive receivers within the immediate vicinity. Therefore, only sensitive receivers located in close proximity to each construction site would be potentially affected by each activity. Nonetheless, construction activities associated with individual housing development projects accommodated under the proposed Housing Element Update may overlap for some time with                                                                                            | No feasible mitigation measures have been identified. | Cumulatively considerable impact. | =                      |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mitigation Measure(s) | HE Residual Impact | Specific Plan Analysis                                                                                                                                                                                                                                                                                                                                                             |
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| construction activities for other development projects. Based on the locations of the potential housing sites displayed in Figure 2-4 of Section 2, Project Description, this could substantially increase noise levels at specific neighboring noise-sensitive receivers since many sites are located in proximity to each other. Therefore, concurrent construction of development projects accommodated under the proposed Housing Element Update could result in cumulatively considerable impacts. This impact would be cumulatively considerable and cumulative impacts would be significant and unavoidable. |                       |                    |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Population and Housing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                       |                    |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Impact POP-1.</b> This EIR assumes full buildout of 19,098 residential units in Berkeley through 2031, which equates to a population increase of an estimated 47,443 residents compared to the existing population. However, growth resulting from the project is anticipated and would not constitute substantial unplanned population growth. This impact would be less than significant.                                                                                                                                                                                                                      | None required.        | LTS                | =<br>The HEU buildout estimates a population increase of 47,443 (or a 38% increase over the 2020 population of 124,563). Utilizing the same persons per unit assumption from the HEU of 2.5 for multi-family, the proposed project's maximum buildout of 4,500 additional units over the HEU's projected buildout would result in a population increase of 11,250. The HEU and the |

| Impact                                                                                                                                                                                                                                                                                                                                                                   | Mitigation Measure(s) | HE Residual Impact | Specific Plan Analysis                                                                                                                                                                                                                                                                                                                                  |
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|                                                                                                                                                                                                                                                                                                                                                                          |                       |                    | proposed project would result in a population increase of 58,068 or a 47% increase over the 2020 population. The Specific Plan and HEU population increase is consistent with State requirements for the RHNA and would be within the growth forecasts for Northwest Alameda County in Plan Bay Area 2050, which projects a 57% increase in population. |
| <b>Impact POP-2.</b> Implementation of proposed project would not result in the displacement of substantial numbers of people or housing. The proposed project would facilitate the development of new housing in accordance with State and local housing requirements, while preserving existing residential neighborhoods. This impact would be less than significant. | None required.        | LTS                | =                                                                                                                                                                                                                                                                                                                                                       |
| <b>Public Services and Recreation</b>                                                                                                                                                                                                                                                                                                                                    |                       |                    |                                                                                                                                                                                                                                                                                                                                                         |
| <b>Impact PS-1.</b> Development facilitated by the proposed HEU would result in an increase of population and buildings within Berkeley. The projected population increase would increase demand for fire protection services and potentially create the need for a new or altered fire station. However, compliance                                                     | None required.        | LTS                | =                                                                                                                                                                                                                                                                                                                                                       |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                    | Mitigation Measure(s) | HE Residual Impact | Specific Plan Analysis                                                                                   |
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| with policies in the 2020 General Plan would reduce impacts related to fire service facilities to a less than significant level.                                                                                                                                                                                                                                                                                                          |                       |                    |                                                                                                          |
| <b>Impact PS-2.</b> Development facilitated by the proposed HEU would result in an increase in the City's population. The projected population increase would increase demand for police protection services and potentially create the need for new or altered police service facilities. However, compliance with policies in the 2020 General Plan would reduce impacts related to police facilities to a less than significant level. | None required.        | LTS                | =                                                                                                        |
| <b>Impact PS-3.</b> Development facilitated under the proposed HEU would result in an increase in population in Berkeley, resulting in the need for additional or expanded school facilities. However, Government Code 65995 (b) would require funding for the provision or expansion of new school facilities to offset impacts from new residential development. Therefore, this impact would be less than significant.                 | None required.        | LTS                | =                                                                                                        |
| <b>Impact PS-4.</b> Development associated with the proposed HEU would increase the population of Berkeley and the use of existing parks and recreational facilities.                                                                                                                                                                                                                                                                     | None required.        | LTS                | =<br>The HEU buildout results in a ratio of parkland per resident of 25.5 acres per 1,000 residents. The |

| Impact                                                                                                                                                                                                                                                                                                                                                        | Mitigation Measure(s) | HE Residual Impact | Specific Plan Analysis                                                                                                                                                                                                                                                                                                                                                                                                           |
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| However, additional recreational opportunities are available adjacent to the City and donation of parkland pursuant to the Quimby Act would be required prior to occupancy of individual projects. No plans for the expansion or construction of new parks or recreational facilities are anticipated. Therefore, this impact would be less than significant. |                       |                    | proposed project increase of 4,500 additional units and 11,500 residents above the HEU Buildout results in a parkland per resident ratio of 23.9 per 1,000 residents.                                                                                                                                                                                                                                                            |
| <b>Transportation</b>                                                                                                                                                                                                                                                                                                                                         |                       |                    |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Impact TRA-1.</b> The proposed HEU would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This impact would be less than significant.                                                                                                            | None required.        | LTS                | =                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Impact TRA-2.</b> The proposed HEU would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). This impact would be less than significant.                                                                                                                                                                                | None required.        | LTS                | =<br>The Specific Plan Area is located within a Transit Priority Area (TPA) and a Low VMT Area. Additionally, San Pablo Avenue is a high-quality transit corridor as defined under Public Resources Code 21155. Therefore, residential projects built as a result of the proposed project would be presumed less than significant. Moreover, the HEU VMT per capita of 10.86 is far below the impact threshold of 19.38, and the |

| Impact                                                                                                                                                                                                                                                           | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | HE Residual Impact | Specific Plan Analysis                                                                                                                                                                              |
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|                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    | increase from 19,098 to 23,598 units and 47,500 to 58,750 people from the maximum buildout of the proposed project, which is a less than 25% increase, is not anticipated to exceed this threshold. |
| <b>Impact TRA-3.</b> The proposed HEU would not substantially increase hazards because of a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). This impact would be less than significant.    | None required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | LTS                | =                                                                                                                                                                                                   |
| <b>Impact TRA-4.</b> The proposed HEU would not have the potential to result in inadequate emergency access. This impact would be less than significant.                                                                                                         | None required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | LTS                | =                                                                                                                                                                                                   |
| <b>Tribal Cultural Resources</b>                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    |                                                                                                                                                                                                     |
| <b>Impact TCR-1.</b> Development during the planning period of the proposed HEU could adversely impact tribal cultural resources due to ground disturbing activity during construction. This impact would be less than significant with mitigation incorporated. | <b>TCR-1 Tribal Cultural Monitoring.</b> For future projects that are determined through tribal consultation to potentially affect tribal cultural resources, in order to mitigate potential adverse impacts to Native American cultural objects and human remains discovered during construction, tribal cultural monitors will be retained to monitor work done in areas of Tribal concern, as determined through tribal consultation. If Native American cultural objects and/or human remains are discovered during construction, work shall be halted within 100 | LTS                | =                                                                                                                                                                                                   |



| Impact                                                                                                                                                         | Mitigation Measure(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | HE Residual Impact | Specific Plan Analysis                                                                                      |
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|                                                                                                                                                                | feet of the discovery until the objects have been inspected and evaluated by tribal cultural monitors and a qualified archaeologist meeting the Professional Qualifications Standards of the Secretary of the Interior (36 CFR Part 61). The archaeologist shall, in accordance with the appropriate Guidelines, identify and evaluate the significance of the discovery and develop recommendations for treatment in consultation with the affected Tribe to ensure any impacts to the cultural resource are less than significant. The preferred mitigation is avoidance. If avoidance is not feasible, Project impacts shall be mitigated in consultation with the affected Tribe consistent with the CEQA Guidelines for Determining the Significance of and Impacts to Cultural Resource, Archaeological Historic and Tribal Cultural Resources. Such mitigation may include, but is not limited to, additional archaeological testing, archaeological monitoring and/or an archaeological data recovery program. A Native American monitor shall be retained to monitor the ground disturbance when it is suspected that a TCR might be encountered. |                    |                                                                                                             |
| <b>Utility and Service Systems</b>                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    |                                                                                                             |
| <b>Impact UTIL-1.</b> Development under the proposed HEU would require utility service and connections for water supply, wastewater conveyance, and stormwater | No MM required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | LTS                | =<br>The City's wastewater treatment capacity is 320 mgd. The existing average daily flow is 63 mgd and the |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Mitigation Measure(s) | HE Residual Impact | Specific Plan Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| conveyance, as well as telecommunications, electricity, and natural gas. Existing utility systems for water, wastewater, stormwater, electric power, natural gas, and telecommunications facilities in Berkeley have sufficient capacity to serve the project. Relocation or construction of new or expanded facilities resulting in significant environmental impacts would not occur, and adequate wastewater capacity exists to serve the project's projected demand in addition to the provider's existing commitments. Impacts would be less than significant. |                       |                    | HEU buildout would add an additional 0.77 mgd. Based on the HEU wastewater generation assumption of 40 gallons per day (gdp) for a multi-family unit, the proposed project buildout of 4,500 units above the Housing Element maximum buildout would add 180,000 gdp, which is 0.18 mgd and well within the City's treatment capacity of 320 mgd.                                                                                                         |
| <b>Impact UTIL-2.</b> Development under the proposed HEU would result in an increase in water demand. However, this increase in demand can be served by the East Bay Municipal Utility District (EBMUD) with demand management measures required by EBMUD. This impact would be less than significant.                                                                                                                                                                                                                                                              | None required.        | LTS                | =<br>The HEU projected increase in water demand is 0.96 mgd, which is a 0.5 percent increase over the 2030 EBMUD service area demand of 190 mgd. Based on the HEU water use assumption of 50 gdp per multi-family unit, the proposed project buildout would add 225,000 gdp, which is 0.25 mgd. The HEU and proposed project buildout would increase demand in the City by an estimated 1.21 MGD or 0.64 percent increase to the 2030 EBMUD service area |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                       | Mitigation Measure(s) | HE Residual Impact | Specific Plan Analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                              |                       |                    | demand. Similar to the HEU, the EBMUD UWMP is used to project water demand with the proposed project. Similar to the HEU, the EBMUD UWMP is used to project water demand with the proposed project. The EBMUD service area reduction goal is 153 gallons per capita per day by 2020. The 2020 CEQA Review Documented GPCD was 121 GPCD, meeting the target. Based on the increase of 0.62 percent from project 2030 water demand, the estimated GPCD with implementation of the HEU and projected project would be 129 GPCD, which is below the targeted 153 GPCD. |
| <b>Impact UTIL-3.</b> Development facilitated by the project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. The project would not impair the attainment of solid waste reduction goals and would comply with federal, State, and local statutes and regulations related to solid waste. Impacts would be less than significant. | None required.        | LTS                | =<br>Based on the HEU solid waste generation rate of 4/lbs/unit/day, and conversion factor of 1,000 pounds per cubic yard, the proposed project buildout would generate 18 cubic yards of solid waste per day. With Berkeley's 69% diversion rate, the proposed project buildout would generate an additional 5.58 cubic yards of solid waste per day, which equates to                                                                                                                                                                                            |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                          | Mitigation Measure(s)                                 | HE Residual Impact          | Specific Plan Analysis                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                       |                             | 2,037 cubic yards per year. The landfill has a remaining capacity of 52.3 million cubic yards (as of October, 2025), meaning the proposed project's potential maximum buildout would generate 0.0039% of the current total remaining landfill capacity per year. |
| <b>Wildfire</b>                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                       |                             |                                                                                                                                                                                                                                                                  |
| <b>Impact W-1.</b> Development during the planning period of the proposed HEU would occur in hillside areas located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. The city employs multiple strategies to reduce the impairment the HEU would have on emergency response and evacuation. Nonetheless, this impact would be significant and unavoidable.                                        | No feasible mitigation measures have been identified. | Significant and Unavoidable | =                                                                                                                                                                                                                                                                |
| <b>Impact W-2.</b> Implementation of the proposed HEU would encourage development in the hillside areas located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. New development would be required to comply with extensive regulations and fire safety provisions in the Berkeley Municipal Code, including the Fire Code. Based on the existing regulatory framework and project review process | No feasible mitigation measures have been identified. | Significant and Unavoidable | =                                                                                                                                                                                                                                                                |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Mitigation Measure(s)                                                                                                                     | HE Residual Impact          | Specific Plan Analysis |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------|
| with Berkeley Fire Department, impacts would be generally avoided. However, it remains possible that even with existing regulations, construction or other human activities related to development in or near an SRA or in a VHFHSZ could exacerbate wildfire risk and expose existing and new residents to pollutant concentrations and uncontrolled spread of a wildfire. Additionally, by increasing the population of the WUI area, more people will be directly threatened when a wildland fire occurs. Therefore, this impact would be significant and unavoidable. |                                                                                                                                           |                             |                        |
| <b>Impact W-3.</b> Implementation of the proposed HEU would encourage development of housing on inventory sites and in the Hillside Overlay district located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. The proposed HEU could expose people and structures to risk due to the terrain and slope in the Berkeley hills. This could result in potential risks such as landslides. This impact would be significant and unavoidable.                                                                                                    | No feasible mitigation measures have been identified.                                                                                     | Significant and Unavoidable | =                      |
| <b>Impact W-4.</b> Implementation of the proposed HEU would encourage development of housing on inventory                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>W-1 Undergrounding of Power Drops in the VHFHSZs.</b> The City shall require that new or upgraded power drops located in the very high | Significant and Unavoidable | =                      |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Mitigation Measure(s)                                                                                                                                               | HE Residual Impact                | Specific Plan Analysis |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------|
| sites and in the R-, R-2, and R-2a districts located near a State Responsibility Area and in a Very High Fire Hazard Severity Zone. However, the area is already developed and served by existing infrastructure and it is not anticipated that installation of new infrastructure or a substantial increase in the maintenance of existing infrastructure would occur. Should additional maintenance or construction of such infrastructure occur, implementation of Mitigation Measure W-1 would reduce the risk of fire during construction. Overall, this impact would be significant and unavoidable. | fire hazard severity zone be installed underground. Prior to the issuance of a building permit, the applicant shall submit plans for undergrounding of power drops. |                                   |                        |
| <b>Cumulative Impact:</b> In and near Berkeley, the VHFHSZs are located largely along the WUI borders with the hilly northwestern areas. Within the geographic scope for this cumulative analysis, wildfire-related impacts could be significant if development is in or near Berkeley's VHFHSZ. The proposed LRDP update would involve improvements and development in Campus Park, the Hill Campus West, the Hill Campus East, the Clark Kerr Campus, and the City Environs Properties, areas of which fall within the VHFHSZ. Development within this area could exacerbate wildfire risks. Like        | No feasible mitigation measures have been identified.                                                                                                               | Cumulatively considerable impact. | =                      |

| Impact                                                                                                                                                                                                                                                                                                                                                                                                                                | Mitigation Measure(s) | HE Residual Impact | Specific Plan Analysis |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|------------------------|
| development under the proposed HEU, new development under the LRDP would be subject to statewide standards for fire safety in the California Fire Code. Nonetheless, because the proposed HEU could exacerbate wildfire risk in a VHFHSZ and development under the proposed LRDP update could also exacerbate such risks, a cumulative impact would occur and the proposed projects' contribution would be cumulatively considerable. |                       |                    |                        |

**APPENDIX B: GREENHOUSE GAS EMISSIONS ANALYSIS**



**Rincon Consultants, Inc.**180 North Ashwood Avenue  
Ventura, California 93003  
805-644-4455Date: June 24, 2025  
Project No: 25-17613Hannah Chan Smyth  
Urban Planning Partners, Inc.  
388 17<sup>th</sup> Street, Suite 230  
Oakland, CA 94612  
Via Email: [hchansmyth@up-partners.com](mailto:hchansmyth@up-partners.com)**Subject: Greenhouse Gas Emissions Modeling Analysis for the San Pablo Specific Plan and 2023-2031 Housing Element**

Dear Mrs. Smyth:

This Greenhouse Gas (GHG) Emissions Letter Report was prepared by Rincon Consultants, Inc. (Rincon) to provide GHG emissions modeling scenarios for the City of Berkeley for the proposed San Pablo Avenue Specific Plan and 2023-2031 Housing Element. Rincon previously assisted the City in preparing the GHG analysis for the 2023-2031 Housing Element Update Environmental Impact Report (EIR), which assumed 90 percent of the natural gas demand would be supplied by electricity. This analysis includes adjustments to the previous modeling effort with the latest California Emissions Estimator Model (CalEEMod) version (2022) in order to evaluate a revised natural gas scenario. In addition, proposed buildout of the San Pablo Avenue Specific Plan is greater than the EIR forecast. Therefore, this analysis also includes modeling to reflect the increased buildout of the Specific Plan.

## Methodology

GHG emissions for development facilitated by the City of Berkeley's 2023-2031 Housing Element EIR were previously calculated using CalEEMod version 2020.4.0. In order to provide a direct comparison between model versions, GHG emissions were remodeled using CalEEMod version 2022, the latest available version of the model. Where possible, user inputs from the previous modeling effort were replicated in version 2022 to establish an updated baseline for comparison with the scenarios described below. Consistent with the methodology used for the Housing Element EIR, emissions modeling was conducted for both single-family and multi-family land uses with an anticipated buildout year of 2031. Utility GHG intensity factors were adjusted to match the original model inputs, which reflect the supply of electricity by East Bay Community Energy under their Bright Choice Plan (40 percent renewable). CalEEMod version 2022 does not provide default values for outdoor water consumption by multi-family uses. Therefore, default consumption factors from version 2020 were replicated in the newer model.

Table 1 shows a comparison of GHG emissions between CalEEMod versions 2020 and 2022 using the original EIR's assumptions, including 90% electrification of the proposed buildout. As shown therein, the updated emissions estimate is 1.9% greater than previously calculated. Both the increased natural gas demand and increased buildout scenarios included later in this analysis were analyzed using the updated emissions estimate as a basis for comparison.

**Table 1 Emissions Comparison Between CalEEMod Versions**

| CalEEMod Model Version                 | Annual Emissions (MT of CO <sub>2</sub> e) |
|----------------------------------------|--------------------------------------------|
| V2020                                  | 81,985                                     |
| v2022                                  | 83,568                                     |
| Percent Change                         | 1.9%                                       |
| See Attachment A for CalEEMod Outputs. |                                            |

## Increased Natural Gas Demand Scenario

Pursuant to Chapter 12.80 of the BMC<sup>1</sup>, which prohibited the installation of natural gas infrastructure in newly constructed buildings unless granted an exception or public interest exception, it was previously assumed that 90 percent of new development would be all-electric for estimation of the project's impacts. Since adoption of the Housing Element EIR, new building electrification data has suggested that 30 to 40 percent of new developments would include natural gas connections, resulting in approximately 60 to 70 percent electrification of development facilitated by the plan. Based on this newly available data reflecting increased natural demand than previously analyzed, GHG emissions for all units modeled as part of the Housing Element EIR were recalculated in CalEEMod with the revised assumption that up to 60 percent of new development would be all-electric and the remainder of units would include natural gas connections. Additional units proposed by the San Pablo Avenue Specific Plan were modeled separately as described in the following subsection.

## Increased Buildout Scenario

In order to account for the proposed buildout facilitated by the San Pablo Avenue Specific Plan, a second GHG model was run for the portion of the buildout that was not previously analyzed under the Berkeley Housing Element EIR. According to the City, it is estimated that approximately 3,250 multifamily housing units with a population of up to 8,125 persons were not included in the Housing Element EIR's buildout assumptions. Therefore, GHG emissions modeling was conducted for the net increase in buildout facilitated by the Specific Plan. This model iteration also accounts for the revised natural gas assumptions described above under *Increased Natural Gas Demand Scenario*. All units analyzed under this scenario were modeled using the land use subtype "Apartments – Mid Rise" and associated default inputs. Where applicable, the methodology and user inputs from the previous modeling effort were replicated in this model run for consistency.

## Results

### Increased Natural Gas Demand Scenario

Table 2 shows GHG emissions estimates for the Housing Element with the EIR's 90% electrification assumption compared to emissions under an increased natural gas demand scenario. As shown therein, GHG emissions would be 83,568 MT CO<sub>2</sub>e per year under the 90 percent electrification scenario and 85,759 MT CO<sub>2</sub>e per year under the 60 percent electrification scenario for difference of 2,191 MT CO<sub>2</sub>e.

<sup>1</sup> Chapter 12.80, Prohibition of Natural Gas Infrastructure in New Buildings, was repealed on June 4, 2024 by Ordinance 7907-NS.

**Table 2 Increased Natural Gas Scenario GHG Emissions**

| Scenario                               | Annual Emissions (MT of CO <sub>2</sub> e) |
|----------------------------------------|--------------------------------------------|
| 90% Electrified                        | 83,568                                     |
| 60% Electrified                        | 85,759                                     |
| Net Difference                         | 2,191                                      |
| Percent Change                         | 2.6%                                       |
| See Attachment A for CalEEMod Outputs. |                                            |

### Increased Buildout Scenario

Table 3 shows the net increase in GHG emissions from the addition of units proposed by the Specific Plan that were not previously analyzed as part of the Housing Element EIR. Emissions shown in Table 3 reflect the revised 60% electrification scenario. Net new emissions from the Specific Plan were combined with the adjusted Housing Element emissions from Table 2 to determine total emissions for the plan areas. As shown in Table 3, the additional 3,250 multifamily units with a population of up to 8,125 persons would result in an increase of 14,035 MT CO<sub>2</sub>e per year, bringing total emissions to 99,794 MT CO<sub>2</sub>e per year.

**Table 3 Increased Buildout Scenario GHG Emissions**

| Scenario                                                        | Annual Emissions (MT of CO <sub>2</sub> e) |
|-----------------------------------------------------------------|--------------------------------------------|
| Berkeley Housing Element <sup>1</sup>                           | 85,759 <sup>2</sup>                        |
| San Pablo Avenue Specific Plan <sup>1</sup>                     | 14,035                                     |
| <b>Total</b>                                                    | <b>99,794</b>                              |
| See Attachment A for CalEEMod Outputs.                          |                                            |
| <sup>1</sup> Reflects the revised 60% electrification scenario. |                                            |
| <sup>2</sup> See Table 2                                        |                                            |

Sincerely,  
**Rincon Consultants, Inc.**

Lucas Carneiro  
 Air Quality and Greenhouse Gas Specialist

Bill Vosti, MESM  
 Program Manager, Technical Services

### Attachments

Attachment 1 CalEEMod Outputs

# Attachment 1

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CalEEMod Outputs

# Berkeley HE Single Fam 90% Electrified v2 Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field                  | Value                                     |
|-----------------------------|-------------------------------------------|
| Project Name                | Berkeley HE Single Fam 90% Electrified v2 |
| Operational Year            | 2031                                      |
| Lead Agency                 | —                                         |
| Land Use Scale              | Plan/community                            |
| Analysis Level for Defaults | County                                    |
| Windspeed (m/s)             | 3.90                                      |
| Precipitation (days)        | 3.40                                      |
| Location                    | 37.87310585963721, -122.29377329662165    |
| County                      | Alameda                                   |
| City                        | Berkeley                                  |
| Air District                | Bay Area AQMD                             |
| Air Basin                   | San Francisco Bay Area                    |
| TAZ                         | 1533                                      |
| EDFZ                        | 1                                         |
| Electric Utility            | User Defined                              |
| Gas Utility                 | User Defined                              |
| App Version                 | 2022.1.1.29                               |

## 1.2. Land Use Types

| Land Use Subtype      | Size | Unit          | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|-----------------------|------|---------------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|
| Single Family Housing | 113  | Dwelling Unit | 36.7        | 220,350               | 1,323,553              | —                              | 323        | —           |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | #   | Measure Title                       |
|--------|-----|-------------------------------------|
| Water  | W-7 | Adopt a Water Conservation Strategy |

## 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit.             | BCO2 | NBCO2  | CO2T   | CH4    | N2O  | R    | CO2e   |
|---------------------|------|--------|--------|--------|------|------|--------|
| Daily, Summer (Max) | —    | —      | —      | —      | —    | —    | —      |
| Unmit.              | 49.3 | 4,735  | 4,784  | 4.31   | 0.22 | 10.8 | 4,967  |
| Mit.                | 47.5 | 4,733  | 4,781  | 4.31   | 0.21 | 10.8 | 4,962  |
| % Reduced           | 3%   | < 0.5% | < 0.5% | < 0.5% | 2%   | —    | < 0.5% |
| Daily, Winter (Max) | —    | —      | —      | —      | —    | —    | —      |
| Unmit.              | 49.3 | 4,461  | 4,510  | 4.34   | 0.24 | 1.82 | 4,691  |
| Mit.                | 47.5 | 4,459  | 4,506  | 4.34   | 0.23 | 1.82 | 4,686  |
| % Reduced           | 3%   | < 0.5% | < 0.5% | < 0.5% | 2%   | —    | < 0.5% |
| Average Daily (Max) | —    | —      | —      | —      | —    | —    | —      |
| Unmit.              | 49.3 | 4,395  | 4,445  | 4.32   | 0.22 | 5.47 | 4,625  |
| Mit.                | 47.5 | 4,394  | 4,441  | 4.32   | 0.22 | 5.47 | 4,620  |
| % Reduced           | 3%   | < 0.5% | < 0.5% | < 0.5% | 2%   | —    | < 0.5% |
| Annual (Max)        | —    | —      | —      | —      | —    | —    | —      |
| Unmit.              | 8.16 | 728    | 736    | 0.72   | 0.04 | 0.91 | 766    |
| Mit.                | 7.87 | 727    | 735    | 0.72   | 0.04 | 0.91 | 765    |
| % Reduced           | 3%   | < 0.5% | < 0.5% | < 0.5% | 2%   | —    | < 0.5% |

### 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | BCO2 | NBCO2 | CO2T  | CH4     | N2O     | R    | CO2e  |
|---------------------|------|-------|-------|---------|---------|------|-------|
| Daily, Summer (Max) | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,507 | 4,507 | 0.20    | 0.20    | 9.21 | 4,580 |
| Area                | 0.00 | 17.1  | 17.1  | < 0.005 | < 0.005 | —    | 17.2  |
| Energy              | —    | 167   | 167   | 0.01    | < 0.005 | —    | 168   |
| Water               | 8.58 | 43.2  | 51.7  | 0.03    | 0.02    | —    | 58.0  |
| Waste               | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig.             | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total               | 49.3 | 4,735 | 4,784 | 4.31    | 0.22    | 10.8 | 4,967 |
| Daily, Winter (Max) | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,250 | 4,250 | 0.23    | 0.22    | 0.24 | 4,321 |
| Area                | 0.00 | 0.00  | 0.00  | 0.00    | 0.00    | —    | 0.00  |
| Energy              | —    | 167   | 167   | 0.01    | < 0.005 | —    | 168   |
| Water               | 8.58 | 43.2  | 51.7  | 0.03    | 0.02    | —    | 58.0  |
| Waste               | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig.             | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total               | 49.3 | 4,461 | 4,510 | 4.34    | 0.24    | 1.82 | 4,691 |
| Average Daily       | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,176 | 4,176 | 0.21    | 0.20    | 3.89 | 4,246 |
| Area                | 0.00 | 8.45  | 8.45  | < 0.005 | < 0.005 | —    | 8.48  |
| Energy              | —    | 167   | 167   | 0.01    | < 0.005 | —    | 168   |
| Water               | 8.58 | 43.2  | 51.7  | 0.03    | 0.02    | —    | 58.0  |
| Waste               | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig.             | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total               | 49.3 | 4,395 | 4,445 | 4.32    | 0.22    | 5.47 | 4,625 |
| Annual              | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 691   | 691   | 0.04    | 0.03    | 0.64 | 703   |

|         |      |      |      |         |         |      |      |
|---------|------|------|------|---------|---------|------|------|
| Area    | 0.00 | 1.40 | 1.40 | < 0.005 | < 0.005 | —    | 1.40 |
| Energy  | —    | 27.7 | 27.7 | < 0.005 | < 0.005 | —    | 27.8 |
| Water   | 1.42 | 7.14 | 8.56 | < 0.005 | < 0.005 | —    | 9.61 |
| Waste   | 6.74 | 0.00 | 6.74 | 0.67    | 0.00    | —    | 23.6 |
| Refrig. | —    | —    | —    | —       | —       | 0.26 | 0.26 |
| Total   | 8.16 | 728  | 736  | 0.72    | 0.04    | 0.91 | 766  |

## 2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | BCO2 | NBCO2 | CO2T  | CH4     | N2O     | R    | CO2e  |
|---------------------|------|-------|-------|---------|---------|------|-------|
| Daily, Summer (Max) | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,507 | 4,507 | 0.20    | 0.20    | 9.21 | 4,580 |
| Area                | 0.00 | 17.1  | 17.1  | < 0.005 | < 0.005 | —    | 17.2  |
| Energy              | —    | 167   | 167   | 0.01    | < 0.005 | —    | 168   |
| Water               | 6.86 | 41.2  | 48.1  | 0.02    | 0.01    | —    | 53.1  |
| Waste               | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig.             | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total               | 47.5 | 4,733 | 4,781 | 4.31    | 0.21    | 10.8 | 4,962 |
| Daily, Winter (Max) | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,250 | 4,250 | 0.23    | 0.22    | 0.24 | 4,321 |
| Area                | 0.00 | 0.00  | 0.00  | 0.00    | 0.00    | —    | 0.00  |
| Energy              | —    | 167   | 167   | 0.01    | < 0.005 | —    | 168   |
| Water               | 6.86 | 41.2  | 48.1  | 0.02    | 0.01    | —    | 53.1  |
| Waste               | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig.             | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total               | 47.5 | 4,459 | 4,506 | 4.34    | 0.23    | 1.82 | 4,686 |
| Average Daily       | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,176 | 4,176 | 0.21    | 0.20    | 3.89 | 4,246 |

|         |      |       |       |         |         |      |       |
|---------|------|-------|-------|---------|---------|------|-------|
| Area    | 0.00 | 8.45  | 8.45  | < 0.005 | < 0.005 | —    | 8.48  |
| Energy  | —    | 167   | 167   | 0.01    | < 0.005 | —    | 168   |
| Water   | 6.86 | 41.2  | 48.1  | 0.02    | 0.01    | —    | 53.1  |
| Waste   | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig. | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total   | 47.5 | 4,394 | 4,441 | 4.32    | 0.22    | 5.47 | 4,620 |
| Annual  | —    | —     | —     | —       | —       | —    | —     |
| Mobile  | —    | 691   | 691   | 0.04    | 0.03    | 0.64 | 703   |
| Area    | 0.00 | 1.40  | 1.40  | < 0.005 | < 0.005 | —    | 1.40  |
| Energy  | —    | 27.7  | 27.7  | < 0.005 | < 0.005 | —    | 27.8  |
| Water   | 1.14 | 6.83  | 7.96  | < 0.005 | < 0.005 | —    | 8.80  |
| Waste   | 6.74 | 0.00  | 6.74  | 0.67    | 0.00    | —    | 23.6  |
| Refrig. | —    | —     | —     | —       | —       | 0.26 | 0.26  |
| Total   | 7.87 | 727   | 735   | 0.72    | 0.04    | 0.91 | 765   |

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T  | CH4  | N2O  | R    | CO2e  |
|-----------------------|------|-------|-------|------|------|------|-------|
| Daily, Summer (Max)   | —    | —     | —     | —    | —    | —    | —     |
| Single Family Housing | —    | 4,507 | 4,507 | 0.20 | 0.20 | 9.21 | 4,580 |
| Total                 | —    | 4,507 | 4,507 | 0.20 | 0.20 | 9.21 | 4,580 |
| Daily, Winter (Max)   | —    | —     | —     | —    | —    | —    | —     |
| Single Family Housing | —    | 4,250 | 4,250 | 0.23 | 0.22 | 0.24 | 4,321 |
| Total                 | —    | 4,250 | 4,250 | 0.23 | 0.22 | 0.24 | 4,321 |

|                       |   |     |     |      |      |      |     |
|-----------------------|---|-----|-----|------|------|------|-----|
| Annual                | — | —   | —   | —    | —    | —    | —   |
| Single Family Housing | — | 691 | 691 | 0.04 | 0.03 | 0.64 | 703 |
| Total                 | — | 691 | 691 | 0.04 | 0.03 | 0.64 | 703 |

#### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T  | CH4  | N2O  | R    | CO2e  |
|-----------------------|------|-------|-------|------|------|------|-------|
| Daily, Summer (Max)   | —    | —     | —     | —    | —    | —    | —     |
| Single Family Housing | —    | 4,507 | 4,507 | 0.20 | 0.20 | 9.21 | 4,580 |
| Total                 | —    | 4,507 | 4,507 | 0.20 | 0.20 | 9.21 | 4,580 |
| Daily, Winter (Max)   | —    | —     | —     | —    | —    | —    | —     |
| Single Family Housing | —    | 4,250 | 4,250 | 0.23 | 0.22 | 0.24 | 4,321 |
| Total                 | —    | 4,250 | 4,250 | 0.23 | 0.22 | 0.24 | 4,321 |
| Annual                | —    | —     | —     | —    | —    | —    | —     |
| Single Family Housing | —    | 691   | 691   | 0.04 | 0.03 | 0.64 | 703   |
| Total                 | —    | 691   | 691   | 0.04 | 0.03 | 0.64 | 703   |

## 4.2. Energy

#### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|-----------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Daily, Winter (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |



|                       |   |      |      |      |      |   |      |
|-----------------------|---|------|------|------|------|---|------|
| Annual                | — | —    | —    | —    | —    | — | —    |
| Single Family Housing | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

#### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|-----------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Daily, Winter (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Annual                | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |

#### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4     | N2O     | R | CO2e |
|-----------------------|------|-------|------|---------|---------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | —    | 167   | 167  | 0.01    | < 0.005 | — | 168  |
| Total                 | —    | 167   | 167  | 0.01    | < 0.005 | — | 168  |
| Daily, Winter (Max)   | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | —    | 167   | 167  | 0.01    | < 0.005 | — | 168  |
| Total                 | —    | 167   | 167  | 0.01    | < 0.005 | — | 168  |
| Annual                | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | —    | 27.7  | 27.7 | < 0.005 | < 0.005 | — | 27.8 |

|       |   |      |      |         |         |   |      |
|-------|---|------|------|---------|---------|---|------|
| Total | — | 27.7 | 27.7 | < 0.005 | < 0.005 | — | 27.8 |
|-------|---|------|------|---------|---------|---|------|

#### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4     | N2O     | R | CO2e |
|-----------------------|------|-------|------|---------|---------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | —    | 167   | 167  | 0.01    | < 0.005 | — | 168  |
| Total                 | —    | 167   | 167  | 0.01    | < 0.005 | — | 168  |
| Daily, Winter (Max)   | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | —    | 167   | 167  | 0.01    | < 0.005 | — | 168  |
| Total                 | —    | 167   | 167  | 0.01    | < 0.005 | — | 168  |
| Annual                | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | —    | 27.7  | 27.7 | < 0.005 | < 0.005 | — | 27.8 |
| Total                 | —    | 27.7  | 27.7 | < 0.005 | < 0.005 | — | 27.8 |

### 4.3. Area Emissions by Source

#### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                 | BCO2 | NBCO2 | CO2T | CH4     | N2O     | R | CO2e |
|------------------------|------|-------|------|---------|---------|---|------|
| Daily, Summer (Max)    | —    | —     | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —       | —       | — | —    |
| Landscape Equipment    | —    | 17.1  | 17.1 | < 0.005 | < 0.005 | — | 17.2 |
| Total                  | 0.00 | 17.1  | 17.1 | < 0.005 | < 0.005 | — | 17.2 |
| Daily, Winter (Max)    | —    | —     | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |

|                        |      |      |      |         |         |   |      |
|------------------------|------|------|------|---------|---------|---|------|
| Consumer Products      | —    | —    | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —    | —    | —       | —       | — | —    |
| Total                  | 0.00 | 0.00 | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Annual                 | —    | —    | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00 | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —    | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —    | —    | —       | —       | — | —    |
| Landscape Equipment    | —    | 1.40 | 1.40 | < 0.005 | < 0.005 | — | 1.40 |
| Total                  | 0.00 | 1.40 | 1.40 | < 0.005 | < 0.005 | — | 1.40 |

#### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                 | BCO2 | NBCO2 | CO2T | CH4     | N2O     | R | CO2e |
|------------------------|------|-------|------|---------|---------|---|------|
| Daily, Summer (Max)    | —    | —     | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —       | —       | — | —    |
| Landscape Equipment    | —    | 17.1  | 17.1 | < 0.005 | < 0.005 | — | 17.2 |
| Total                  | 0.00 | 17.1  | 17.1 | < 0.005 | < 0.005 | — | 17.2 |
| Daily, Winter (Max)    | —    | —     | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —       | —       | — | —    |
| Total                  | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Annual                 | —    | —     | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —       | —       | — | —    |

|                     |      |      |      |         |         |   |      |
|---------------------|------|------|------|---------|---------|---|------|
| Landscape Equipment | —    | 1.40 | 1.40 | < 0.005 | < 0.005 | — | 1.40 |
| Total               | 0.00 | 1.40 | 1.40 | < 0.005 | < 0.005 | — | 1.40 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4     | N2O     | R | CO2e |
|-----------------------|------|-------|------|---------|---------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | 8.58 | 43.2  | 51.7 | 0.03    | 0.02    | — | 58.0 |
| Total                 | 8.58 | 43.2  | 51.7 | 0.03    | 0.02    | — | 58.0 |
| Daily, Winter (Max)   | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | 8.58 | 43.2  | 51.7 | 0.03    | 0.02    | — | 58.0 |
| Total                 | 8.58 | 43.2  | 51.7 | 0.03    | 0.02    | — | 58.0 |
| Annual                | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | 1.42 | 7.14  | 8.56 | < 0.005 | < 0.005 | — | 9.61 |
| Total                 | 1.42 | 7.14  | 8.56 | < 0.005 | < 0.005 | — | 9.61 |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|-----------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 6.86 | 41.2  | 48.1 | 0.02 | 0.01 | — | 53.1 |
| Total                 | 6.86 | 41.2  | 48.1 | 0.02 | 0.01 | — | 53.1 |
| Daily, Winter (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 6.86 | 41.2  | 48.1 | 0.02 | 0.01 | — | 53.1 |
| Total                 | 6.86 | 41.2  | 48.1 | 0.02 | 0.01 | — | 53.1 |
| Annual                | —    | —     | —    | —    | —    | — | —    |

|                       |      |      |      |         |         |   |      |
|-----------------------|------|------|------|---------|---------|---|------|
| Single Family Housing | 1.14 | 6.83 | 7.96 | < 0.005 | < 0.005 | — | 8.80 |
| Total                 | 1.14 | 6.83 | 7.96 | < 0.005 | < 0.005 | — | 8.80 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|-----------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Total                 | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Daily, Winter (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Total                 | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Annual                | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 6.74 | 0.00  | 6.74 | 0.67 | 0.00 | — | 23.6 |
| Total                 | 6.74 | 0.00  | 6.74 | 0.67 | 0.00 | — | 23.6 |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|-----------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Total                 | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Daily, Winter (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Total                 | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Annual                | —    | —     | —    | —    | —    | — | —    |

|                       |      |      |      |      |      |   |      |
|-----------------------|------|------|------|------|------|---|------|
| Single Family Housing | 6.74 | 0.00 | 6.74 | 0.67 | 0.00 | — | 23.6 |
| Total                 | 6.74 | 0.00 | 6.74 | 0.67 | 0.00 | — | 23.6 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4 | N2O | R    | CO2e |
|-----------------------|------|-------|------|-----|-----|------|------|
| Daily, Summer (Max)   | —    | —     | —    | —   | —   | —    | —    |
| Single Family Housing | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Total                 | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Daily, Winter (Max)   | —    | —     | —    | —   | —   | —    | —    |
| Single Family Housing | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Total                 | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Annual                | —    | —     | —    | —   | —   | —    | —    |
| Single Family Housing | —    | —     | —    | —   | —   | 0.26 | 0.26 |
| Total                 | —    | —     | —    | —   | —   | 0.26 | 0.26 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4 | N2O | R    | CO2e |
|-----------------------|------|-------|------|-----|-----|------|------|
| Daily, Summer (Max)   | —    | —     | —    | —   | —   | —    | —    |
| Single Family Housing | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Total                 | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Daily, Winter (Max)   | —    | —     | —    | —   | —   | —    | —    |
| Single Family Housing | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Total                 | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Annual                | —    | —     | —    | —   | —   | —    | —    |

|                       |   |   |   |   |   |      |      |
|-----------------------|---|---|---|---|---|------|------|
| Single Family Housing | — | — | — | — | — | 0.26 | 0.26 |
| Total                 | — | — | — | — | — | 0.26 | 0.26 |

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

#### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.8.2. Mitigated

#### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.9. User Defined Emissions By Equipment Type

##### 4.9.1. Unmitigated

#### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |



|        |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — |
| Total  | — | — | — | — | — | — | — |

#### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

##### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|----------|------|-------|------|-----|-----|---|------|
|----------|------|-------|------|-----|-----|---|------|

|                     |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |
| Annual              | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |

#### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |

|             |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|
| Subtotal    | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Removed     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| —           | — | — | — | — | — | — | — |

#### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |

## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

| Land Use Type         | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year  |
|-----------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|-----------|
| Single Family Housing | 1,067         | 1,078          | 966          | 384,698    | 6,240       | 6,306        | 5,652      | 2,250,495 |

#### 5.9.2. Mitigated

| Land Use Type         | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year  |
|-----------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|-----------|
| Single Family Housing | 1,067         | 1,078          | 966          | 384,698    | 6,240       | 6,306        | 5,652      | 2,250,495 |

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

| Hearth Type               | Unmitigated (number) |
|---------------------------|----------------------|
| Single Family Housing     | —                    |
| Wood Fireplaces           | 0                    |
| Gas Fireplaces            | 0                    |
| Propane Fireplaces        | 0                    |
| Electric Fireplaces       | 0                    |
| No Fireplaces             | 0                    |
| Conventional Wood Stoves  | 0                    |
| Catalytic Wood Stoves     | 0                    |
| Non-Catalytic Wood Stoves | 0                    |

|                    |   |
|--------------------|---|
| Pellet Wood Stoves | 0 |
|--------------------|---|

5.10.1.2. Mitigated

| Hearth Type               | Unmitigated (number) |
|---------------------------|----------------------|
| Single Family Housing     | —                    |
| Wood Fireplaces           | 0                    |
| Gas Fireplaces            | 0                    |
| Propane Fireplaces        | 0                    |
| Electric Fireplaces       | 0                    |
| No Fireplaces             | 0                    |
| Conventional Wood Stoves  | 0                    |
| Catalytic Wood Stoves     | 0                    |
| Non-Catalytic Wood Stoves | 0                    |
| Pellet Wood Stoves        | 0                    |

5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|------------------------------------------|------------------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------|
| 446208.75                                | 148,736                                  | 0.00                                         | 0.00                                         | —                           |

5.10.3. Landscape Equipment

| Season      | Unit   | Value |
|-------------|--------|-------|
| Snow Days   | day/yr | 0.00  |
| Summer Days | day/yr | 180   |

5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|--------|------|-------|
|--------|------|-------|

|             |        |      |
|-------------|--------|------|
| Snow Days   | day/yr | 0.00 |
| Summer Days | day/yr | 180  |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use              | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|-----------------------|----------------------|-----|--------|--------|-----------------------|
| Single Family Housing | 0.00                 | 135 | 0.0000 | 0.0000 | 522,308               |

### 5.11.2. Mitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use              | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|-----------------------|----------------------|-----|--------|--------|-----------------------|
| Single Family Housing | 0.00                 | 135 | 0.0000 | 0.0000 | 522,308               |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use              | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|-----------------------|-------------------------|--------------------------|
| Single Family Housing | 4,012,726               | 18,378,911               |

### 5.12.2. Mitigated

| Land Use              | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|-----------------------|-------------------------|--------------------------|
| Single Family Housing | 3,210,181               | 18,378,911               |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use              | Waste (ton/year) | Cogeneration (kWh/year) |
|-----------------------|------------------|-------------------------|
| Single Family Housing | 75.5             | —                       |

### 5.13.2. Mitigated

| Land Use              | Waste (ton/year) | Cogeneration (kWh/year) |
|-----------------------|------------------|-------------------------|
| Single Family Housing | 75.5             | —                       |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type         | Equipment Type                                          | Refrigerant | GWP   | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|-----------------------|---------------------------------------------------------|-------------|-------|---------------|----------------------|-------------------|----------------|
| Single Family Housing | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Single Family Housing | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |

### 5.14.2. Mitigated

| Land Use Type         | Equipment Type                                          | Refrigerant | GWP   | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|-----------------------|---------------------------------------------------------|-------------|-------|---------------|----------------------|-------------------|----------------|
| Single Family Housing | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Single Family Housing | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |

## 5.15. Operational Off-Road Equipment



5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|----------------|-----------|-------------|----------------|---------------|------------|-------------|
|----------------|-----------|-------------|----------------|---------------|------------|-------------|

5.15.2. Mitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|----------------|-----------|-------------|----------------|---------------|------------|-------------|
|----------------|-----------|-------------|----------------|---------------|------------|-------------|

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|----------------|-----------|----------------|---------------|----------------|------------|-------------|
|----------------|-----------|----------------|---------------|----------------|------------|-------------|

5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|

5.17. User Defined

| Equipment Type | Fuel Type |
|----------------|-----------|
|----------------|-----------|

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.2. Sequestration

5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard               | Result for Project Location | Unit                                       |
|------------------------------|-----------------------------|--------------------------------------------|
| Temperature and Extreme Heat | 7.10                        | annual days of extreme heat                |
| Extreme Precipitation        | 7.50                        | annual days with precipitation above 20 mm |
| Sea Level Rise               | —                           | meters of inundation depth                 |
| Wildfire                     | 0.00                        | annual hectares burned                     |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about  $\frac{3}{4}$  an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard               | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|------------------------------|----------------|-------------------|-------------------------|---------------------|
| Temperature and Extreme Heat | N/A            | N/A               | N/A                     | N/A                 |
| Extreme Precipitation        | 2              | 0                 | 0                       | N/A                 |
| Sea Level Rise               | 1              | 0                 | 0                       | N/A                 |
| Wildfire                     | 1              | 0                 | 0                       | N/A                 |
| Flooding                     | N/A            | N/A               | N/A                     | N/A                 |
| Drought                      | N/A            | N/A               | N/A                     | N/A                 |
| Snowpack Reduction           | N/A            | N/A               | N/A                     | N/A                 |
| Air Quality Degradation      | 0              | 0                 | 0                       | N/A                 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard               | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|------------------------------|----------------|-------------------|-------------------------|---------------------|
| Temperature and Extreme Heat | N/A            | N/A               | N/A                     | N/A                 |
| Extreme Precipitation        | 2              | 1                 | 1                       | 3                   |
| Sea Level Rise               | 1              | 1                 | 1                       | 2                   |

|                         |     |     |     |     |
|-------------------------|-----|-----|-----|-----|
| Wildfire                | 1   | 1   | 1   | 2   |
| Flooding                | N/A | N/A | N/A | N/A |
| Drought                 | N/A | N/A | N/A | N/A |
| Snowpack Reduction      | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 1   | 1   | 1   | 2   |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator           | Result for Project Census Tract |
|---------------------|---------------------------------|
| Exposure Indicators | —                               |
| AQ-Ozone            | 3.12                            |
| AQ-PM               | 39.2                            |
| AQ-DPM              | 77.5                            |
| Drinking Water      | 4.21                            |
| Lead Risk Housing   | 61.6                            |
| Pesticides          | 0.00                            |
| Toxic Releases      | 61.3                            |
| Traffic             | 31.2                            |
| Effect Indicators   | —                               |
| CleanUp Sites       | 65.0                            |
| Groundwater         | 97.0                            |

|                                 |      |
|---------------------------------|------|
| Haz Waste Facilities/Generators | 93.0 |
| Impaired Water Bodies           | 90.1 |
| Solid Waste                     | 9.67 |
| Sensitive Population            | —    |
| Asthma                          | 81.1 |
| Cardio-vascular                 | 46.8 |
| Low Birth Weights               | 44.5 |
| Socioeconomic Factor Indicators | —    |
| Education                       | 26.4 |
| Housing                         | 55.1 |
| Linguistic                      | 6.27 |
| Poverty                         | 35.6 |
| Unemployment                    | 49.9 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator              | Result for Project Census Tract |
|------------------------|---------------------------------|
| Economic               | —                               |
| Above Poverty          | 59.38662903                     |
| Employed               | 93.82779417                     |
| Median HI              | 46.50327217                     |
| Education              | —                               |
| Bachelor's or higher   | 88.88746311                     |
| High school enrollment | 100                             |
| Preschool enrollment   | 74.06646991                     |
| Transportation         | —                               |
| Auto Access            | 13.06300526                     |
| Active commuting       | 96.25304761                     |

|                                              |             |
|----------------------------------------------|-------------|
| Social                                       | —           |
| 2-parent households                          | 16.38650071 |
| Voting                                       | 76.22225074 |
| Neighborhood                                 | —           |
| Alcohol availability                         | 4.516874118 |
| Park access                                  | 81.35506224 |
| Retail density                               | 82.84357757 |
| Supermarket access                           | 74.27178237 |
| Tree canopy                                  | 46.11831131 |
| Housing                                      | —           |
| Homeownership                                | 47.94045939 |
| Housing habitability                         | 50.7121776  |
| Low-inc homeowner severe housing cost burden | 19.67150006 |
| Low-inc renter severe housing cost burden    | 46.67008854 |
| Uncrowded housing                            | 60.05389452 |
| Health Outcomes                              | —           |
| Insured adults                               | 80.68779674 |
| Arthritis                                    | 60.6        |
| Asthma ER Admissions                         | 13.2        |
| High Blood Pressure                          | 62.1        |
| Cancer (excluding skin)                      | 38.7        |
| Asthma                                       | 61.7        |
| Coronary Heart Disease                       | 79.3        |
| Chronic Obstructive Pulmonary Disease        | 88.0        |
| Diagnosed Diabetes                           | 75.2        |
| Life Expectancy at Birth                     | 71.4        |
| Cognitively Disabled                         | 85.7        |
| Physically Disabled                          | 84.3        |

|                                       |      |
|---------------------------------------|------|
| Heart Attack ER Admissions            | 59.6 |
| Mental Health Not Good                | 82.3 |
| Chronic Kidney Disease                | 64.9 |
| Obesity                               | 68.7 |
| Pedestrian Injuries                   | 19.6 |
| Physical Health Not Good              | 84.3 |
| Stroke                                | 70.4 |
| Health Risk Behaviors                 | —    |
| Binge Drinking                        | 38.6 |
| Current Smoker                        | 87.1 |
| No Leisure Time for Physical Activity | 83.8 |
| Climate Change Exposures              | —    |
| Wildfire Risk                         | 0.0  |
| SLR Inundation Area                   | 0.0  |
| Children                              | 92.8 |
| Elderly                               | 43.9 |
| English Speaking                      | 71.2 |
| Foreign-born                          | 47.0 |
| Outdoor Workers                       | 90.9 |
| Climate Change Adaptive Capacity      | —    |
| Impervious Surface Cover              | 28.0 |
| Traffic Density                       | 29.2 |
| Traffic Access                        | 87.4 |
| Other Indices                         | —    |
| Hardship                              | 21.5 |
| Other Decision Support                | —    |
| 2016 Voting                           | 71.1 |

### 7.3. Overall Health & Equity Scores

| Metric                                                                              | Result for Project Census Tract |
|-------------------------------------------------------------------------------------|---------------------------------|
| CalEnviroScreen 4.0 Score for Project Location (a)                                  | 54.0                            |
| Healthy Places Index Score for Project Location (b)                                 | 82.0                            |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535)           | No                              |
| Project Located in a Low-Income Community (Assembly Bill 1550)                      | Yes                             |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No                              |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

| Screen                               | Justification                                                                                                                                                              |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Characteristics: Utility Information | East Bay Community Energy is the primary electricity provider. Intensity factors adjusted for consistency with Berkeley Housing Element methodology.                       |
| Land Use                             | Based on EIR growth assumption of 113 single-family units and 323 new residents. Default acreage, building square footage, and landscape area.                             |
| Operations: Hearths                  | No woodstoves or fireplaces                                                                                                                                                |
| Operations: Energy Use               | Assume 90% of development will not include natural gas pursuant to BMC Section 12.80 (Natural gas ban). Assumes 100% offset of electricity consumption by onsite PV solar. |
| Operations: Water and Waste Water    | EBMUD Wastewater treatment plant 100 percent aerobic                                                                                                                       |



# Berkeley HE Multi Fam 90% Electrified Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field                  | Value                                  |
|-----------------------------|----------------------------------------|
| Project Name                | Berkeley HE Multi Fam 90% Electrified  |
| Operational Year            | 2031                                   |
| Lead Agency                 | —                                      |
| Land Use Scale              | Plan/community                         |
| Analysis Level for Defaults | County                                 |
| Windspeed (m/s)             | 3.90                                   |
| Precipitation (days)        | 3.40                                   |
| Location                    | 37.87310585963721, -122.29377329662165 |
| County                      | Alameda                                |
| City                        | Berkeley                               |
| Air District                | Bay Area AQMD                          |
| Air Basin                   | San Francisco Bay Area                 |
| TAZ                         | 1533                                   |
| EDFZ                        | 1                                      |
| Electric Utility            | User Defined                           |
| Gas Utility                 | User Defined                           |
| App Version                 | 2022.1.1.29                            |

## 1.2. Land Use Types

| Land Use Subtype    | Size   | Unit          | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---------------------|--------|---------------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|
| Apartments Mid Rise | 17,427 | Dwelling Unit | 459         | 16,729,920            | 0.00                   | —                              | 42,630     | —           |
| Condo/Townhouse     | 1,570  | Dwelling Unit | 98.1        | 1,664,200             | 0.00                   | —                              | 4,490      | —           |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | #   | Measure Title                       |
|--------|-----|-------------------------------------|
| Water  | W-7 | Adopt a Water Conservation Strategy |

## 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit.             | BCO2   | NBCO2   | CO2T    | CH4    | N2O    | R     | CO2e    |
|---------------------|--------|---------|---------|--------|--------|-------|---------|
| Daily, Summer (Max) | —      | —       | —       | —      | —      | —     | —       |
| Unmit.              | 6,787  | 518,912 | 525,699 | 687    | 21.5   | 1,064 | 550,338 |
| Mit.                | 6,761  | 518,883 | 525,644 | 687    | 21.4   | 1,064 | 550,265 |
| % Reduced           | < 0.5% | < 0.5%  | < 0.5%  | < 0.5% | < 0.5% | —     | < 0.5%  |
| Daily, Winter (Max) | —      | —       | —       | —      | —      | —     | —       |
| Unmit.              | 6,787  | 490,429 | 497,216 | 690    | 23.4   | 156   | 521,604 |
| Mit.                | 6,761  | 490,401 | 497,162 | 690    | 23.4   | 156   | 521,531 |
| % Reduced           | < 0.5% | < 0.5%  | < 0.5%  | < 0.5% | < 0.5% | —     | < 0.5%  |
| Average Daily (Max) | —      | —       | —       | —      | —      | —     | —       |
| Unmit.              | 6,787  | 469,339 | 476,126 | 687    | 21.4   | 512   | 500,206 |
| Mit.                | 6,761  | 469,310 | 476,072 | 687    | 21.4   | 512   | 500,133 |
| % Reduced           | < 0.5% | < 0.5%  | < 0.5%  | < 0.5% | < 0.5% | —     | < 0.5%  |
| Annual (Max)        | —      | —       | —       | —      | —      | —     | —       |
| Unmit.              | 1,124  | 77,704  | 78,828  | 114    | 3.55   | 84.7  | 82,815  |
| Mit.                | 1,119  | 77,700  | 78,819  | 114    | 3.54   | 84.7  | 82,803  |
| % Reduced           | < 0.5% | < 0.5%  | < 0.5%  | < 0.5% | < 0.5% | —     | < 0.5%  |

### 2.5. Operations Emissions by Sector, Unmitigated



Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | BCO2  | NBCO2   | CO2T    | CH4  | N2O  | R     | CO2e    |
|---------------------|-------|---------|---------|------|------|-------|---------|
| Daily, Summer (Max) | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 464,159 | 464,159 | 20.2 | 21.2 | 932   | 471,906 |
| Area                | 0.00  | 2,882   | 2,882   | 0.12 | 0.02 | —     | 2,892   |
| Energy              | —     | 50,304  | 50,304  | 0.57 | 0.01 | —     | 50,321  |
| Water               | 128   | 1,567   | 1,695   | 0.44 | 0.28 | —     | 1,789   |
| Waste               | 6,659 | 0.00    | 6,659   | 666  | 0.00 | —     | 23,298  |
| Refrig.             | —     | —       | —       | —    | —    | 132   | 132     |
| Total               | 6,787 | 518,912 | 525,699 | 687  | 21.5 | 1,064 | 550,338 |
| Daily, Winter (Max) | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 438,559 | 438,559 | 23.4 | 23.1 | 24.2  | 446,064 |
| Area                | 0.00  | 0.00    | 0.00    | 0.00 | 0.00 | —     | 0.00    |
| Energy              | —     | 50,304  | 50,304  | 0.57 | 0.01 | —     | 50,321  |
| Water               | 128   | 1,567   | 1,695   | 0.44 | 0.28 | —     | 1,789   |
| Waste               | 6,659 | 0.00    | 6,659   | 666  | 0.00 | —     | 23,298  |
| Refrig.             | —     | —       | —       | —    | —    | 132   | 132     |
| Total               | 6,787 | 490,429 | 497,216 | 690  | 23.4 | 156   | 521,604 |
| Average Daily       | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 416,047 | 416,047 | 20.8 | 21.1 | 380   | 423,241 |
| Area                | 0.00  | 1,421   | 1,421   | 0.06 | 0.01 | —     | 1,426   |
| Energy              | —     | 50,304  | 50,304  | 0.57 | 0.01 | —     | 50,321  |
| Water               | 128   | 1,567   | 1,695   | 0.44 | 0.28 | —     | 1,789   |
| Waste               | 6,659 | 0.00    | 6,659   | 666  | 0.00 | —     | 23,298  |
| Refrig.             | —     | —       | —       | —    | —    | 132   | 132     |
| Total               | 6,787 | 469,339 | 476,126 | 687  | 21.4 | 512   | 500,206 |
| Annual              | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 68,881  | 68,881  | 3.45 | 3.50 | 62.9  | 70,072  |

|         |       |        |        |      |         |      |        |
|---------|-------|--------|--------|------|---------|------|--------|
| Area    | 0.00  | 235    | 235    | 0.01 | < 0.005 | —    | 236    |
| Energy  | —     | 8,328  | 8,328  | 0.09 | < 0.005 | —    | 8,331  |
| Water   | 21.1  | 259    | 281    | 0.07 | 0.05    | —    | 296    |
| Waste   | 1,102 | 0.00   | 1,102  | 110  | 0.00    | —    | 3,857  |
| Refrig. | —     | —      | —      | —    | —       | 21.8 | 21.8   |
| Total   | 1,124 | 77,704 | 78,828 | 114  | 3.55    | 84.7 | 82,815 |

## 2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | BCO2  | NBCO2   | CO2T    | CH4  | N2O  | R     | CO2e    |
|---------------------|-------|---------|---------|------|------|-------|---------|
| Daily, Summer (Max) | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 464,159 | 464,159 | 20.2 | 21.2 | 932   | 471,906 |
| Area                | 0.00  | 2,882   | 2,882   | 0.12 | 0.02 | —     | 2,892   |
| Energy              | —     | 50,304  | 50,304  | 0.57 | 0.01 | —     | 50,321  |
| Water               | 102   | 1,538   | 1,641   | 0.35 | 0.22 | —     | 1,716   |
| Waste               | 6,659 | 0.00    | 6,659   | 666  | 0.00 | —     | 23,298  |
| Refrig.             | —     | —       | —       | —    | —    | 132   | 132     |
| Total               | 6,761 | 518,883 | 525,644 | 687  | 21.4 | 1,064 | 550,265 |
| Daily, Winter (Max) | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 438,559 | 438,559 | 23.4 | 23.1 | 24.2  | 446,064 |
| Area                | 0.00  | 0.00    | 0.00    | 0.00 | 0.00 | —     | 0.00    |
| Energy              | —     | 50,304  | 50,304  | 0.57 | 0.01 | —     | 50,321  |
| Water               | 102   | 1,538   | 1,641   | 0.35 | 0.22 | —     | 1,716   |
| Waste               | 6,659 | 0.00    | 6,659   | 666  | 0.00 | —     | 23,298  |
| Refrig.             | —     | —       | —       | —    | —    | 132   | 132     |
| Total               | 6,761 | 490,401 | 497,162 | 690  | 23.4 | 156   | 521,531 |
| Average Daily       | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 416,047 | 416,047 | 20.8 | 21.1 | 380   | 423,241 |

|         |       |         |         |      |         |      |         |
|---------|-------|---------|---------|------|---------|------|---------|
| Area    | 0.00  | 1,421   | 1,421   | 0.06 | 0.01    | —    | 1,426   |
| Energy  | —     | 50,304  | 50,304  | 0.57 | 0.01    | —    | 50,321  |
| Water   | 102   | 1,538   | 1,641   | 0.35 | 0.22    | —    | 1,716   |
| Waste   | 6,659 | 0.00    | 6,659   | 666  | 0.00    | —    | 23,298  |
| Refrig. | —     | —       | —       | —    | —       | 132  | 132     |
| Total   | 6,761 | 469,310 | 476,072 | 687  | 21.4    | 512  | 500,133 |
| Annual  | —     | —       | —       | —    | —       | —    | —       |
| Mobile  | —     | 68,881  | 68,881  | 3.45 | 3.50    | 62.9 | 70,072  |
| Area    | 0.00  | 235     | 235     | 0.01 | < 0.005 | —    | 236     |
| Energy  | —     | 8,328   | 8,328   | 0.09 | < 0.005 | —    | 8,331   |
| Water   | 16.9  | 255     | 272     | 0.06 | 0.04    | —    | 284     |
| Waste   | 1,102 | 0.00    | 1,102   | 110  | 0.00    | —    | 3,857   |
| Refrig. | —     | —       | —       | —    | —       | 21.8 | 21.8    |
| Total   | 1,119 | 77,700  | 78,819  | 114  | 3.54    | 84.7 | 82,803  |

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2   | CO2T    | CH4  | N2O  | R    | CO2e    |
|---------------------|------|---------|---------|------|------|------|---------|
| Daily, Summer (Max) | —    | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | —    | 409,022 | 409,022 | 17.8 | 18.7 | 821  | 415,848 |
| Condo/Townhouse     | —    | 55,138  | 55,138  | 2.40 | 2.52 | 111  | 56,058  |
| Total               | —    | 464,159 | 464,159 | 20.2 | 21.2 | 932  | 471,906 |
| Daily, Winter (Max) | —    | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | —    | 386,462 | 386,462 | 20.6 | 20.4 | 21.3 | 393,076 |

|                     |   |         |         |      |      |      |         |
|---------------------|---|---------|---------|------|------|------|---------|
| Condo/Townhouse     | — | 52,097  | 52,097  | 2.78 | 2.75 | 2.87 | 52,988  |
| Total               | — | 438,559 | 438,559 | 23.4 | 23.1 | 24.2 | 446,064 |
| Annual              | — | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | — | 61,121  | 61,121  | 3.06 | 3.10 | 55.8 | 62,177  |
| Condo/Townhouse     | — | 7,761   | 7,761   | 0.39 | 0.39 | 7.09 | 7,895   |
| Total               | — | 68,881  | 68,881  | 3.45 | 3.50 | 62.9 | 70,072  |

#### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2   | CO2T    | CH4  | N2O  | R    | CO2e    |
|---------------------|------|---------|---------|------|------|------|---------|
| Daily, Summer (Max) | —    | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | —    | 409,022 | 409,022 | 17.8 | 18.7 | 821  | 415,848 |
| Condo/Townhouse     | —    | 55,138  | 55,138  | 2.40 | 2.52 | 111  | 56,058  |
| Total               | —    | 464,159 | 464,159 | 20.2 | 21.2 | 932  | 471,906 |
| Daily, Winter (Max) | —    | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | —    | 386,462 | 386,462 | 20.6 | 20.4 | 21.3 | 393,076 |
| Condo/Townhouse     | —    | 52,097  | 52,097  | 2.78 | 2.75 | 2.87 | 52,988  |
| Total               | —    | 438,559 | 438,559 | 23.4 | 23.1 | 24.2 | 446,064 |
| Annual              | —    | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | —    | 61,121  | 61,121  | 3.06 | 3.10 | 55.8 | 62,177  |
| Condo/Townhouse     | —    | 7,761   | 7,761   | 0.39 | 0.39 | 7.09 | 7,895   |
| Total               | —    | 68,881  | 68,881  | 3.45 | 3.50 | 62.9 | 70,072  |

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|----------|------|-------|------|-----|-----|---|------|
|----------|------|-------|------|-----|-----|---|------|

|                     |   |        |        |      |      |   |        |
|---------------------|---|--------|--------|------|------|---|--------|
| Daily, Summer (Max) | — | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | — | 43,916 | 43,916 | 0.00 | 0.00 | — | 43,916 |
| Condo/Townhouse     | — | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | — | 43,916 | 43,916 | 0.00 | 0.00 | — | 43,916 |
| Daily, Winter (Max) | — | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | — | 43,916 | 43,916 | 0.00 | 0.00 | — | 43,916 |
| Condo/Townhouse     | — | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | — | 43,916 | 43,916 | 0.00 | 0.00 | — | 43,916 |
| Annual              | — | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | — | 7,271  | 7,271  | 0.00 | 0.00 | — | 7,271  |
| Condo/Townhouse     | — | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | — | 7,271  | 7,271  | 0.00 | 0.00 | — | 7,271  |

#### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2  | CO2T   | CH4  | N2O  | R | CO2e   |
|---------------------|------|--------|--------|------|------|---|--------|
| Daily, Summer (Max) | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 43,916 | 43,916 | 0.00 | 0.00 | — | 43,916 |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 43,916 | 43,916 | 0.00 | 0.00 | — | 43,916 |
| Daily, Winter (Max) | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 43,916 | 43,916 | 0.00 | 0.00 | — | 43,916 |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 43,916 | 43,916 | 0.00 | 0.00 | — | 43,916 |
| Annual              | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 7,271  | 7,271  | 0.00 | 0.00 | — | 7,271  |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 7,271  | 7,271  | 0.00 | 0.00 | — | 7,271  |

#### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T  | CH4  | N2O     | R | CO2e  |
|---------------------|------|-------|-------|------|---------|---|-------|
| Daily, Summer (Max) | —    | —     | —     | —    | —       | — | —     |
| Apartments Mid Rise | —    | 6,388 | 6,388 | 0.57 | 0.01    | — | 6,405 |
| Condo/Townhouse     | —    | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Total               | —    | 6,388 | 6,388 | 0.57 | 0.01    | — | 6,405 |
| Daily, Winter (Max) | —    | —     | —     | —    | —       | — | —     |
| Apartments Mid Rise | —    | 6,388 | 6,388 | 0.57 | 0.01    | — | 6,405 |
| Condo/Townhouse     | —    | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Total               | —    | 6,388 | 6,388 | 0.57 | 0.01    | — | 6,405 |
| Annual              | —    | —     | —     | —    | —       | — | —     |
| Apartments Mid Rise | —    | 1,058 | 1,058 | 0.09 | < 0.005 | — | 1,060 |
| Condo/Townhouse     | —    | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Total               | —    | 1,058 | 1,058 | 0.09 | < 0.005 | — | 1,060 |

#### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T  | CH4  | N2O  | R | CO2e  |
|---------------------|------|-------|-------|------|------|---|-------|
| Daily, Summer (Max) | —    | —     | —     | —    | —    | — | —     |
| Apartments Mid Rise | —    | 6,388 | 6,388 | 0.57 | 0.01 | — | 6,405 |
| Condo/Townhouse     | —    | 0.00  | 0.00  | 0.00 | 0.00 | — | 0.00  |
| Total               | —    | 6,388 | 6,388 | 0.57 | 0.01 | — | 6,405 |
| Daily, Winter (Max) | —    | —     | —     | —    | —    | — | —     |
| Apartments Mid Rise | —    | 6,388 | 6,388 | 0.57 | 0.01 | — | 6,405 |
| Condo/Townhouse     | —    | 0.00  | 0.00  | 0.00 | 0.00 | — | 0.00  |
| Total               | —    | 6,388 | 6,388 | 0.57 | 0.01 | — | 6,405 |
| Annual              | —    | —     | —     | —    | —    | — | —     |

|                     |   |       |       |      |         |   |       |
|---------------------|---|-------|-------|------|---------|---|-------|
| Apartments Mid Rise | — | 1,058 | 1,058 | 0.09 | < 0.005 | — | 1,060 |
| Condo/Townhouse     | — | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Total               | — | 1,058 | 1,058 | 0.09 | < 0.005 | — | 1,060 |

### 4.3. Area Emissions by Source

#### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                 | BCO2 | NBCO2 | CO2T  | CH4  | N2O     | R | CO2e  |
|------------------------|------|-------|-------|------|---------|---|-------|
| Daily, Summer (Max)    | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Landscape Equipment    | —    | 2,882 | 2,882 | 0.12 | 0.02    | — | 2,892 |
| Total                  | 0.00 | 2,882 | 2,882 | 0.12 | 0.02    | — | 2,892 |
| Daily, Winter (Max)    | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Total                  | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Annual                 | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Landscape Equipment    | —    | 235   | 235   | 0.01 | < 0.005 | — | 236   |
| Total                  | 0.00 | 235   | 235   | 0.01 | < 0.005 | — | 236   |

#### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                 | BCO2 | NBCO2 | CO2T  | CH4  | N2O     | R | CO2e  |
|------------------------|------|-------|-------|------|---------|---|-------|
| Daily, Summer (Max)    | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Landscape Equipment    | —    | 2,882 | 2,882 | 0.12 | 0.02    | — | 2,892 |
| Total                  | 0.00 | 2,882 | 2,882 | 0.12 | 0.02    | — | 2,892 |
| Daily, Winter (Max)    | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Total                  | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Annual                 | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Landscape Equipment    | —    | 235   | 235   | 0.01 | < 0.005 | — | 236   |
| Total                  | 0.00 | 235   | 235   | 0.01 | < 0.005 | — | 236   |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T  | CH4  | N2O  | R | CO2e  |
|---------------------|------|-------|-------|------|------|---|-------|
| Daily, Summer (Max) | —    | —     | —     | —    | —    | — | —     |
| Apartments Mid Rise | 8.58 | 1,434 | 1,442 | 0.03 | 0.02 | — | 1,448 |
| Condo/Townhouse     | 119  | 134   | 253   | 0.41 | 0.26 | — | 340   |



|                     |      |       |       |         |         |   |       |
|---------------------|------|-------|-------|---------|---------|---|-------|
| Total               | 128  | 1,567 | 1,695 | 0.44    | 0.28    | — | 1,789 |
| Daily, Winter (Max) | —    | —     | —     | —       | —       | — | —     |
| Apartments Mid Rise | 8.58 | 1,434 | 1,442 | 0.03    | 0.02    | — | 1,448 |
| Condo/Townhouse     | 119  | 134   | 253   | 0.41    | 0.26    | — | 340   |
| Total               | 128  | 1,567 | 1,695 | 0.44    | 0.28    | — | 1,789 |
| Annual              | —    | —     | —     | —       | —       | — | —     |
| Apartments Mid Rise | 1.42 | 237   | 239   | < 0.005 | < 0.005 | — | 240   |
| Condo/Townhouse     | 19.7 | 22.1  | 41.8  | 0.07    | 0.04    | — | 56.4  |
| Total               | 21.1 | 259   | 281   | 0.07    | 0.05    | — | 296   |

#### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T  | CH4     | N2O     | R | CO2e  |
|---------------------|------|-------|-------|---------|---------|---|-------|
| Daily, Summer (Max) | —    | —     | —     | —       | —       | — | —     |
| Apartments Mid Rise | 6.86 | 1,432 | 1,439 | 0.02    | 0.01    | — | 1,444 |
| Condo/Townhouse     | 95.3 | 107   | 202   | 0.33    | 0.21    | — | 272   |
| Total               | 102  | 1,538 | 1,641 | 0.35    | 0.22    | — | 1,716 |
| Daily, Winter (Max) | —    | —     | —     | —       | —       | — | —     |
| Apartments Mid Rise | 6.86 | 1,432 | 1,439 | 0.02    | 0.01    | — | 1,444 |
| Condo/Townhouse     | 95.3 | 107   | 202   | 0.33    | 0.21    | — | 272   |
| Total               | 102  | 1,538 | 1,641 | 0.35    | 0.22    | — | 1,716 |
| Annual              | —    | —     | —     | —       | —       | — | —     |
| Apartments Mid Rise | 1.14 | 237   | 238   | < 0.005 | < 0.005 | — | 239   |
| Condo/Townhouse     | 15.8 | 17.7  | 33.5  | 0.05    | 0.03    | — | 45.1  |
| Total               | 16.9 | 255   | 272   | 0.06    | 0.04    | — | 284   |

#### 4.5. Waste Emissions by Land Use

#### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2  | NBCO2 | CO2T  | CH4  | N2O  | R | CO2e   |
|---------------------|-------|-------|-------|------|------|---|--------|
| Daily, Summer (Max) | —     | —     | —     | —    | —    | — | —      |
| Apartments Mid Rise | 6,025 | 0.00  | 6,025 | 602  | 0.00 | — | 21,078 |
| Condo/Townhouse     | 635   | 0.00  | 635   | 63.4 | 0.00 | — | 2,220  |
| Total               | 6,659 | 0.00  | 6,659 | 666  | 0.00 | — | 23,298 |
| Daily, Winter (Max) | —     | —     | —     | —    | —    | — | —      |
| Apartments Mid Rise | 6,025 | 0.00  | 6,025 | 602  | 0.00 | — | 21,078 |
| Condo/Townhouse     | 635   | 0.00  | 635   | 63.4 | 0.00 | — | 2,220  |
| Total               | 6,659 | 0.00  | 6,659 | 666  | 0.00 | — | 23,298 |
| Annual              | —     | —     | —     | —    | —    | — | —      |
| Apartments Mid Rise | 997   | 0.00  | 997   | 99.7 | 0.00 | — | 3,490  |
| Condo/Townhouse     | 105   | 0.00  | 105   | 10.5 | 0.00 | — | 368    |
| Total               | 1,102 | 0.00  | 1,102 | 110  | 0.00 | — | 3,857  |

#### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2  | NBCO2 | CO2T  | CH4  | N2O  | R | CO2e   |
|---------------------|-------|-------|-------|------|------|---|--------|
| Daily, Summer (Max) | —     | —     | —     | —    | —    | — | —      |
| Apartments Mid Rise | 6,025 | 0.00  | 6,025 | 602  | 0.00 | — | 21,078 |
| Condo/Townhouse     | 635   | 0.00  | 635   | 63.4 | 0.00 | — | 2,220  |
| Total               | 6,659 | 0.00  | 6,659 | 666  | 0.00 | — | 23,298 |
| Daily, Winter (Max) | —     | —     | —     | —    | —    | — | —      |
| Apartments Mid Rise | 6,025 | 0.00  | 6,025 | 602  | 0.00 | — | 21,078 |
| Condo/Townhouse     | 635   | 0.00  | 635   | 63.4 | 0.00 | — | 2,220  |
| Total               | 6,659 | 0.00  | 6,659 | 666  | 0.00 | — | 23,298 |
| Annual              | —     | —     | —     | —    | —    | — | —      |

|                     |       |      |       |      |      |   |       |
|---------------------|-------|------|-------|------|------|---|-------|
| Apartments Mid Rise | 997   | 0.00 | 997   | 99.7 | 0.00 | — | 3,490 |
| Condo/Townhouse     | 105   | 0.00 | 105   | 10.5 | 0.00 | — | 368   |
| Total               | 1,102 | 0.00 | 1,102 | 110  | 0.00 | — | 3,857 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R    | CO2e |
|---------------------|------|-------|------|-----|-----|------|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 120  | 120  |
| Condo/Townhouse     | —    | —     | —    | —   | —   | 11.9 | 11.9 |
| Total               | —    | —     | —    | —   | —   | 132  | 132  |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 120  | 120  |
| Condo/Townhouse     | —    | —     | —    | —   | —   | 11.9 | 11.9 |
| Total               | —    | —     | —    | —   | —   | 132  | 132  |
| Annual              | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 19.8 | 19.8 |
| Condo/Townhouse     | —    | —     | —    | —   | —   | 1.97 | 1.97 |
| Total               | —    | —     | —    | —   | —   | 21.8 | 21.8 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R    | CO2e |
|---------------------|------|-------|------|-----|-----|------|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 120  | 120  |
| Condo/Townhouse     | —    | —     | —    | —   | —   | 11.9 | 11.9 |

|                     |   |   |   |   |   |      |      |
|---------------------|---|---|---|---|---|------|------|
| Total               | — | — | — | — | — | 132  | 132  |
| Daily, Winter (Max) | — | — | — | — | — | —    | —    |
| Apartments Mid Rise | — | — | — | — | — | 120  | 120  |
| Condo/Townhouse     | — | — | — | — | — | 11.9 | 11.9 |
| Total               | — | — | — | — | — | 132  | 132  |
| Annual              | — | — | — | — | — | —    | —    |
| Apartments Mid Rise | — | — | — | — | — | 19.8 | 19.8 |
| Condo/Townhouse     | — | — | — | — | — | 1.97 | 1.97 |
| Total               | — | — | — | — | — | 21.8 | 21.8 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |

|        |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|
| Total  | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — |
| Total  | — | — | — | — | — | — | — |

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

### 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |

|        |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|
| Total  | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — |
| Total  | — | — | — | — | — | — | — |

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |

|             |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|
| Sequestered | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Removed     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| —           | — | — | — | — | — | — | — |
| Annual      | — | — | — | — | — | — | — |
| Avoided     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Removed     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| —           | — | — | — | — | — | — | — |

#### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |



|                     |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|
| Total               | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |
| Annual              | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |

#### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |

|             |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|
| Sequestered | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Removed     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| —           | — | — | — | — | — | — | — |

## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

| Land Use Type       | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year    |
|---------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|-------------|
| Apartments Mid Rise | 94,803        | 85,567         | 71,276       | 32,894,708 | 554,600     | 500,567      | 416,969    | 192,435,070 |
| Condo/Townhouse     | 11,492        | 12,780         | 9,860        | 4,176,716  | 67,231      | 74,762       | 57,679     | 24,433,919  |

#### 5.9.2. Mitigated

| Land Use Type       | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year    |
|---------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|-------------|
| Apartments Mid Rise | 94,803        | 85,567         | 71,276       | 32,894,708 | 554,600     | 500,567      | 416,969    | 192,435,070 |
| Condo/Townhouse     | 11,492        | 12,780         | 9,860        | 4,176,716  | 67,231      | 74,762       | 57,679     | 24,433,919  |

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

| Hearth Type         | Unmitigated (number) |
|---------------------|----------------------|
| Apartments Mid Rise | —                    |

|                           |   |
|---------------------------|---|
| Wood Fireplaces           | 0 |
| Gas Fireplaces            | 0 |
| Propane Fireplaces        | 0 |
| Electric Fireplaces       | 0 |
| No Fireplaces             | 0 |
| Conventional Wood Stoves  | 0 |
| Catalytic Wood Stoves     | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves        | 0 |
| Condo/Townhouse           | — |
| Wood Fireplaces           | 0 |
| Gas Fireplaces            | 0 |
| Propane Fireplaces        | 0 |
| Electric Fireplaces       | 0 |
| No Fireplaces             | 0 |
| Conventional Wood Stoves  | 0 |
| Catalytic Wood Stoves     | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves        | 0 |

5.10.1.2. Mitigated

| Hearth Type         | Unmitigated (number) |
|---------------------|----------------------|
| Apartments Mid Rise | —                    |
| Wood Fireplaces     | 0                    |
| Gas Fireplaces      | 0                    |
| Propane Fireplaces  | 0                    |
| Electric Fireplaces | 0                    |
| No Fireplaces       | 0                    |

|                           |   |
|---------------------------|---|
| Conventional Wood Stoves  | 0 |
| Catalytic Wood Stoves     | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves        | 0 |
| Condo/Townhouse           | — |
| Wood Fireplaces           | 0 |
| Gas Fireplaces            | 0 |
| Propane Fireplaces        | 0 |
| Electric Fireplaces       | 0 |
| No Fireplaces             | 0 |
| Conventional Wood Stoves  | 0 |
| Catalytic Wood Stoves     | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves        | 0 |

5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|------------------------------------------|------------------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------|
| 37248093                                 | 12,416,031                               | 0.00                                         | 0.00                                         | —                           |

5.10.3. Landscape Equipment

| Season      | Unit   | Value |
|-------------|--------|-------|
| Snow Days   | day/yr | 0.00  |
| Summer Days | day/yr | 180   |

5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|--------|------|-------|
|--------|------|-------|

|             |        |      |
|-------------|--------|------|
| Snow Days   | day/yr | 0.00 |
| Summer Days | day/yr | 180  |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use            | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|---------------------|----------------------|-----|--------|--------|-----------------------|
| Apartments Mid Rise | 118,735,584          | 135 | 0.0000 | 0.0000 | 19,931,115            |
| Condo/Townhouse     | 0.00                 | 135 | 0.0000 | 0.0000 | 0.00                  |

### 5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use            | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|---------------------|----------------------|-----|--------|--------|-----------------------|
| Apartments Mid Rise | 118,735,584          | 135 | 0.0000 | 0.0000 | 19,931,115            |
| Condo/Townhouse     | 0.00                 | 135 | 0.0000 | 0.0000 | 0.00                  |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use            | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---------------------|-------------------------|--------------------------|
| Apartments Mid Rise | 4,012,726               | 780,308,430              |
| Condo/Townhouse     | 55,752,035              | 0.00                     |

### 5.12.2. Mitigated

| Land Use            | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---------------------|-------------------------|--------------------------|
| Apartments Mid Rise | 3,210,181               | 780,308,430              |
| Condo/Townhouse     | 44,601,628              | 0.00                     |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use            | Waste (ton/year) | Cogeneration (kWh/year) |
|---------------------|------------------|-------------------------|
| Apartments Mid Rise | 11,178           | —                       |
| Condo/Townhouse     | 1,177            | —                       |

### 5.13.2. Mitigated

| Land Use            | Waste (ton/year) | Cogeneration (kWh/year) |
|---------------------|------------------|-------------------------|
| Apartments Mid Rise | 11,178           | —                       |
| Condo/Townhouse     | 1,177            | —                       |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type       | Equipment Type                                          | Refrigerant | GWP   | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---------------------|---------------------------------------------------------|-------------|-------|---------------|----------------------|-------------------|----------------|
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Apartments Mid Rise | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |
| Condo/Townhouse     | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Condo/Townhouse     | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |

### 5.14.2. Mitigated

| Land Use Type       | Equipment Type                                          | Refrigerant | GWP   | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---------------------|---------------------------------------------------------|-------------|-------|---------------|----------------------|-------------------|----------------|
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Apartments Mid Rise | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |
| Condo/Townhouse     | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Condo/Townhouse     | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|----------------|-----------|-------------|----------------|---------------|------------|-------------|
|----------------|-----------|-------------|----------------|---------------|------------|-------------|

### 5.15.2. Mitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|----------------|-----------|-------------|----------------|---------------|------------|-------------|
|----------------|-----------|-------------|----------------|---------------|------------|-------------|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|----------------|-----------|----------------|---------------|----------------|------------|-------------|
|----------------|-----------|----------------|---------------|----------------|------------|-------------|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|

5.17. User Defined

| Equipment Type | Fuel Type |
|----------------|-----------|
|----------------|-----------|

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.2. Sequestration

5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

5.18.2.2. Mitigated



| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard               | Result for Project Location | Unit                                       |
|------------------------------|-----------------------------|--------------------------------------------|
| Temperature and Extreme Heat | 7.10                        | annual days of extreme heat                |
| Extreme Precipitation        | 7.50                        | annual days with precipitation above 20 mm |
| Sea Level Rise               | —                           | meters of inundation depth                 |
| Wildfire                     | 0.00                        | annual hectares burned                     |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about  $\frac{3}{4}$  an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

### 6.2. Initial Climate Risk Scores

| Climate Hazard               | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|------------------------------|----------------|-------------------|-------------------------|---------------------|
| Temperature and Extreme Heat | N/A            | N/A               | N/A                     | N/A                 |
| Extreme Precipitation        | 2              | 0                 | 0                       | N/A                 |
| Sea Level Rise               | 1              | 0                 | 0                       | N/A                 |
| Wildfire                     | 1              | 0                 | 0                       | N/A                 |
| Flooding                     | N/A            | N/A               | N/A                     | N/A                 |
| Drought                      | N/A            | N/A               | N/A                     | N/A                 |

|                         |     |     |     |     |
|-------------------------|-----|-----|-----|-----|
| Snowpack Reduction      | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 0   | 0   | 0   | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

### 6.3. Adjusted Climate Risk Scores

| Climate Hazard               | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|------------------------------|----------------|-------------------|-------------------------|---------------------|
| Temperature and Extreme Heat | N/A            | N/A               | N/A                     | N/A                 |
| Extreme Precipitation        | 2              | 1                 | 1                       | 3                   |
| Sea Level Rise               | 1              | 1                 | 1                       | 2                   |
| Wildfire                     | 1              | 1                 | 1                       | 2                   |
| Flooding                     | N/A            | N/A               | N/A                     | N/A                 |
| Drought                      | N/A            | N/A               | N/A                     | N/A                 |
| Snowpack Reduction           | N/A            | N/A               | N/A                     | N/A                 |
| Air Quality Degradation      | 1              | 1                 | 1                       | 2                   |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

### 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator                       | Result for Project Census Tract |
|---------------------------------|---------------------------------|
| Exposure Indicators             | —                               |
| AQ-Ozone                        | 3.12                            |
| AQ-PM                           | 39.2                            |
| AQ-DPM                          | 77.5                            |
| Drinking Water                  | 4.21                            |
| Lead Risk Housing               | 61.6                            |
| Pesticides                      | 0.00                            |
| Toxic Releases                  | 61.3                            |
| Traffic                         | 31.2                            |
| Effect Indicators               | —                               |
| CleanUp Sites                   | 65.0                            |
| Groundwater                     | 97.0                            |
| Haz Waste Facilities/Generators | 93.0                            |
| Impaired Water Bodies           | 90.1                            |
| Solid Waste                     | 9.67                            |
| Sensitive Population            | —                               |
| Asthma                          | 81.1                            |
| Cardio-vascular                 | 46.8                            |
| Low Birth Weights               | 44.5                            |
| Socioeconomic Factor Indicators | —                               |
| Education                       | 26.4                            |
| Housing                         | 55.1                            |
| Linguistic                      | 6.27                            |
| Poverty                         | 35.6                            |
| Unemployment                    | 49.9                            |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator                                    | Result for Project Census Tract |
|----------------------------------------------|---------------------------------|
| Economic                                     | —                               |
| Above Poverty                                | 59.38662903                     |
| Employed                                     | 93.82779417                     |
| Median HI                                    | 46.50327217                     |
| Education                                    | —                               |
| Bachelor's or higher                         | 88.88746311                     |
| High school enrollment                       | 100                             |
| Preschool enrollment                         | 74.06646991                     |
| Transportation                               | —                               |
| Auto Access                                  | 13.06300526                     |
| Active commuting                             | 96.25304761                     |
| Social                                       | —                               |
| 2-parent households                          | 16.38650071                     |
| Voting                                       | 76.22225074                     |
| Neighborhood                                 | —                               |
| Alcohol availability                         | 4.516874118                     |
| Park access                                  | 81.35506224                     |
| Retail density                               | 82.84357757                     |
| Supermarket access                           | 74.27178237                     |
| Tree canopy                                  | 46.11831131                     |
| Housing                                      | —                               |
| Homeownership                                | 47.94045939                     |
| Housing habitability                         | 50.7121776                      |
| Low-inc homeowner severe housing cost burden | 19.67150006                     |
| Low-inc renter severe housing cost burden    | 46.67008854                     |
| Uncrowded housing                            | 60.05389452                     |
| Health Outcomes                              | —                               |

|                                       |             |
|---------------------------------------|-------------|
| Insured adults                        | 80.68779674 |
| Arthritis                             | 60.6        |
| Asthma ER Admissions                  | 13.2        |
| High Blood Pressure                   | 62.1        |
| Cancer (excluding skin)               | 38.7        |
| Asthma                                | 61.7        |
| Coronary Heart Disease                | 79.3        |
| Chronic Obstructive Pulmonary Disease | 88.0        |
| Diagnosed Diabetes                    | 75.2        |
| Life Expectancy at Birth              | 71.4        |
| Cognitively Disabled                  | 85.7        |
| Physically Disabled                   | 84.3        |
| Heart Attack ER Admissions            | 59.6        |
| Mental Health Not Good                | 82.3        |
| Chronic Kidney Disease                | 64.9        |
| Obesity                               | 68.7        |
| Pedestrian Injuries                   | 19.6        |
| Physical Health Not Good              | 84.3        |
| Stroke                                | 70.4        |
| Health Risk Behaviors                 | —           |
| Binge Drinking                        | 38.6        |
| Current Smoker                        | 87.1        |
| No Leisure Time for Physical Activity | 83.8        |
| Climate Change Exposures              | —           |
| Wildfire Risk                         | 0.0         |
| SLR Inundation Area                   | 0.0         |
| Children                              | 92.8        |
| Elderly                               | 43.9        |

|                                  |      |
|----------------------------------|------|
| English Speaking                 | 71.2 |
| Foreign-born                     | 47.0 |
| Outdoor Workers                  | 90.9 |
| Climate Change Adaptive Capacity | —    |
| Impervious Surface Cover         | 28.0 |
| Traffic Density                  | 29.2 |
| Traffic Access                   | 87.4 |
| Other Indices                    | —    |
| Hardship                         | 21.5 |
| Other Decision Support           | —    |
| 2016 Voting                      | 71.1 |

### 7.3. Overall Health & Equity Scores

| Metric                                                                              | Result for Project Census Tract |
|-------------------------------------------------------------------------------------|---------------------------------|
| CalEnviroScreen 4.0 Score for Project Location (a)                                  | 54.0                            |
| Healthy Places Index Score for Project Location (b)                                 | 82.0                            |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535)           | No                              |
| Project Located in a Low-Income Community (Assembly Bill 1550)                      | Yes                             |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No                              |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

| Screen                               | Justification                                                                                                                                                                                                                                                                                                              |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Characteristics: Utility Information | East Bay Community Energy is the primary electricity provider. Intensity factors adjusted for consistency with Berkeley Housing Element methodology.                                                                                                                                                                       |
| Land Use                             | Based on EIR growth assumption of 17,427 multi-family units, 1,570 condo/townhome units and 47,120 new residents. ADUs included as condo/townhouse for a conservative assumption. Default acreage and building square footage. Landscape area set to zero, outdoor water consumption estimated at rate of 41,075 gal/unit. |
| Operations: Hearths                  | No woodstoves or fireplaces                                                                                                                                                                                                                                                                                                |
| Operations: Energy Use               | Assume 90% of development will not include natural gas pursuant to BMC Section 12.80 (Natural gas ban). Totals combined and added to Apartments row.                                                                                                                                                                       |
| Operations: Water and Waste Water    | EBMUD Wastewater treatment plant 100 percent aerobic. Outdoor water consumption based on v2020 defaults per multifamily unit in lieu of available data in v2022.                                                                                                                                                           |

# Berkeley HE Single Fam 60% Electrified Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field                  | Value                                  |
|-----------------------------|----------------------------------------|
| Project Name                | Berkeley HE Single Fam 60% Electrified |
| Operational Year            | 2031                                   |
| Lead Agency                 | —                                      |
| Land Use Scale              | Plan/community                         |
| Analysis Level for Defaults | County                                 |
| Windspeed (m/s)             | 3.90                                   |
| Precipitation (days)        | 3.40                                   |
| Location                    | 37.87310585963721, -122.29377329662165 |
| County                      | Alameda                                |
| City                        | Berkeley                               |
| Air District                | Bay Area AQMD                          |
| Air Basin                   | San Francisco Bay Area                 |
| TAZ                         | 1533                                   |
| EDFZ                        | 1                                      |
| Electric Utility            | User Defined                           |
| Gas Utility                 | User Defined                           |
| App Version                 | 2022.1.1.29                            |

## 1.2. Land Use Types

| Land Use Subtype      | Size | Unit          | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|-----------------------|------|---------------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|
| Single Family Housing | 113  | Dwelling Unit | 36.7        | 220,350               | 1,323,553              | —                              | 323        | —           |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | #   | Measure Title                       |
|--------|-----|-------------------------------------|
| Water  | W-7 | Adopt a Water Conservation Strategy |

## 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit.             | BCO2 | NBCO2  | CO2T   | CH4    | N2O  | R    | CO2e   |
|---------------------|------|--------|--------|--------|------|------|--------|
| Daily, Summer (Max) | —    | —      | —      | —      | —    | —    | —      |
| Unmit.              | 49.3 | 5,237  | 5,286  | 4.36   | 0.22 | 10.8 | 5,471  |
| Mit.                | 47.5 | 5,235  | 5,283  | 4.35   | 0.21 | 10.8 | 5,466  |
| % Reduced           | 3%   | < 0.5% | < 0.5% | < 0.5% | 2%   | —    | < 0.5% |
| Daily, Winter (Max) | —    | —      | —      | —      | —    | —    | —      |
| Unmit.              | 49.3 | 4,963  | 5,012  | 4.39   | 0.24 | 1.82 | 5,194  |
| Mit.                | 47.5 | 4,961  | 5,009  | 4.38   | 0.23 | 1.82 | 5,189  |
| % Reduced           | 3%   | < 0.5% | < 0.5% | < 0.5% | 2%   | —    | < 0.5% |
| Average Daily (Max) | —    | —      | —      | —      | —    | —    | —      |
| Unmit.              | 49.3 | 4,898  | 4,947  | 4.37   | 0.22 | 5.47 | 5,128  |
| Mit.                | 47.5 | 4,896  | 4,943  | 4.36   | 0.22 | 5.47 | 5,123  |
| % Reduced           | 3%   | < 0.5% | < 0.5% | < 0.5% | 2%   | —    | < 0.5% |
| Annual (Max)        | —    | —      | —      | —      | —    | —    | —      |
| Unmit.              | 8.16 | 811    | 819    | 0.72   | 0.04 | 0.91 | 849    |
| Mit.                | 7.87 | 811    | 818    | 0.72   | 0.04 | 0.91 | 848    |
| % Reduced           | 3%   | < 0.5% | < 0.5% | < 0.5% | 2%   | —    | < 0.5% |

### 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | BCO2 | NBCO2 | CO2T  | CH4     | N2O     | R    | CO2e  |
|---------------------|------|-------|-------|---------|---------|------|-------|
| Daily, Summer (Max) | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,507 | 4,507 | 0.20    | 0.20    | 9.21 | 4,580 |
| Area                | 0.00 | 17.1  | 17.1  | < 0.005 | < 0.005 | —    | 17.2  |
| Energy              | —    | 670   | 670   | 0.06    | < 0.005 | —    | 671   |
| Water               | 8.58 | 43.2  | 51.7  | 0.03    | 0.02    | —    | 58.0  |
| Waste               | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig.             | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total               | 49.3 | 5,237 | 5,286 | 4.36    | 0.22    | 10.8 | 5,471 |
| Daily, Winter (Max) | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,250 | 4,250 | 0.23    | 0.22    | 0.24 | 4,321 |
| Area                | 0.00 | 0.00  | 0.00  | 0.00    | 0.00    | —    | 0.00  |
| Energy              | —    | 670   | 670   | 0.06    | < 0.005 | —    | 671   |
| Water               | 8.58 | 43.2  | 51.7  | 0.03    | 0.02    | —    | 58.0  |
| Waste               | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig.             | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total               | 49.3 | 4,963 | 5,012 | 4.39    | 0.24    | 1.82 | 5,194 |
| Average Daily       | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,176 | 4,176 | 0.21    | 0.20    | 3.89 | 4,246 |
| Area                | 0.00 | 8.45  | 8.45  | < 0.005 | < 0.005 | —    | 8.48  |
| Energy              | —    | 670   | 670   | 0.06    | < 0.005 | —    | 671   |
| Water               | 8.58 | 43.2  | 51.7  | 0.03    | 0.02    | —    | 58.0  |
| Waste               | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig.             | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total               | 49.3 | 4,898 | 4,947 | 4.37    | 0.22    | 5.47 | 5,128 |
| Annual              | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 691   | 691   | 0.04    | 0.03    | 0.64 | 703   |



|         |      |      |      |         |         |      |      |
|---------|------|------|------|---------|---------|------|------|
| Area    | 0.00 | 1.40 | 1.40 | < 0.005 | < 0.005 | —    | 1.40 |
| Energy  | —    | 111  | 111  | 0.01    | < 0.005 | —    | 111  |
| Water   | 1.42 | 7.14 | 8.56 | < 0.005 | < 0.005 | —    | 9.61 |
| Waste   | 6.74 | 0.00 | 6.74 | 0.67    | 0.00    | —    | 23.6 |
| Refrig. | —    | —    | —    | —       | —       | 0.26 | 0.26 |
| Total   | 8.16 | 811  | 819  | 0.72    | 0.04    | 0.91 | 849  |

## 2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | BCO2 | NBCO2 | CO2T  | CH4     | N2O     | R    | CO2e  |
|---------------------|------|-------|-------|---------|---------|------|-------|
| Daily, Summer (Max) | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,507 | 4,507 | 0.20    | 0.20    | 9.21 | 4,580 |
| Area                | 0.00 | 17.1  | 17.1  | < 0.005 | < 0.005 | —    | 17.2  |
| Energy              | —    | 670   | 670   | 0.06    | < 0.005 | —    | 671   |
| Water               | 6.86 | 41.2  | 48.1  | 0.02    | 0.01    | —    | 53.1  |
| Waste               | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig.             | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total               | 47.5 | 5,235 | 5,283 | 4.35    | 0.21    | 10.8 | 5,466 |
| Daily, Winter (Max) | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,250 | 4,250 | 0.23    | 0.22    | 0.24 | 4,321 |
| Area                | 0.00 | 0.00  | 0.00  | 0.00    | 0.00    | —    | 0.00  |
| Energy              | —    | 670   | 670   | 0.06    | < 0.005 | —    | 671   |
| Water               | 6.86 | 41.2  | 48.1  | 0.02    | 0.01    | —    | 53.1  |
| Waste               | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig.             | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total               | 47.5 | 4,961 | 5,009 | 4.38    | 0.23    | 1.82 | 5,189 |
| Average Daily       | —    | —     | —     | —       | —       | —    | —     |
| Mobile              | —    | 4,176 | 4,176 | 0.21    | 0.20    | 3.89 | 4,246 |

|         |      |       |       |         |         |      |       |
|---------|------|-------|-------|---------|---------|------|-------|
| Area    | 0.00 | 8.45  | 8.45  | < 0.005 | < 0.005 | —    | 8.48  |
| Energy  | —    | 670   | 670   | 0.06    | < 0.005 | —    | 671   |
| Water   | 6.86 | 41.2  | 48.1  | 0.02    | 0.01    | —    | 53.1  |
| Waste   | 40.7 | 0.00  | 40.7  | 4.07    | 0.00    | —    | 142   |
| Refrig. | —    | —     | —     | —       | —       | 1.58 | 1.58  |
| Total   | 47.5 | 4,896 | 4,943 | 4.36    | 0.22    | 5.47 | 5,123 |
| Annual  | —    | —     | —     | —       | —       | —    | —     |
| Mobile  | —    | 691   | 691   | 0.04    | 0.03    | 0.64 | 703   |
| Area    | 0.00 | 1.40  | 1.40  | < 0.005 | < 0.005 | —    | 1.40  |
| Energy  | —    | 111   | 111   | 0.01    | < 0.005 | —    | 111   |
| Water   | 1.14 | 6.83  | 7.96  | < 0.005 | < 0.005 | —    | 8.80  |
| Waste   | 6.74 | 0.00  | 6.74  | 0.67    | 0.00    | —    | 23.6  |
| Refrig. | —    | —     | —     | —       | —       | 0.26 | 0.26  |
| Total   | 7.87 | 811   | 818   | 0.72    | 0.04    | 0.91 | 848   |

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T  | CH4  | N2O  | R    | CO2e  |
|-----------------------|------|-------|-------|------|------|------|-------|
| Daily, Summer (Max)   | —    | —     | —     | —    | —    | —    | —     |
| Single Family Housing | —    | 4,507 | 4,507 | 0.20 | 0.20 | 9.21 | 4,580 |
| Total                 | —    | 4,507 | 4,507 | 0.20 | 0.20 | 9.21 | 4,580 |
| Daily, Winter (Max)   | —    | —     | —     | —    | —    | —    | —     |
| Single Family Housing | —    | 4,250 | 4,250 | 0.23 | 0.22 | 0.24 | 4,321 |
| Total                 | —    | 4,250 | 4,250 | 0.23 | 0.22 | 0.24 | 4,321 |

|                       |   |     |     |      |      |      |     |
|-----------------------|---|-----|-----|------|------|------|-----|
| Annual                | — | —   | —   | —    | —    | —    | —   |
| Single Family Housing | — | 691 | 691 | 0.04 | 0.03 | 0.64 | 703 |
| Total                 | — | 691 | 691 | 0.04 | 0.03 | 0.64 | 703 |

#### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T  | CH4  | N2O  | R    | CO2e  |
|-----------------------|------|-------|-------|------|------|------|-------|
| Daily, Summer (Max)   | —    | —     | —     | —    | —    | —    | —     |
| Single Family Housing | —    | 4,507 | 4,507 | 0.20 | 0.20 | 9.21 | 4,580 |
| Total                 | —    | 4,507 | 4,507 | 0.20 | 0.20 | 9.21 | 4,580 |
| Daily, Winter (Max)   | —    | —     | —     | —    | —    | —    | —     |
| Single Family Housing | —    | 4,250 | 4,250 | 0.23 | 0.22 | 0.24 | 4,321 |
| Total                 | —    | 4,250 | 4,250 | 0.23 | 0.22 | 0.24 | 4,321 |
| Annual                | —    | —     | —     | —    | —    | —    | —     |
| Single Family Housing | —    | 691   | 691   | 0.04 | 0.03 | 0.64 | 703   |
| Total                 | —    | 691   | 691   | 0.04 | 0.03 | 0.64 | 703   |

## 4.2. Energy

#### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|-----------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Daily, Winter (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |

|                       |   |      |      |      |      |   |      |
|-----------------------|---|------|------|------|------|---|------|
| Annual                | — | —    | —    | —    | —    | — | —    |
| Single Family Housing | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

#### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|-----------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Daily, Winter (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Annual                | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total                 | —    | 0.00  | 0.00 | 0.00 | 0.00 | — | 0.00 |

#### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O     | R | CO2e |
|-----------------------|------|-------|------|------|---------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —       | — | —    |
| Single Family Housing | —    | 670   | 670  | 0.06 | < 0.005 | — | 671  |
| Total                 | —    | 670   | 670  | 0.06 | < 0.005 | — | 671  |
| Daily, Winter (Max)   | —    | —     | —    | —    | —       | — | —    |
| Single Family Housing | —    | 670   | 670  | 0.06 | < 0.005 | — | 671  |
| Total                 | —    | 670   | 670  | 0.06 | < 0.005 | — | 671  |
| Annual                | —    | —     | —    | —    | —       | — | —    |
| Single Family Housing | —    | 111   | 111  | 0.01 | < 0.005 | — | 111  |

|       |   |     |     |      |         |   |     |
|-------|---|-----|-----|------|---------|---|-----|
| Total | — | 111 | 111 | 0.01 | < 0.005 | — | 111 |
|-------|---|-----|-----|------|---------|---|-----|

#### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O     | R | CO2e |
|-----------------------|------|-------|------|------|---------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —       | — | —    |
| Single Family Housing | —    | 670   | 670  | 0.06 | < 0.005 | — | 671  |
| Total                 | —    | 670   | 670  | 0.06 | < 0.005 | — | 671  |
| Daily, Winter (Max)   | —    | —     | —    | —    | —       | — | —    |
| Single Family Housing | —    | 670   | 670  | 0.06 | < 0.005 | — | 671  |
| Total                 | —    | 670   | 670  | 0.06 | < 0.005 | — | 671  |
| Annual                | —    | —     | —    | —    | —       | — | —    |
| Single Family Housing | —    | 111   | 111  | 0.01 | < 0.005 | — | 111  |
| Total                 | —    | 111   | 111  | 0.01 | < 0.005 | — | 111  |

#### 4.3. Area Emissions by Source

##### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                 | BCO2 | NBCO2 | CO2T | CH4     | N2O     | R | CO2e |
|------------------------|------|-------|------|---------|---------|---|------|
| Daily, Summer (Max)    | —    | —     | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —       | —       | — | —    |
| Landscape Equipment    | —    | 17.1  | 17.1 | < 0.005 | < 0.005 | — | 17.2 |
| Total                  | 0.00 | 17.1  | 17.1 | < 0.005 | < 0.005 | — | 17.2 |
| Daily, Winter (Max)    | —    | —     | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |

|                        |      |      |      |         |         |   |      |
|------------------------|------|------|------|---------|---------|---|------|
| Consumer Products      | —    | —    | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —    | —    | —       | —       | — | —    |
| Total                  | 0.00 | 0.00 | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Annual                 | —    | —    | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00 | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —    | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —    | —    | —       | —       | — | —    |
| Landscape Equipment    | —    | 1.40 | 1.40 | < 0.005 | < 0.005 | — | 1.40 |
| Total                  | 0.00 | 1.40 | 1.40 | < 0.005 | < 0.005 | — | 1.40 |

#### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                 | BCO2 | NBCO2 | CO2T | CH4     | N2O     | R | CO2e |
|------------------------|------|-------|------|---------|---------|---|------|
| Daily, Summer (Max)    | —    | —     | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —       | —       | — | —    |
| Landscape Equipment    | —    | 17.1  | 17.1 | < 0.005 | < 0.005 | — | 17.2 |
| Total                  | 0.00 | 17.1  | 17.1 | < 0.005 | < 0.005 | — | 17.2 |
| Daily, Winter (Max)    | —    | —     | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —       | —       | — | —    |
| Total                  | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Annual                 | —    | —     | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —       | —       | — | —    |

|                     |      |      |      |         |         |   |      |
|---------------------|------|------|------|---------|---------|---|------|
| Landscape Equipment | —    | 1.40 | 1.40 | < 0.005 | < 0.005 | — | 1.40 |
| Total               | 0.00 | 1.40 | 1.40 | < 0.005 | < 0.005 | — | 1.40 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4     | N2O     | R | CO2e |
|-----------------------|------|-------|------|---------|---------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | 8.58 | 43.2  | 51.7 | 0.03    | 0.02    | — | 58.0 |
| Total                 | 8.58 | 43.2  | 51.7 | 0.03    | 0.02    | — | 58.0 |
| Daily, Winter (Max)   | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | 8.58 | 43.2  | 51.7 | 0.03    | 0.02    | — | 58.0 |
| Total                 | 8.58 | 43.2  | 51.7 | 0.03    | 0.02    | — | 58.0 |
| Annual                | —    | —     | —    | —       | —       | — | —    |
| Single Family Housing | 1.42 | 7.14  | 8.56 | < 0.005 | < 0.005 | — | 9.61 |
| Total                 | 1.42 | 7.14  | 8.56 | < 0.005 | < 0.005 | — | 9.61 |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|-----------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 6.86 | 41.2  | 48.1 | 0.02 | 0.01 | — | 53.1 |
| Total                 | 6.86 | 41.2  | 48.1 | 0.02 | 0.01 | — | 53.1 |
| Daily, Winter (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 6.86 | 41.2  | 48.1 | 0.02 | 0.01 | — | 53.1 |
| Total                 | 6.86 | 41.2  | 48.1 | 0.02 | 0.01 | — | 53.1 |
| Annual                | —    | —     | —    | —    | —    | — | —    |

|                       |      |      |      |         |         |   |      |
|-----------------------|------|------|------|---------|---------|---|------|
| Single Family Housing | 1.14 | 6.83 | 7.96 | < 0.005 | < 0.005 | — | 8.80 |
| Total                 | 1.14 | 6.83 | 7.96 | < 0.005 | < 0.005 | — | 8.80 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|-----------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Total                 | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Daily, Winter (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Total                 | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Annual                | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 6.74 | 0.00  | 6.74 | 0.67 | 0.00 | — | 23.6 |
| Total                 | 6.74 | 0.00  | 6.74 | 0.67 | 0.00 | — | 23.6 |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|-----------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Total                 | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Daily, Winter (Max)   | —    | —     | —    | —    | —    | — | —    |
| Single Family Housing | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Total                 | 40.7 | 0.00  | 40.7 | 4.07 | 0.00 | — | 142  |
| Annual                | —    | —     | —    | —    | —    | — | —    |



|                       |      |      |      |      |      |   |      |
|-----------------------|------|------|------|------|------|---|------|
| Single Family Housing | 6.74 | 0.00 | 6.74 | 0.67 | 0.00 | — | 23.6 |
| Total                 | 6.74 | 0.00 | 6.74 | 0.67 | 0.00 | — | 23.6 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4 | N2O | R    | CO2e |
|-----------------------|------|-------|------|-----|-----|------|------|
| Daily, Summer (Max)   | —    | —     | —    | —   | —   | —    | —    |
| Single Family Housing | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Total                 | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Daily, Winter (Max)   | —    | —     | —    | —   | —   | —    | —    |
| Single Family Housing | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Total                 | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Annual                | —    | —     | —    | —   | —   | —    | —    |
| Single Family Housing | —    | —     | —    | —   | —   | 0.26 | 0.26 |
| Total                 | —    | —     | —    | —   | —   | 0.26 | 0.26 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use              | BCO2 | NBCO2 | CO2T | CH4 | N2O | R    | CO2e |
|-----------------------|------|-------|------|-----|-----|------|------|
| Daily, Summer (Max)   | —    | —     | —    | —   | —   | —    | —    |
| Single Family Housing | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Total                 | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Daily, Winter (Max)   | —    | —     | —    | —   | —   | —    | —    |
| Single Family Housing | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Total                 | —    | —     | —    | —   | —   | 1.58 | 1.58 |
| Annual                | —    | —     | —    | —   | —   | —    | —    |

|                       |   |   |   |   |   |      |      |
|-----------------------|---|---|---|---|---|------|------|
| Single Family Housing | — | — | — | — | — | 0.26 | 0.26 |
| Total                 | — | — | — | — | — | 0.26 | 0.26 |

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

#### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.8.2. Mitigated

#### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.9. User Defined Emissions By Equipment Type

##### 4.9.1. Unmitigated

#### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

|        |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — |
| Total  | — | — | — | — | — | — | — |

#### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

##### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|----------|------|-------|------|-----|-----|---|------|
|----------|------|-------|------|-----|-----|---|------|

|                     |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |
| Annual              | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |

#### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |

|             |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|
| Subtotal    | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Removed     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| —           | — | — | — | — | — | — | — |

#### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |

## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

| Land Use Type         | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year  |
|-----------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|-----------|
| Single Family Housing | 1,067         | 1,078          | 966          | 384,698    | 6,240       | 6,306        | 5,652      | 2,250,495 |

#### 5.9.2. Mitigated

| Land Use Type         | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year  |
|-----------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|-----------|
| Single Family Housing | 1,067         | 1,078          | 966          | 384,698    | 6,240       | 6,306        | 5,652      | 2,250,495 |

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

| Hearth Type               | Unmitigated (number) |
|---------------------------|----------------------|
| Single Family Housing     | —                    |
| Wood Fireplaces           | 0                    |
| Gas Fireplaces            | 0                    |
| Propane Fireplaces        | 0                    |
| Electric Fireplaces       | 0                    |
| No Fireplaces             | 0                    |
| Conventional Wood Stoves  | 0                    |
| Catalytic Wood Stoves     | 0                    |
| Non-Catalytic Wood Stoves | 0                    |



|                    |   |
|--------------------|---|
| Pellet Wood Stoves | 0 |
|--------------------|---|

5.10.1.2. Mitigated

| Hearth Type               | Unmitigated (number) |
|---------------------------|----------------------|
| Single Family Housing     | —                    |
| Wood Fireplaces           | 0                    |
| Gas Fireplaces            | 0                    |
| Propane Fireplaces        | 0                    |
| Electric Fireplaces       | 0                    |
| No Fireplaces             | 0                    |
| Conventional Wood Stoves  | 0                    |
| Catalytic Wood Stoves     | 0                    |
| Non-Catalytic Wood Stoves | 0                    |
| Pellet Wood Stoves        | 0                    |

5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|------------------------------------------|------------------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------|
| 446208.75                                | 148,736                                  | 0.00                                         | 0.00                                         | —                           |

5.10.3. Landscape Equipment

| Season      | Unit   | Value |
|-------------|--------|-------|
| Snow Days   | day/yr | 0.00  |
| Summer Days | day/yr | 180   |

5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|--------|------|-------|
|--------|------|-------|

|             |        |      |
|-------------|--------|------|
| Snow Days   | day/yr | 0.00 |
| Summer Days | day/yr | 180  |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use              | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|-----------------------|----------------------|-----|--------|--------|-----------------------|
| Single Family Housing | 0.00                 | 135 | 0.0000 | 0.0000 | 2,089,231             |

### 5.11.2. Mitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use              | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|-----------------------|----------------------|-----|--------|--------|-----------------------|
| Single Family Housing | 0.00                 | 135 | 0.0000 | 0.0000 | 2,089,231             |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use              | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|-----------------------|-------------------------|--------------------------|
| Single Family Housing | 4,012,726               | 18,378,911               |

### 5.12.2. Mitigated

| Land Use              | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|-----------------------|-------------------------|--------------------------|
| Single Family Housing | 3,210,181               | 18,378,911               |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use              | Waste (ton/year) | Cogeneration (kWh/year) |
|-----------------------|------------------|-------------------------|
| Single Family Housing | 75.5             | —                       |

### 5.13.2. Mitigated

| Land Use              | Waste (ton/year) | Cogeneration (kWh/year) |
|-----------------------|------------------|-------------------------|
| Single Family Housing | 75.5             | —                       |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type         | Equipment Type                                          | Refrigerant | GWP   | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|-----------------------|---------------------------------------------------------|-------------|-------|---------------|----------------------|-------------------|----------------|
| Single Family Housing | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Single Family Housing | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |

### 5.14.2. Mitigated

| Land Use Type         | Equipment Type                                          | Refrigerant | GWP   | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|-----------------------|---------------------------------------------------------|-------------|-------|---------------|----------------------|-------------------|----------------|
| Single Family Housing | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Single Family Housing | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |

## 5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|----------------|-----------|-------------|----------------|---------------|------------|-------------|
|----------------|-----------|-------------|----------------|---------------|------------|-------------|

5.15.2. Mitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|----------------|-----------|-------------|----------------|---------------|------------|-------------|
|----------------|-----------|-------------|----------------|---------------|------------|-------------|

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|----------------|-----------|----------------|---------------|----------------|------------|-------------|
|----------------|-----------|----------------|---------------|----------------|------------|-------------|

5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|

5.17. User Defined

| Equipment Type | Fuel Type |
|----------------|-----------|
|----------------|-----------|

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.2. Sequestration

5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard               | Result for Project Location | Unit                                       |
|------------------------------|-----------------------------|--------------------------------------------|
| Temperature and Extreme Heat | 7.10                        | annual days of extreme heat                |
| Extreme Precipitation        | 7.50                        | annual days with precipitation above 20 mm |
| Sea Level Rise               | —                           | meters of inundation depth                 |
| Wildfire                     | 0.00                        | annual hectares burned                     |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard               | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|------------------------------|----------------|-------------------|-------------------------|---------------------|
| Temperature and Extreme Heat | N/A            | N/A               | N/A                     | N/A                 |
| Extreme Precipitation        | 2              | 0                 | 0                       | N/A                 |
| Sea Level Rise               | 1              | 0                 | 0                       | N/A                 |
| Wildfire                     | 1              | 0                 | 0                       | N/A                 |
| Flooding                     | N/A            | N/A               | N/A                     | N/A                 |
| Drought                      | N/A            | N/A               | N/A                     | N/A                 |
| Snowpack Reduction           | N/A            | N/A               | N/A                     | N/A                 |
| Air Quality Degradation      | 0              | 0                 | 0                       | N/A                 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard               | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|------------------------------|----------------|-------------------|-------------------------|---------------------|
| Temperature and Extreme Heat | N/A            | N/A               | N/A                     | N/A                 |
| Extreme Precipitation        | 2              | 1                 | 1                       | 3                   |
| Sea Level Rise               | 1              | 1                 | 1                       | 2                   |

|                         |     |     |     |     |
|-------------------------|-----|-----|-----|-----|
| Wildfire                | 1   | 1   | 1   | 2   |
| Flooding                | N/A | N/A | N/A | N/A |
| Drought                 | N/A | N/A | N/A | N/A |
| Snowpack Reduction      | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 1   | 1   | 1   | 2   |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator           | Result for Project Census Tract |
|---------------------|---------------------------------|
| Exposure Indicators | —                               |
| AQ-Ozone            | 3.12                            |
| AQ-PM               | 39.2                            |
| AQ-DPM              | 77.5                            |
| Drinking Water      | 4.21                            |
| Lead Risk Housing   | 61.6                            |
| Pesticides          | 0.00                            |
| Toxic Releases      | 61.3                            |
| Traffic             | 31.2                            |
| Effect Indicators   | —                               |
| CleanUp Sites       | 65.0                            |
| Groundwater         | 97.0                            |

|                                 |      |
|---------------------------------|------|
| Haz Waste Facilities/Generators | 93.0 |
| Impaired Water Bodies           | 90.1 |
| Solid Waste                     | 9.67 |
| Sensitive Population            | —    |
| Asthma                          | 81.1 |
| Cardio-vascular                 | 46.8 |
| Low Birth Weights               | 44.5 |
| Socioeconomic Factor Indicators | —    |
| Education                       | 26.4 |
| Housing                         | 55.1 |
| Linguistic                      | 6.27 |
| Poverty                         | 35.6 |
| Unemployment                    | 49.9 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator              | Result for Project Census Tract |
|------------------------|---------------------------------|
| Economic               | —                               |
| Above Poverty          | 59.38662903                     |
| Employed               | 93.82779417                     |
| Median HI              | 46.50327217                     |
| Education              | —                               |
| Bachelor's or higher   | 88.88746311                     |
| High school enrollment | 100                             |
| Preschool enrollment   | 74.06646991                     |
| Transportation         | —                               |
| Auto Access            | 13.06300526                     |
| Active commuting       | 96.25304761                     |



|                                              |             |
|----------------------------------------------|-------------|
| Social                                       | —           |
| 2-parent households                          | 16.38650071 |
| Voting                                       | 76.22225074 |
| Neighborhood                                 | —           |
| Alcohol availability                         | 4.516874118 |
| Park access                                  | 81.35506224 |
| Retail density                               | 82.84357757 |
| Supermarket access                           | 74.27178237 |
| Tree canopy                                  | 46.11831131 |
| Housing                                      | —           |
| Homeownership                                | 47.94045939 |
| Housing habitability                         | 50.7121776  |
| Low-inc homeowner severe housing cost burden | 19.67150006 |
| Low-inc renter severe housing cost burden    | 46.67008854 |
| Uncrowded housing                            | 60.05389452 |
| Health Outcomes                              | —           |
| Insured adults                               | 80.68779674 |
| Arthritis                                    | 60.6        |
| Asthma ER Admissions                         | 13.2        |
| High Blood Pressure                          | 62.1        |
| Cancer (excluding skin)                      | 38.7        |
| Asthma                                       | 61.7        |
| Coronary Heart Disease                       | 79.3        |
| Chronic Obstructive Pulmonary Disease        | 88.0        |
| Diagnosed Diabetes                           | 75.2        |
| Life Expectancy at Birth                     | 71.4        |
| Cognitively Disabled                         | 85.7        |
| Physically Disabled                          | 84.3        |

|                                       |      |
|---------------------------------------|------|
| Heart Attack ER Admissions            | 59.6 |
| Mental Health Not Good                | 82.3 |
| Chronic Kidney Disease                | 64.9 |
| Obesity                               | 68.7 |
| Pedestrian Injuries                   | 19.6 |
| Physical Health Not Good              | 84.3 |
| Stroke                                | 70.4 |
| Health Risk Behaviors                 | —    |
| Binge Drinking                        | 38.6 |
| Current Smoker                        | 87.1 |
| No Leisure Time for Physical Activity | 83.8 |
| Climate Change Exposures              | —    |
| Wildfire Risk                         | 0.0  |
| SLR Inundation Area                   | 0.0  |
| Children                              | 92.8 |
| Elderly                               | 43.9 |
| English Speaking                      | 71.2 |
| Foreign-born                          | 47.0 |
| Outdoor Workers                       | 90.9 |
| Climate Change Adaptive Capacity      | —    |
| Impervious Surface Cover              | 28.0 |
| Traffic Density                       | 29.2 |
| Traffic Access                        | 87.4 |
| Other Indices                         | —    |
| Hardship                              | 21.5 |
| Other Decision Support                | —    |
| 2016 Voting                           | 71.1 |

### 7.3. Overall Health & Equity Scores

| Metric                                                                              | Result for Project Census Tract |
|-------------------------------------------------------------------------------------|---------------------------------|
| CalEnviroScreen 4.0 Score for Project Location (a)                                  | 54.0                            |
| Healthy Places Index Score for Project Location (b)                                 | 82.0                            |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535)           | No                              |
| Project Located in a Low-Income Community (Assembly Bill 1550)                      | Yes                             |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No                              |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.  
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

| Screen                               | Justification                                                                                                                                                              |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Characteristics: Utility Information | East Bay Community Energy is the primary electricity provider. Intensity factors adjusted for consistency with Berkeley Housing Element methodology.                       |
| Land Use                             | Based on EIR growth assumption of 113 single-family units and 323 new residents. Default acreage, building square footage, and landscape area.                             |
| Operations: Hearths                  | No woodstoves or fireplaces                                                                                                                                                |
| Operations: Energy Use               | Assume 60% of development will not include natural gas pursuant to BMC Section 12.80 (Natural gas ban). Assumes 100% offset of electricity consumption by onsite PV solar. |
| Operations: Water and Waste Water    | EBMUD Wastewater treatment plant 100 percent aerobic                                                                                                                       |

# Berkeley HE Multi Fam 60% Electrified Detailed Report

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8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field                  | Value                                  |
|-----------------------------|----------------------------------------|
| Project Name                | Berkeley HE Multi Fam 60% Electrified  |
| Operational Year            | 2031                                   |
| Lead Agency                 | —                                      |
| Land Use Scale              | Plan/community                         |
| Analysis Level for Defaults | County                                 |
| Windspeed (m/s)             | 3.90                                   |
| Precipitation (days)        | 3.40                                   |
| Location                    | 37.87310585963721, -122.29377329662165 |
| County                      | Alameda                                |
| City                        | Berkeley                               |
| Air District                | Bay Area AQMD                          |
| Air Basin                   | San Francisco Bay Area                 |
| TAZ                         | 1533                                   |
| EDFZ                        | 1                                      |
| Electric Utility            | User Defined                           |
| Gas Utility                 | User Defined                           |
| App Version                 | 2022.1.1.29                            |

## 1.2. Land Use Types

| Land Use Subtype    | Size   | Unit          | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---------------------|--------|---------------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|
| Apartments Mid Rise | 17,427 | Dwelling Unit | 459         | 16,729,920            | 0.00                   | —                              | 42,630     | —           |
| Condo/Townhouse     | 1,570  | Dwelling Unit | 98.1        | 1,664,200             | 0.00                   | —                              | 4,490      | —           |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | #   | Measure Title                       |
|--------|-----|-------------------------------------|
| Water  | W-7 | Adopt a Water Conservation Strategy |

## 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit.             | BCO2   | NBCO2   | CO2T    | CH4    | N2O    | R     | CO2e    |
|---------------------|--------|---------|---------|--------|--------|-------|---------|
| Daily, Summer (Max) | —      | —       | —       | —      | —      | —     | —       |
| Unmit.              | 6,787  | 531,593 | 538,380 | 689    | 21.5   | 1,064 | 563,072 |
| Mit.                | 6,761  | 531,564 | 538,326 | 688    | 21.5   | 1,064 | 562,999 |
| % Reduced           | < 0.5% | < 0.5%  | < 0.5%  | < 0.5% | < 0.5% | —     | < 0.5%  |
| Daily, Winter (Max) | —      | —       | —       | —      | —      | —     | —       |
| Unmit.              | 6,787  | 503,110 | 509,897 | 692    | 23.5   | 156   | 534,338 |
| Mit.                | 6,761  | 503,082 | 509,843 | 692    | 23.4   | 156   | 534,265 |
| % Reduced           | < 0.5% | < 0.5%  | < 0.5%  | < 0.5% | < 0.5% | —     | < 0.5%  |
| Average Daily (Max) | —      | —       | —       | —      | —      | —     | —       |
| Unmit.              | 6,787  | 482,020 | 488,807 | 689    | 21.5   | 512   | 512,941 |
| Mit.                | 6,761  | 481,992 | 488,753 | 689    | 21.4   | 512   | 512,868 |
| % Reduced           | < 0.5% | < 0.5%  | < 0.5%  | < 0.5% | < 0.5% | —     | < 0.5%  |
| Annual (Max)        | —      | —       | —       | —      | —      | —     | —       |
| Unmit.              | 1,124  | 79,804  | 80,928  | 114    | 3.55   | 84.7  | 84,923  |
| Mit.                | 1,119  | 79,799  | 80,919  | 114    | 3.54   | 84.7  | 84,911  |
| % Reduced           | < 0.5% | < 0.5%  | < 0.5%  | < 0.5% | < 0.5% | —     | < 0.5%  |

### 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | BCO2  | NBCO2   | CO2T    | CH4  | N2O  | R     | CO2e    |
|---------------------|-------|---------|---------|------|------|-------|---------|
| Daily, Summer (Max) | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 464,159 | 464,159 | 20.2 | 21.2 | 932   | 471,906 |
| Area                | 0.00  | 2,882   | 2,882   | 0.12 | 0.02 | —     | 2,892   |
| Energy              | —     | 62,985  | 62,985  | 2.26 | 0.05 | —     | 63,056  |
| Water               | 128   | 1,567   | 1,695   | 0.44 | 0.28 | —     | 1,789   |
| Waste               | 6,659 | 0.00    | 6,659   | 666  | 0.00 | —     | 23,298  |
| Refrig.             | —     | —       | —       | —    | —    | 132   | 132     |
| Total               | 6,787 | 531,593 | 538,380 | 689  | 21.5 | 1,064 | 563,072 |
| Daily, Winter (Max) | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 438,559 | 438,559 | 23.4 | 23.1 | 24.2  | 446,064 |
| Area                | 0.00  | 0.00    | 0.00    | 0.00 | 0.00 | —     | 0.00    |
| Energy              | —     | 62,985  | 62,985  | 2.26 | 0.05 | —     | 63,056  |
| Water               | 128   | 1,567   | 1,695   | 0.44 | 0.28 | —     | 1,789   |
| Waste               | 6,659 | 0.00    | 6,659   | 666  | 0.00 | —     | 23,298  |
| Refrig.             | —     | —       | —       | —    | —    | 132   | 132     |
| Total               | 6,787 | 503,110 | 509,897 | 692  | 23.5 | 156   | 534,338 |
| Average Daily       | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 416,047 | 416,047 | 20.8 | 21.1 | 380   | 423,241 |
| Area                | 0.00  | 1,421   | 1,421   | 0.06 | 0.01 | —     | 1,426   |
| Energy              | —     | 62,985  | 62,985  | 2.26 | 0.05 | —     | 63,056  |
| Water               | 128   | 1,567   | 1,695   | 0.44 | 0.28 | —     | 1,789   |
| Waste               | 6,659 | 0.00    | 6,659   | 666  | 0.00 | —     | 23,298  |
| Refrig.             | —     | —       | —       | —    | —    | 132   | 132     |
| Total               | 6,787 | 482,020 | 488,807 | 689  | 21.5 | 512   | 512,941 |
| Annual              | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 68,881  | 68,881  | 3.45 | 3.50 | 62.9  | 70,072  |

|         |       |        |        |      |         |      |        |
|---------|-------|--------|--------|------|---------|------|--------|
| Area    | 0.00  | 235    | 235    | 0.01 | < 0.005 | —    | 236    |
| Energy  | —     | 10,428 | 10,428 | 0.37 | 0.01    | —    | 10,440 |
| Water   | 21.1  | 259    | 281    | 0.07 | 0.05    | —    | 296    |
| Waste   | 1,102 | 0.00   | 1,102  | 110  | 0.00    | —    | 3,857  |
| Refrig. | —     | —      | —      | —    | —       | 21.8 | 21.8   |
| Total   | 1,124 | 79,804 | 80,928 | 114  | 3.55    | 84.7 | 84,923 |

## 2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | BCO2  | NBCO2   | CO2T    | CH4  | N2O  | R     | CO2e    |
|---------------------|-------|---------|---------|------|------|-------|---------|
| Daily, Summer (Max) | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 464,159 | 464,159 | 20.2 | 21.2 | 932   | 471,906 |
| Area                | 0.00  | 2,882   | 2,882   | 0.12 | 0.02 | —     | 2,892   |
| Energy              | —     | 62,985  | 62,985  | 2.26 | 0.05 | —     | 63,056  |
| Water               | 102   | 1,538   | 1,641   | 0.35 | 0.22 | —     | 1,716   |
| Waste               | 6,659 | 0.00    | 6,659   | 666  | 0.00 | —     | 23,298  |
| Refrig.             | —     | —       | —       | —    | —    | 132   | 132     |
| Total               | 6,761 | 531,564 | 538,326 | 688  | 21.5 | 1,064 | 562,999 |
| Daily, Winter (Max) | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 438,559 | 438,559 | 23.4 | 23.1 | 24.2  | 446,064 |
| Area                | 0.00  | 0.00    | 0.00    | 0.00 | 0.00 | —     | 0.00    |
| Energy              | —     | 62,985  | 62,985  | 2.26 | 0.05 | —     | 63,056  |
| Water               | 102   | 1,538   | 1,641   | 0.35 | 0.22 | —     | 1,716   |
| Waste               | 6,659 | 0.00    | 6,659   | 666  | 0.00 | —     | 23,298  |
| Refrig.             | —     | —       | —       | —    | —    | 132   | 132     |
| Total               | 6,761 | 503,082 | 509,843 | 692  | 23.4 | 156   | 534,265 |
| Average Daily       | —     | —       | —       | —    | —    | —     | —       |
| Mobile              | —     | 416,047 | 416,047 | 20.8 | 21.1 | 380   | 423,241 |

|         |       |         |         |      |         |      |         |
|---------|-------|---------|---------|------|---------|------|---------|
| Area    | 0.00  | 1,421   | 1,421   | 0.06 | 0.01    | —    | 1,426   |
| Energy  | —     | 62,985  | 62,985  | 2.26 | 0.05    | —    | 63,056  |
| Water   | 102   | 1,538   | 1,641   | 0.35 | 0.22    | —    | 1,716   |
| Waste   | 6,659 | 0.00    | 6,659   | 666  | 0.00    | —    | 23,298  |
| Refrig. | —     | —       | —       | —    | —       | 132  | 132     |
| Total   | 6,761 | 481,992 | 488,753 | 689  | 21.4    | 512  | 512,868 |
| Annual  | —     | —       | —       | —    | —       | —    | —       |
| Mobile  | —     | 68,881  | 68,881  | 3.45 | 3.50    | 62.9 | 70,072  |
| Area    | 0.00  | 235     | 235     | 0.01 | < 0.005 | —    | 236     |
| Energy  | —     | 10,428  | 10,428  | 0.37 | 0.01    | —    | 10,440  |
| Water   | 16.9  | 255     | 272     | 0.06 | 0.04    | —    | 284     |
| Waste   | 1,102 | 0.00    | 1,102   | 110  | 0.00    | —    | 3,857   |
| Refrig. | —     | —       | —       | —    | —       | 21.8 | 21.8    |
| Total   | 1,119 | 79,799  | 80,919  | 114  | 3.54    | 84.7 | 84,911  |

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2   | CO2T    | CH4  | N2O  | R    | CO2e    |
|---------------------|------|---------|---------|------|------|------|---------|
| Daily, Summer (Max) | —    | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | —    | 409,022 | 409,022 | 17.8 | 18.7 | 821  | 415,848 |
| Condo/Townhouse     | —    | 55,138  | 55,138  | 2.40 | 2.52 | 111  | 56,058  |
| Total               | —    | 464,159 | 464,159 | 20.2 | 21.2 | 932  | 471,906 |
| Daily, Winter (Max) | —    | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | —    | 386,462 | 386,462 | 20.6 | 20.4 | 21.3 | 393,076 |

|                     |   |         |         |      |      |      |         |
|---------------------|---|---------|---------|------|------|------|---------|
| Condo/Townhouse     | — | 52,097  | 52,097  | 2.78 | 2.75 | 2.87 | 52,988  |
| Total               | — | 438,559 | 438,559 | 23.4 | 23.1 | 24.2 | 446,064 |
| Annual              | — | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | — | 61,121  | 61,121  | 3.06 | 3.10 | 55.8 | 62,177  |
| Condo/Townhouse     | — | 7,761   | 7,761   | 0.39 | 0.39 | 7.09 | 7,895   |
| Total               | — | 68,881  | 68,881  | 3.45 | 3.50 | 62.9 | 70,072  |

#### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2   | CO2T    | CH4  | N2O  | R    | CO2e    |
|---------------------|------|---------|---------|------|------|------|---------|
| Daily, Summer (Max) | —    | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | —    | 409,022 | 409,022 | 17.8 | 18.7 | 821  | 415,848 |
| Condo/Townhouse     | —    | 55,138  | 55,138  | 2.40 | 2.52 | 111  | 56,058  |
| Total               | —    | 464,159 | 464,159 | 20.2 | 21.2 | 932  | 471,906 |
| Daily, Winter (Max) | —    | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | —    | 386,462 | 386,462 | 20.6 | 20.4 | 21.3 | 393,076 |
| Condo/Townhouse     | —    | 52,097  | 52,097  | 2.78 | 2.75 | 2.87 | 52,988  |
| Total               | —    | 438,559 | 438,559 | 23.4 | 23.1 | 24.2 | 446,064 |
| Annual              | —    | —       | —       | —    | —    | —    | —       |
| Apartments Mid Rise | —    | 61,121  | 61,121  | 3.06 | 3.10 | 55.8 | 62,177  |
| Condo/Townhouse     | —    | 7,761   | 7,761   | 0.39 | 0.39 | 7.09 | 7,895   |
| Total               | —    | 68,881  | 68,881  | 3.45 | 3.50 | 62.9 | 70,072  |

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|----------|------|-------|------|-----|-----|---|------|
|----------|------|-------|------|-----|-----|---|------|

|                     |   |        |        |      |      |   |        |
|---------------------|---|--------|--------|------|------|---|--------|
| Daily, Summer (Max) | — | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | — | 37,434 | 37,434 | 0.00 | 0.00 | — | 37,434 |
| Condo/Townhouse     | — | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | — | 37,434 | 37,434 | 0.00 | 0.00 | — | 37,434 |
| Daily, Winter (Max) | — | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | — | 37,434 | 37,434 | 0.00 | 0.00 | — | 37,434 |
| Condo/Townhouse     | — | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | — | 37,434 | 37,434 | 0.00 | 0.00 | — | 37,434 |
| Annual              | — | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | — | 6,198  | 6,198  | 0.00 | 0.00 | — | 6,198  |
| Condo/Townhouse     | — | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | — | 6,198  | 6,198  | 0.00 | 0.00 | — | 6,198  |

#### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2  | CO2T   | CH4  | N2O  | R | CO2e   |
|---------------------|------|--------|--------|------|------|---|--------|
| Daily, Summer (Max) | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 37,434 | 37,434 | 0.00 | 0.00 | — | 37,434 |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 37,434 | 37,434 | 0.00 | 0.00 | — | 37,434 |
| Daily, Winter (Max) | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 37,434 | 37,434 | 0.00 | 0.00 | — | 37,434 |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 37,434 | 37,434 | 0.00 | 0.00 | — | 37,434 |
| Annual              | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 6,198  | 6,198  | 0.00 | 0.00 | — | 6,198  |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 6,198  | 6,198  | 0.00 | 0.00 | — | 6,198  |



#### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2  | CO2T   | CH4  | N2O  | R | CO2e   |
|---------------------|------|--------|--------|------|------|---|--------|
| Daily, Summer (Max) | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 25,551 | 25,551 | 2.26 | 0.05 | — | 25,621 |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 25,551 | 25,551 | 2.26 | 0.05 | — | 25,621 |
| Daily, Winter (Max) | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 25,551 | 25,551 | 2.26 | 0.05 | — | 25,621 |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 25,551 | 25,551 | 2.26 | 0.05 | — | 25,621 |
| Annual              | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 4,230  | 4,230  | 0.37 | 0.01 | — | 4,242  |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 4,230  | 4,230  | 0.37 | 0.01 | — | 4,242  |

#### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2  | CO2T   | CH4  | N2O  | R | CO2e   |
|---------------------|------|--------|--------|------|------|---|--------|
| Daily, Summer (Max) | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 25,551 | 25,551 | 2.26 | 0.05 | — | 25,621 |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 25,551 | 25,551 | 2.26 | 0.05 | — | 25,621 |
| Daily, Winter (Max) | —    | —      | —      | —    | —    | — | —      |
| Apartments Mid Rise | —    | 25,551 | 25,551 | 2.26 | 0.05 | — | 25,621 |
| Condo/Townhouse     | —    | 0.00   | 0.00   | 0.00 | 0.00 | — | 0.00   |
| Total               | —    | 25,551 | 25,551 | 2.26 | 0.05 | — | 25,621 |
| Annual              | —    | —      | —      | —    | —    | — | —      |

|                     |   |       |       |      |      |   |       |
|---------------------|---|-------|-------|------|------|---|-------|
| Apartments Mid Rise | — | 4,230 | 4,230 | 0.37 | 0.01 | — | 4,242 |
| Condo/Townhouse     | — | 0.00  | 0.00  | 0.00 | 0.00 | — | 0.00  |
| Total               | — | 4,230 | 4,230 | 0.37 | 0.01 | — | 4,242 |

### 4.3. Area Emissions by Source

#### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                 | BCO2 | NBCO2 | CO2T  | CH4  | N2O     | R | CO2e  |
|------------------------|------|-------|-------|------|---------|---|-------|
| Daily, Summer (Max)    | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Landscape Equipment    | —    | 2,882 | 2,882 | 0.12 | 0.02    | — | 2,892 |
| Total                  | 0.00 | 2,882 | 2,882 | 0.12 | 0.02    | — | 2,892 |
| Daily, Winter (Max)    | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Total                  | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Annual                 | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Landscape Equipment    | —    | 235   | 235   | 0.01 | < 0.005 | — | 236   |
| Total                  | 0.00 | 235   | 235   | 0.01 | < 0.005 | — | 236   |

#### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                 | BCO2 | NBCO2 | CO2T  | CH4  | N2O     | R | CO2e  |
|------------------------|------|-------|-------|------|---------|---|-------|
| Daily, Summer (Max)    | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Landscape Equipment    | —    | 2,882 | 2,882 | 0.12 | 0.02    | — | 2,892 |
| Total                  | 0.00 | 2,882 | 2,882 | 0.12 | 0.02    | — | 2,892 |
| Daily, Winter (Max)    | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Total                  | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Annual                 | —    | —     | —     | —    | —       | — | —     |
| Hearths                | 0.00 | 0.00  | 0.00  | 0.00 | 0.00    | — | 0.00  |
| Consumer Products      | —    | —     | —     | —    | —       | — | —     |
| Architectural Coatings | —    | —     | —     | —    | —       | — | —     |
| Landscape Equipment    | —    | 235   | 235   | 0.01 | < 0.005 | — | 236   |
| Total                  | 0.00 | 235   | 235   | 0.01 | < 0.005 | — | 236   |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T  | CH4  | N2O  | R | CO2e  |
|---------------------|------|-------|-------|------|------|---|-------|
| Daily, Summer (Max) | —    | —     | —     | —    | —    | — | —     |
| Apartments Mid Rise | 8.58 | 1,434 | 1,442 | 0.03 | 0.02 | — | 1,448 |
| Condo/Townhouse     | 119  | 134   | 253   | 0.41 | 0.26 | — | 340   |

|                     |      |       |       |         |         |   |       |
|---------------------|------|-------|-------|---------|---------|---|-------|
| Total               | 128  | 1,567 | 1,695 | 0.44    | 0.28    | — | 1,789 |
| Daily, Winter (Max) | —    | —     | —     | —       | —       | — | —     |
| Apartments Mid Rise | 8.58 | 1,434 | 1,442 | 0.03    | 0.02    | — | 1,448 |
| Condo/Townhouse     | 119  | 134   | 253   | 0.41    | 0.26    | — | 340   |
| Total               | 128  | 1,567 | 1,695 | 0.44    | 0.28    | — | 1,789 |
| Annual              | —    | —     | —     | —       | —       | — | —     |
| Apartments Mid Rise | 1.42 | 237   | 239   | < 0.005 | < 0.005 | — | 240   |
| Condo/Townhouse     | 19.7 | 22.1  | 41.8  | 0.07    | 0.04    | — | 56.4  |
| Total               | 21.1 | 259   | 281   | 0.07    | 0.05    | — | 296   |

#### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T  | CH4     | N2O     | R | CO2e  |
|---------------------|------|-------|-------|---------|---------|---|-------|
| Daily, Summer (Max) | —    | —     | —     | —       | —       | — | —     |
| Apartments Mid Rise | 6.86 | 1,432 | 1,439 | 0.02    | 0.01    | — | 1,444 |
| Condo/Townhouse     | 95.3 | 107   | 202   | 0.33    | 0.21    | — | 272   |
| Total               | 102  | 1,538 | 1,641 | 0.35    | 0.22    | — | 1,716 |
| Daily, Winter (Max) | —    | —     | —     | —       | —       | — | —     |
| Apartments Mid Rise | 6.86 | 1,432 | 1,439 | 0.02    | 0.01    | — | 1,444 |
| Condo/Townhouse     | 95.3 | 107   | 202   | 0.33    | 0.21    | — | 272   |
| Total               | 102  | 1,538 | 1,641 | 0.35    | 0.22    | — | 1,716 |
| Annual              | —    | —     | —     | —       | —       | — | —     |
| Apartments Mid Rise | 1.14 | 237   | 238   | < 0.005 | < 0.005 | — | 239   |
| Condo/Townhouse     | 15.8 | 17.7  | 33.5  | 0.05    | 0.03    | — | 45.1  |
| Total               | 16.9 | 255   | 272   | 0.06    | 0.04    | — | 284   |

#### 4.5. Waste Emissions by Land Use

#### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2  | NBCO2 | CO2T  | CH4  | N2O  | R | CO2e   |
|---------------------|-------|-------|-------|------|------|---|--------|
| Daily, Summer (Max) | —     | —     | —     | —    | —    | — | —      |
| Apartments Mid Rise | 6,025 | 0.00  | 6,025 | 602  | 0.00 | — | 21,078 |
| Condo/Townhouse     | 635   | 0.00  | 635   | 63.4 | 0.00 | — | 2,220  |
| Total               | 6,659 | 0.00  | 6,659 | 666  | 0.00 | — | 23,298 |
| Daily, Winter (Max) | —     | —     | —     | —    | —    | — | —      |
| Apartments Mid Rise | 6,025 | 0.00  | 6,025 | 602  | 0.00 | — | 21,078 |
| Condo/Townhouse     | 635   | 0.00  | 635   | 63.4 | 0.00 | — | 2,220  |
| Total               | 6,659 | 0.00  | 6,659 | 666  | 0.00 | — | 23,298 |
| Annual              | —     | —     | —     | —    | —    | — | —      |
| Apartments Mid Rise | 997   | 0.00  | 997   | 99.7 | 0.00 | — | 3,490  |
| Condo/Townhouse     | 105   | 0.00  | 105   | 10.5 | 0.00 | — | 368    |
| Total               | 1,102 | 0.00  | 1,102 | 110  | 0.00 | — | 3,857  |

#### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2  | NBCO2 | CO2T  | CH4  | N2O  | R | CO2e   |
|---------------------|-------|-------|-------|------|------|---|--------|
| Daily, Summer (Max) | —     | —     | —     | —    | —    | — | —      |
| Apartments Mid Rise | 6,025 | 0.00  | 6,025 | 602  | 0.00 | — | 21,078 |
| Condo/Townhouse     | 635   | 0.00  | 635   | 63.4 | 0.00 | — | 2,220  |
| Total               | 6,659 | 0.00  | 6,659 | 666  | 0.00 | — | 23,298 |
| Daily, Winter (Max) | —     | —     | —     | —    | —    | — | —      |
| Apartments Mid Rise | 6,025 | 0.00  | 6,025 | 602  | 0.00 | — | 21,078 |
| Condo/Townhouse     | 635   | 0.00  | 635   | 63.4 | 0.00 | — | 2,220  |
| Total               | 6,659 | 0.00  | 6,659 | 666  | 0.00 | — | 23,298 |
| Annual              | —     | —     | —     | —    | —    | — | —      |

|                     |       |      |       |      |      |   |       |
|---------------------|-------|------|-------|------|------|---|-------|
| Apartments Mid Rise | 997   | 0.00 | 997   | 99.7 | 0.00 | — | 3,490 |
| Condo/Townhouse     | 105   | 0.00 | 105   | 10.5 | 0.00 | — | 368   |
| Total               | 1,102 | 0.00 | 1,102 | 110  | 0.00 | — | 3,857 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R    | CO2e |
|---------------------|------|-------|------|-----|-----|------|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 120  | 120  |
| Condo/Townhouse     | —    | —     | —    | —   | —   | 11.9 | 11.9 |
| Total               | —    | —     | —    | —   | —   | 132  | 132  |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 120  | 120  |
| Condo/Townhouse     | —    | —     | —    | —   | —   | 11.9 | 11.9 |
| Total               | —    | —     | —    | —   | —   | 132  | 132  |
| Annual              | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 19.8 | 19.8 |
| Condo/Townhouse     | —    | —     | —    | —   | —   | 1.97 | 1.97 |
| Total               | —    | —     | —    | —   | —   | 21.8 | 21.8 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R    | CO2e |
|---------------------|------|-------|------|-----|-----|------|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 120  | 120  |
| Condo/Townhouse     | —    | —     | —    | —   | —   | 11.9 | 11.9 |

|                     |   |   |   |   |   |      |      |
|---------------------|---|---|---|---|---|------|------|
| Total               | — | — | — | — | — | 132  | 132  |
| Daily, Winter (Max) | — | — | — | — | — | —    | —    |
| Apartments Mid Rise | — | — | — | — | — | 120  | 120  |
| Condo/Townhouse     | — | — | — | — | — | 11.9 | 11.9 |
| Total               | — | — | — | — | — | 132  | 132  |
| Annual              | — | — | — | — | — | —    | —    |
| Apartments Mid Rise | — | — | — | — | — | 19.8 | 19.8 |
| Condo/Townhouse     | — | — | — | — | — | 1.97 | 1.97 |
| Total               | — | — | — | — | — | 21.8 | 21.8 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |

|        |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|
| Total  | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — |
| Total  | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

### 4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

## 4.9. User Defined Emissions By Equipment Type



#### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

### 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |

|        |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|
| Total  | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — |
| Total  | — | — | — | — | — | — | — |

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |

|             |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|
| Sequestered | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Removed     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| —           | — | — | — | — | — | — | — |
| Annual      | — | — | — | — | — | — | — |
| Avoided     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Removed     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| —           | — | — | — | — | — | — | — |

#### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |

|                     |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|
| Total               | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |
| Annual              | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |

#### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |

|             |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|
| Sequestered | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Removed     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| —           | — | — | — | — | — | — | — |

## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

| Land Use Type       | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year    |
|---------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|-------------|
| Apartments Mid Rise | 94,803        | 85,567         | 71,276       | 32,894,708 | 554,600     | 500,567      | 416,969    | 192,435,070 |
| Condo/Townhouse     | 11,492        | 12,780         | 9,860        | 4,176,716  | 67,231      | 74,762       | 57,679     | 24,433,919  |

#### 5.9.2. Mitigated

| Land Use Type       | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year    |
|---------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|-------------|
| Apartments Mid Rise | 94,803        | 85,567         | 71,276       | 32,894,708 | 554,600     | 500,567      | 416,969    | 192,435,070 |
| Condo/Townhouse     | 11,492        | 12,780         | 9,860        | 4,176,716  | 67,231      | 74,762       | 57,679     | 24,433,919  |

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

| Hearth Type         | Unmitigated (number) |
|---------------------|----------------------|
| Apartments Mid Rise | —                    |

|                           |   |
|---------------------------|---|
| Wood Fireplaces           | 0 |
| Gas Fireplaces            | 0 |
| Propane Fireplaces        | 0 |
| Electric Fireplaces       | 0 |
| No Fireplaces             | 0 |
| Conventional Wood Stoves  | 0 |
| Catalytic Wood Stoves     | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves        | 0 |
| Condo/Townhouse           | — |
| Wood Fireplaces           | 0 |
| Gas Fireplaces            | 0 |
| Propane Fireplaces        | 0 |
| Electric Fireplaces       | 0 |
| No Fireplaces             | 0 |
| Conventional Wood Stoves  | 0 |
| Catalytic Wood Stoves     | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves        | 0 |

5.10.1.2. Mitigated

| Hearth Type         | Unmitigated (number) |
|---------------------|----------------------|
| Apartments Mid Rise | —                    |
| Wood Fireplaces     | 0                    |
| Gas Fireplaces      | 0                    |
| Propane Fireplaces  | 0                    |
| Electric Fireplaces | 0                    |
| No Fireplaces       | 0                    |

|                           |   |
|---------------------------|---|
| Conventional Wood Stoves  | 0 |
| Catalytic Wood Stoves     | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves        | 0 |
| Condo/Townhouse           | — |
| Wood Fireplaces           | 0 |
| Gas Fireplaces            | 0 |
| Propane Fireplaces        | 0 |
| Electric Fireplaces       | 0 |
| No Fireplaces             | 0 |
| Conventional Wood Stoves  | 0 |
| Catalytic Wood Stoves     | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves        | 0 |

5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|------------------------------------------|------------------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------|
| 37248093                                 | 12,416,031                               | 0.00                                         | 0.00                                         | —                           |

5.10.3. Landscape Equipment

| Season      | Unit   | Value |
|-------------|--------|-------|
| Snow Days   | day/yr | 0.00  |
| Summer Days | day/yr | 180   |

5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|--------|------|-------|
|--------|------|-------|

|             |        |      |
|-------------|--------|------|
| Snow Days   | day/yr | 0.00 |
| Summer Days | day/yr | 180  |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use            | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|---------------------|----------------------|-----|--------|--------|-----------------------|
| Apartments Mid Rise | 101,211,157          | 135 | 0.0000 | 0.0000 | 79,724,461            |
| Condo/Townhouse     | 0.00                 | 135 | 0.0000 | 0.0000 | 0.00                  |

### 5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use            | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|---------------------|----------------------|-----|--------|--------|-----------------------|
| Apartments Mid Rise | 101,211,157          | 135 | 0.0000 | 0.0000 | 79,724,461            |
| Condo/Townhouse     | 0.00                 | 135 | 0.0000 | 0.0000 | 0.00                  |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use            | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---------------------|-------------------------|--------------------------|
| Apartments Mid Rise | 4,012,726               | 780,308,430              |
| Condo/Townhouse     | 55,752,035              | 0.00                     |

### 5.12.2. Mitigated

| Land Use            | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---------------------|-------------------------|--------------------------|
| Apartments Mid Rise | 3,210,181               | 780,308,430              |
| Condo/Townhouse     | 44,601,628              | 0.00                     |



## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use            | Waste (ton/year) | Cogeneration (kWh/year) |
|---------------------|------------------|-------------------------|
| Apartments Mid Rise | 11,178           | —                       |
| Condo/Townhouse     | 1,177            | —                       |

### 5.13.2. Mitigated

| Land Use            | Waste (ton/year) | Cogeneration (kWh/year) |
|---------------------|------------------|-------------------------|
| Apartments Mid Rise | 11,178           | —                       |
| Condo/Townhouse     | 1,177            | —                       |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type       | Equipment Type                                          | Refrigerant | GWP   | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---------------------|---------------------------------------------------------|-------------|-------|---------------|----------------------|-------------------|----------------|
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Apartments Mid Rise | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |
| Condo/Townhouse     | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Condo/Townhouse     | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |

### 5.14.2. Mitigated

| Land Use Type       | Equipment Type                                          | Refrigerant | GWP   | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---------------------|---------------------------------------------------------|-------------|-------|---------------|----------------------|-------------------|----------------|
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Apartments Mid Rise | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |
| Condo/Townhouse     | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Condo/Townhouse     | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|----------------|-----------|-------------|----------------|---------------|------------|-------------|
|----------------|-----------|-------------|----------------|---------------|------------|-------------|

### 5.15.2. Mitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|----------------|-----------|-------------|----------------|---------------|------------|-------------|
|----------------|-----------|-------------|----------------|---------------|------------|-------------|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|----------------|-----------|----------------|---------------|----------------|------------|-------------|
|----------------|-----------|----------------|---------------|----------------|------------|-------------|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|

5.17. User Defined

| Equipment Type | Fuel Type |
|----------------|-----------|
|----------------|-----------|

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.2. Sequestration

5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard               | Result for Project Location | Unit                                       |
|------------------------------|-----------------------------|--------------------------------------------|
| Temperature and Extreme Heat | 7.10                        | annual days of extreme heat                |
| Extreme Precipitation        | 7.50                        | annual days with precipitation above 20 mm |
| Sea Level Rise               | —                           | meters of inundation depth                 |
| Wildfire                     | 0.00                        | annual hectares burned                     |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about  $\frac{3}{4}$  an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

### 6.2. Initial Climate Risk Scores

| Climate Hazard               | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|------------------------------|----------------|-------------------|-------------------------|---------------------|
| Temperature and Extreme Heat | N/A            | N/A               | N/A                     | N/A                 |
| Extreme Precipitation        | 2              | 0                 | 0                       | N/A                 |
| Sea Level Rise               | 1              | 0                 | 0                       | N/A                 |
| Wildfire                     | 1              | 0                 | 0                       | N/A                 |
| Flooding                     | N/A            | N/A               | N/A                     | N/A                 |
| Drought                      | N/A            | N/A               | N/A                     | N/A                 |

|                         |     |     |     |     |
|-------------------------|-----|-----|-----|-----|
| Snowpack Reduction      | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 0   | 0   | 0   | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

### 6.3. Adjusted Climate Risk Scores

| Climate Hazard               | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|------------------------------|----------------|-------------------|-------------------------|---------------------|
| Temperature and Extreme Heat | N/A            | N/A               | N/A                     | N/A                 |
| Extreme Precipitation        | 2              | 1                 | 1                       | 3                   |
| Sea Level Rise               | 1              | 1                 | 1                       | 2                   |
| Wildfire                     | 1              | 1                 | 1                       | 2                   |
| Flooding                     | N/A            | N/A               | N/A                     | N/A                 |
| Drought                      | N/A            | N/A               | N/A                     | N/A                 |
| Snowpack Reduction           | N/A            | N/A               | N/A                     | N/A                 |
| Air Quality Degradation      | 1              | 1                 | 1                       | 2                   |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

### 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator                       | Result for Project Census Tract |
|---------------------------------|---------------------------------|
| Exposure Indicators             | —                               |
| AQ-Ozone                        | 3.12                            |
| AQ-PM                           | 39.2                            |
| AQ-DPM                          | 77.5                            |
| Drinking Water                  | 4.21                            |
| Lead Risk Housing               | 61.6                            |
| Pesticides                      | 0.00                            |
| Toxic Releases                  | 61.3                            |
| Traffic                         | 31.2                            |
| Effect Indicators               | —                               |
| CleanUp Sites                   | 65.0                            |
| Groundwater                     | 97.0                            |
| Haz Waste Facilities/Generators | 93.0                            |
| Impaired Water Bodies           | 90.1                            |
| Solid Waste                     | 9.67                            |
| Sensitive Population            | —                               |
| Asthma                          | 81.1                            |
| Cardio-vascular                 | 46.8                            |
| Low Birth Weights               | 44.5                            |
| Socioeconomic Factor Indicators | —                               |
| Education                       | 26.4                            |
| Housing                         | 55.1                            |
| Linguistic                      | 6.27                            |
| Poverty                         | 35.6                            |
| Unemployment                    | 49.9                            |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator                                    | Result for Project Census Tract |
|----------------------------------------------|---------------------------------|
| Economic                                     | —                               |
| Above Poverty                                | 59.38662903                     |
| Employed                                     | 93.82779417                     |
| Median HI                                    | 46.50327217                     |
| Education                                    | —                               |
| Bachelor's or higher                         | 88.88746311                     |
| High school enrollment                       | 100                             |
| Preschool enrollment                         | 74.06646991                     |
| Transportation                               | —                               |
| Auto Access                                  | 13.06300526                     |
| Active commuting                             | 96.25304761                     |
| Social                                       | —                               |
| 2-parent households                          | 16.38650071                     |
| Voting                                       | 76.22225074                     |
| Neighborhood                                 | —                               |
| Alcohol availability                         | 4.516874118                     |
| Park access                                  | 81.35506224                     |
| Retail density                               | 82.84357757                     |
| Supermarket access                           | 74.27178237                     |
| Tree canopy                                  | 46.11831131                     |
| Housing                                      | —                               |
| Homeownership                                | 47.94045939                     |
| Housing habitability                         | 50.7121776                      |
| Low-inc homeowner severe housing cost burden | 19.67150006                     |
| Low-inc renter severe housing cost burden    | 46.67008854                     |
| Uncrowded housing                            | 60.05389452                     |
| Health Outcomes                              | —                               |

|                                       |             |
|---------------------------------------|-------------|
| Insured adults                        | 80.68779674 |
| Arthritis                             | 60.6        |
| Asthma ER Admissions                  | 13.2        |
| High Blood Pressure                   | 62.1        |
| Cancer (excluding skin)               | 38.7        |
| Asthma                                | 61.7        |
| Coronary Heart Disease                | 79.3        |
| Chronic Obstructive Pulmonary Disease | 88.0        |
| Diagnosed Diabetes                    | 75.2        |
| Life Expectancy at Birth              | 71.4        |
| Cognitively Disabled                  | 85.7        |
| Physically Disabled                   | 84.3        |
| Heart Attack ER Admissions            | 59.6        |
| Mental Health Not Good                | 82.3        |
| Chronic Kidney Disease                | 64.9        |
| Obesity                               | 68.7        |
| Pedestrian Injuries                   | 19.6        |
| Physical Health Not Good              | 84.3        |
| Stroke                                | 70.4        |
| Health Risk Behaviors                 | —           |
| Binge Drinking                        | 38.6        |
| Current Smoker                        | 87.1        |
| No Leisure Time for Physical Activity | 83.8        |
| Climate Change Exposures              | —           |
| Wildfire Risk                         | 0.0         |
| SLR Inundation Area                   | 0.0         |
| Children                              | 92.8        |
| Elderly                               | 43.9        |



|                                  |      |
|----------------------------------|------|
| English Speaking                 | 71.2 |
| Foreign-born                     | 47.0 |
| Outdoor Workers                  | 90.9 |
| Climate Change Adaptive Capacity | —    |
| Impervious Surface Cover         | 28.0 |
| Traffic Density                  | 29.2 |
| Traffic Access                   | 87.4 |
| Other Indices                    | —    |
| Hardship                         | 21.5 |
| Other Decision Support           | —    |
| 2016 Voting                      | 71.1 |

7.3. Overall Health & Equity Scores

| Metric                                                                              | Result for Project Census Tract |
|-------------------------------------------------------------------------------------|---------------------------------|
| CalEnviroScreen 4.0 Score for Project Location (a)                                  | 54.0                            |
| Healthy Places Index Score for Project Location (b)                                 | 82.0                            |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535)           | No                              |
| Project Located in a Low-Income Community (Assembly Bill 1550)                      | Yes                             |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No                              |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.  
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

| Screen                               | Justification                                                                                                                                                                                                                                                                                                              |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Characteristics: Utility Information | East Bay Community Energy is the primary electricity provider. Intensity factors adjusted for consistency with Berkeley Housing Element methodology.                                                                                                                                                                       |
| Land Use                             | Based on EIR growth assumption of 17,427 multi-family units, 1,570 condo/townhome units and 47,120 new residents. ADUs included as condo/townhouse for a conservative assumption. Default acreage and building square footage. Landscape area set to zero, outdoor water consumption estimated at rate of 41,075 gal/unit. |
| Operations: Hearths                  | No woodstoves or fireplaces                                                                                                                                                                                                                                                                                                |
| Operations: Energy Use               | Assume 60% of development will not include natural gas pursuant to BMC Section 12.80 (Natural gas ban). Totals combined and added to Apartments row.                                                                                                                                                                       |
| Operations: Water and Waste Water    | EBMUD Wastewater treatment plant 100 percent aerobic. Water consumption based on v2020 defaults per multifamily unit in lieu of available data in v2022.                                                                                                                                                                   |

# San Pablo Ave SP Added Units Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field                  | Value                                  |
|-----------------------------|----------------------------------------|
| Project Name                | San Pablo Ave SP Added Units           |
| Operational Year            | 2031                                   |
| Lead Agency                 | —                                      |
| Land Use Scale              | Plan/community                         |
| Analysis Level for Defaults | County                                 |
| Windspeed (m/s)             | 3.90                                   |
| Precipitation (days)        | 3.40                                   |
| Location                    | 37.87310585963721, -122.29377329662165 |
| County                      | Alameda                                |
| City                        | Berkeley                               |
| Air District                | Bay Area AQMD                          |
| Air Basin                   | San Francisco Bay Area                 |
| TAZ                         | 1533                                   |
| EDFZ                        | 1                                      |
| Electric Utility            | User Defined                           |
| Gas Utility                 | User Defined                           |
| App Version                 | 2022.1.1.29                            |

## 1.2. Land Use Types

| Land Use Subtype    | Size  | Unit          | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---------------------|-------|---------------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|
| Apartments Mid Rise | 3,250 | Dwelling Unit | 85.5        | 3,120,000             | 0.00                   | —                              | 8,125      | —           |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | #   | Measure Title                       |
|--------|-----|-------------------------------------|
| Water  | W-7 | Adopt a Water Conservation Strategy |

## 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit.             | BCO2  | NBCO2  | CO2T   | CH4    | N2O  | R    | CO2e   |
|---------------------|-------|--------|--------|--------|------|------|--------|
| Daily, Summer (Max) | —     | —      | —      | —      | —    | —    | —      |
| Unmit.              | 1,395 | 86,922 | 88,317 | 119    | 4.03 | 176  | 92,675 |
| Mit.                | 1,346 | 86,867 | 88,212 | 119    | 3.92 | 176  | 92,534 |
| % Reduced           | 4%    | < 0.5% | < 0.5% | < 0.5% | 3%   | —    | < 0.5% |
| Daily, Winter (Max) | —     | —      | —      | —      | —    | —    | —      |
| Unmit.              | 1,395 | 82,222 | 83,617 | 120    | 4.35 | 26.3 | 87,934 |
| Mit.                | 1,346 | 82,167 | 83,512 | 120    | 4.24 | 26.3 | 87,793 |
| % Reduced           | 4%    | < 0.5% | < 0.5% | < 0.5% | 2%   | —    | < 0.5% |
| Average Daily (Max) | —     | —      | —      | —      | —    | —    | —      |
| Unmit.              | 1,395 | 79,241 | 80,636 | 119    | 4.04 | 85.2 | 84,910 |
| Mit.                | 1,346 | 79,186 | 80,531 | 119    | 3.93 | 85.2 | 84,769 |
| % Reduced           | 4%    | < 0.5% | < 0.5% | < 0.5% | 3%   | —    | < 0.5% |
| Annual (Max)        | —     | —      | —      | —      | —    | —    | —      |
| Unmit.              | 231   | 13,119 | 13,350 | 19.8   | 0.67 | 14.1 | 14,058 |
| Mit.                | 223   | 13,110 | 13,333 | 19.7   | 0.65 | 14.1 | 14,035 |
| % Reduced           | 4%    | < 0.5% | < 0.5% | < 0.5% | 3%   | —    | < 0.5% |

### 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | BCO2  | NBCO2  | CO2T   | CH4  | N2O     | R    | CO2e   |
|---------------------|-------|--------|--------|------|---------|------|--------|
| Daily, Summer (Max) | —     | —      | —      | —    | —       | —    | —      |
| Mobile              | —     | 76,279 | 76,279 | 3.32 | 3.48    | 153  | 77,552 |
| Area                | 0.00  | 493    | 493    | 0.02 | < 0.005 | —    | 495    |
| Energy              | —     | 9,630  | 9,630  | 0.32 | 0.01    | —    | 9,640  |
| Water               | 247   | 520    | 767    | 0.85 | 0.54    | —    | 948    |
| Waste               | 1,148 | 0.00   | 1,148  | 115  | 0.00    | —    | 4,017  |
| Refrig.             | —     | —      | —      | —    | —       | 22.3 | 22.3   |
| Total               | 1,395 | 86,922 | 88,317 | 119  | 4.03    | 176  | 92,675 |
| Daily, Winter (Max) | —     | —      | —      | —    | —       | —    | —      |
| Mobile              | —     | 72,072 | 72,072 | 3.84 | 3.80    | 3.97 | 73,306 |
| Area                | 0.00  | 0.00   | 0.00   | 0.00 | 0.00    | —    | 0.00   |
| Energy              | —     | 9,630  | 9,630  | 0.32 | 0.01    | —    | 9,640  |
| Water               | 247   | 520    | 767    | 0.85 | 0.54    | —    | 948    |
| Waste               | 1,148 | 0.00   | 1,148  | 115  | 0.00    | —    | 4,017  |
| Refrig.             | —     | —      | —      | —    | —       | 22.3 | 22.3   |
| Total               | 1,395 | 82,222 | 83,617 | 120  | 4.35    | 26.3 | 87,934 |
| Average Daily       | —     | —      | —      | —    | —       | —    | —      |
| Mobile              | —     | 68,848 | 68,848 | 3.45 | 3.49    | 62.9 | 70,038 |
| Area                | 0.00  | 243    | 243    | 0.01 | < 0.005 | —    | 244    |
| Energy              | —     | 9,630  | 9,630  | 0.32 | 0.01    | —    | 9,640  |
| Water               | 247   | 520    | 767    | 0.85 | 0.54    | —    | 948    |
| Waste               | 1,148 | 0.00   | 1,148  | 115  | 0.00    | —    | 4,017  |
| Refrig.             | —     | —      | —      | —    | —       | 22.3 | 22.3   |
| Total               | 1,395 | 79,241 | 80,636 | 119  | 4.04    | 85.2 | 84,910 |
| Annual              | —     | —      | —      | —    | —       | —    | —      |
| Mobile              | —     | 11,399 | 11,399 | 0.57 | 0.58    | 10.4 | 11,596 |

|         |      |        |        |         |         |      |        |
|---------|------|--------|--------|---------|---------|------|--------|
| Area    | 0.00 | 40.3   | 40.3   | < 0.005 | < 0.005 | —    | 40.4   |
| Energy  | —    | 1,594  | 1,594  | 0.05    | < 0.005 | —    | 1,596  |
| Water   | 40.8 | 86.1   | 127    | 0.14    | 0.09    | —    | 157    |
| Waste   | 190  | 0.00   | 190    | 19.0    | 0.00    | —    | 665    |
| Refrig. | —    | —      | —      | —       | —       | 3.70 | 3.70   |
| Total   | 231  | 13,119 | 13,350 | 19.8    | 0.67    | 14.1 | 14,058 |

## 2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | BCO2  | NBCO2  | CO2T   | CH4  | N2O     | R    | CO2e   |
|---------------------|-------|--------|--------|------|---------|------|--------|
| Daily, Summer (Max) | —     | —      | —      | —    | —       | —    | —      |
| Mobile              | —     | 76,279 | 76,279 | 3.32 | 3.48    | 153  | 77,552 |
| Area                | 0.00  | 493    | 493    | 0.02 | < 0.005 | —    | 495    |
| Energy              | —     | 9,630  | 9,630  | 0.32 | 0.01    | —    | 9,640  |
| Water               | 197   | 465    | 662    | 0.68 | 0.43    | —    | 807    |
| Waste               | 1,148 | 0.00   | 1,148  | 115  | 0.00    | —    | 4,017  |
| Refrig.             | —     | —      | —      | —    | —       | 22.3 | 22.3   |
| Total               | 1,346 | 86,867 | 88,212 | 119  | 3.92    | 176  | 92,534 |
| Daily, Winter (Max) | —     | —      | —      | —    | —       | —    | —      |
| Mobile              | —     | 72,072 | 72,072 | 3.84 | 3.80    | 3.97 | 73,306 |
| Area                | 0.00  | 0.00   | 0.00   | 0.00 | 0.00    | —    | 0.00   |
| Energy              | —     | 9,630  | 9,630  | 0.32 | 0.01    | —    | 9,640  |
| Water               | 197   | 465    | 662    | 0.68 | 0.43    | —    | 807    |
| Waste               | 1,148 | 0.00   | 1,148  | 115  | 0.00    | —    | 4,017  |
| Refrig.             | —     | —      | —      | —    | —       | 22.3 | 22.3   |
| Total               | 1,346 | 82,167 | 83,512 | 120  | 4.24    | 26.3 | 87,793 |
| Average Daily       | —     | —      | —      | —    | —       | —    | —      |
| Mobile              | —     | 68,848 | 68,848 | 3.45 | 3.49    | 62.9 | 70,038 |

|         |       |        |        |         |         |      |        |
|---------|-------|--------|--------|---------|---------|------|--------|
| Area    | 0.00  | 243    | 243    | 0.01    | < 0.005 | —    | 244    |
| Energy  | —     | 9,630  | 9,630  | 0.32    | 0.01    | —    | 9,640  |
| Water   | 197   | 465    | 662    | 0.68    | 0.43    | —    | 807    |
| Waste   | 1,148 | 0.00   | 1,148  | 115     | 0.00    | —    | 4,017  |
| Refrig. | —     | —      | —      | —       | —       | 22.3 | 22.3   |
| Total   | 1,346 | 79,186 | 80,531 | 119     | 3.93    | 85.2 | 84,769 |
| Annual  | —     | —      | —      | —       | —       | —    | —      |
| Mobile  | —     | 11,399 | 11,399 | 0.57    | 0.58    | 10.4 | 11,596 |
| Area    | 0.00  | 40.3   | 40.3   | < 0.005 | < 0.005 | —    | 40.4   |
| Energy  | —     | 1,594  | 1,594  | 0.05    | < 0.005 | —    | 1,596  |
| Water   | 32.7  | 76.9   | 110    | 0.11    | 0.07    | —    | 134    |
| Waste   | 190   | 0.00   | 190    | 19.0    | 0.00    | —    | 665    |
| Refrig. | —     | —      | —      | —       | —       | 3.70 | 3.70   |
| Total   | 223   | 13,110 | 13,333 | 19.7    | 0.65    | 14.1 | 14,035 |

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2  | CO2T   | CH4  | N2O  | R    | CO2e   |
|---------------------|------|--------|--------|------|------|------|--------|
| Daily, Summer (Max) | —    | —      | —      | —    | —    | —    | —      |
| Apartments Mid Rise | —    | 76,279 | 76,279 | 3.32 | 3.48 | 153  | 77,552 |
| Total               | —    | 76,279 | 76,279 | 3.32 | 3.48 | 153  | 77,552 |
| Daily, Winter (Max) | —    | —      | —      | —    | —    | —    | —      |
| Apartments Mid Rise | —    | 72,072 | 72,072 | 3.84 | 3.80 | 3.97 | 73,306 |
| Total               | —    | 72,072 | 72,072 | 3.84 | 3.80 | 3.97 | 73,306 |

|                     |   |        |        |      |      |      |        |
|---------------------|---|--------|--------|------|------|------|--------|
| Annual              | — | —      | —      | —    | —    | —    | —      |
| Apartments Mid Rise | — | 11,399 | 11,399 | 0.57 | 0.58 | 10.4 | 11,596 |
| Total               | — | 11,399 | 11,399 | 0.57 | 0.58 | 10.4 | 11,596 |

#### 4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2  | CO2T   | CH4  | N2O  | R    | CO2e   |
|---------------------|------|--------|--------|------|------|------|--------|
| Daily, Summer (Max) | —    | —      | —      | —    | —    | —    | —      |
| Apartments Mid Rise | —    | 76,279 | 76,279 | 3.32 | 3.48 | 153  | 77,552 |
| Total               | —    | 76,279 | 76,279 | 3.32 | 3.48 | 153  | 77,552 |
| Daily, Winter (Max) | —    | —      | —      | —    | —    | —    | —      |
| Apartments Mid Rise | —    | 72,072 | 72,072 | 3.84 | 3.80 | 3.97 | 73,306 |
| Total               | —    | 72,072 | 72,072 | 3.84 | 3.80 | 3.97 | 73,306 |
| Annual              | —    | —      | —      | —    | —    | —    | —      |
| Apartments Mid Rise | —    | 11,399 | 11,399 | 0.57 | 0.58 | 10.4 | 11,596 |
| Total               | —    | 11,399 | 11,399 | 0.57 | 0.58 | 10.4 | 11,596 |

## 4.2. Energy

#### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T  | CH4  | N2O  | R | CO2e  |
|---------------------|------|-------|-------|------|------|---|-------|
| Daily, Summer (Max) | —    | —     | —     | —    | —    | — | —     |
| Apartments Mid Rise | —    | 5,962 | 5,962 | 0.00 | 0.00 | — | 5,962 |
| Total               | —    | 5,962 | 5,962 | 0.00 | 0.00 | — | 5,962 |
| Daily, Winter (Max) | —    | —     | —     | —    | —    | — | —     |
| Apartments Mid Rise | —    | 5,962 | 5,962 | 0.00 | 0.00 | — | 5,962 |
| Total               | —    | 5,962 | 5,962 | 0.00 | 0.00 | — | 5,962 |

|                     |   |     |     |      |      |   |     |
|---------------------|---|-----|-----|------|------|---|-----|
| Annual              | — | —   | —   | —    | —    | — | —   |
| Apartments Mid Rise | — | 987 | 987 | 0.00 | 0.00 | — | 987 |
| Total               | — | 987 | 987 | 0.00 | 0.00 | — | 987 |

#### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T  | CH4  | N2O  | R | CO2e  |
|---------------------|------|-------|-------|------|------|---|-------|
| Daily, Summer (Max) | —    | —     | —     | —    | —    | — | —     |
| Apartments Mid Rise | —    | 5,962 | 5,962 | 0.00 | 0.00 | — | 5,962 |
| Total               | —    | 5,962 | 5,962 | 0.00 | 0.00 | — | 5,962 |
| Daily, Winter (Max) | —    | —     | —     | —    | —    | — | —     |
| Apartments Mid Rise | —    | 5,962 | 5,962 | 0.00 | 0.00 | — | 5,962 |
| Total               | —    | 5,962 | 5,962 | 0.00 | 0.00 | — | 5,962 |
| Annual              | —    | —     | —     | —    | —    | — | —     |
| Apartments Mid Rise | —    | 987   | 987   | 0.00 | 0.00 | — | 987   |
| Total               | —    | 987   | 987   | 0.00 | 0.00 | — | 987   |

#### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T  | CH4  | N2O     | R | CO2e  |
|---------------------|------|-------|-------|------|---------|---|-------|
| Daily, Summer (Max) | —    | —     | —     | —    | —       | — | —     |
| Apartments Mid Rise | —    | 3,668 | 3,668 | 0.32 | 0.01    | — | 3,678 |
| Total               | —    | 3,668 | 3,668 | 0.32 | 0.01    | — | 3,678 |
| Daily, Winter (Max) | —    | —     | —     | —    | —       | — | —     |
| Apartments Mid Rise | —    | 3,668 | 3,668 | 0.32 | 0.01    | — | 3,678 |
| Total               | —    | 3,668 | 3,668 | 0.32 | 0.01    | — | 3,678 |
| Annual              | —    | —     | —     | —    | —       | — | —     |
| Apartments Mid Rise | —    | 607   | 607   | 0.05 | < 0.005 | — | 609   |

|       |   |     |     |      |         |   |     |
|-------|---|-----|-----|------|---------|---|-----|
| Total | — | 607 | 607 | 0.05 | < 0.005 | — | 609 |
|-------|---|-----|-----|------|---------|---|-----|

#### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T  | CH4  | N2O     | R | CO2e  |
|---------------------|------|-------|-------|------|---------|---|-------|
| Daily, Summer (Max) | —    | —     | —     | —    | —       | — | —     |
| Apartments Mid Rise | —    | 3,668 | 3,668 | 0.32 | 0.01    | — | 3,678 |
| Total               | —    | 3,668 | 3,668 | 0.32 | 0.01    | — | 3,678 |
| Daily, Winter (Max) | —    | —     | —     | —    | —       | — | —     |
| Apartments Mid Rise | —    | 3,668 | 3,668 | 0.32 | 0.01    | — | 3,678 |
| Total               | —    | 3,668 | 3,668 | 0.32 | 0.01    | — | 3,678 |
| Annual              | —    | —     | —     | —    | —       | — | —     |
| Apartments Mid Rise | —    | 607   | 607   | 0.05 | < 0.005 | — | 609   |
| Total               | —    | 607   | 607   | 0.05 | < 0.005 | — | 609   |

### 4.3. Area Emissions by Source

#### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                 | BCO2 | NBCO2 | CO2T | CH4  | N2O     | R | CO2e |
|------------------------|------|-------|------|------|---------|---|------|
| Daily, Summer (Max)    | —    | —     | —    | —    | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00 | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —    | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —    | —       | — | —    |
| Landscape Equipment    | —    | 493   | 493  | 0.02 | < 0.005 | — | 495  |
| Total                  | 0.00 | 493   | 493  | 0.02 | < 0.005 | — | 495  |
| Daily, Winter (Max)    | —    | —     | —    | —    | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00 | 0.00    | — | 0.00 |



|                        |      |      |      |         |         |   |      |
|------------------------|------|------|------|---------|---------|---|------|
| Consumer Products      | —    | —    | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —    | —    | —       | —       | — | —    |
| Total                  | 0.00 | 0.00 | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Annual                 | —    | —    | —    | —       | —       | — | —    |
| Hearths                | 0.00 | 0.00 | 0.00 | 0.00    | 0.00    | — | 0.00 |
| Consumer Products      | —    | —    | —    | —       | —       | — | —    |
| Architectural Coatings | —    | —    | —    | —       | —       | — | —    |
| Landscape Equipment    | —    | 40.3 | 40.3 | < 0.005 | < 0.005 | — | 40.4 |
| Total                  | 0.00 | 40.3 | 40.3 | < 0.005 | < 0.005 | — | 40.4 |

#### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                 | BCO2 | NBCO2 | CO2T | CH4  | N2O     | R | CO2e |
|------------------------|------|-------|------|------|---------|---|------|
| Daily, Summer (Max)    | —    | —     | —    | —    | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00 | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —    | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —    | —       | — | —    |
| Landscape Equipment    | —    | 493   | 493  | 0.02 | < 0.005 | — | 495  |
| Total                  | 0.00 | 493   | 493  | 0.02 | < 0.005 | — | 495  |
| Daily, Winter (Max)    | —    | —     | —    | —    | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00 | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —    | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —    | —       | — | —    |
| Total                  | 0.00 | 0.00  | 0.00 | 0.00 | 0.00    | — | 0.00 |
| Annual                 | —    | —     | —    | —    | —       | — | —    |
| Hearths                | 0.00 | 0.00  | 0.00 | 0.00 | 0.00    | — | 0.00 |
| Consumer Products      | —    | —     | —    | —    | —       | — | —    |
| Architectural Coatings | —    | —     | —    | —    | —       | — | —    |

|                     |      |      |      |         |         |   |      |
|---------------------|------|------|------|---------|---------|---|------|
| Landscape Equipment | —    | 40.3 | 40.3 | < 0.005 | < 0.005 | — | 40.4 |
| Total               | 0.00 | 40.3 | 40.3 | < 0.005 | < 0.005 | — | 40.4 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|---------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max) | —    | —     | —    | —    | —    | — | —    |
| Apartments Mid Rise | 247  | 520   | 767  | 0.85 | 0.54 | — | 948  |
| Total               | 247  | 520   | 767  | 0.85 | 0.54 | — | 948  |
| Daily, Winter (Max) | —    | —     | —    | —    | —    | — | —    |
| Apartments Mid Rise | 247  | 520   | 767  | 0.85 | 0.54 | — | 948  |
| Total               | 247  | 520   | 767  | 0.85 | 0.54 | — | 948  |
| Annual              | —    | —     | —    | —    | —    | — | —    |
| Apartments Mid Rise | 40.8 | 86.1  | 127  | 0.14 | 0.09 | — | 157  |
| Total               | 40.8 | 86.1  | 127  | 0.14 | 0.09 | — | 157  |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4  | N2O  | R | CO2e |
|---------------------|------|-------|------|------|------|---|------|
| Daily, Summer (Max) | —    | —     | —    | —    | —    | — | —    |
| Apartments Mid Rise | 197  | 465   | 662  | 0.68 | 0.43 | — | 807  |
| Total               | 197  | 465   | 662  | 0.68 | 0.43 | — | 807  |
| Daily, Winter (Max) | —    | —     | —    | —    | —    | — | —    |
| Apartments Mid Rise | 197  | 465   | 662  | 0.68 | 0.43 | — | 807  |
| Total               | 197  | 465   | 662  | 0.68 | 0.43 | — | 807  |
| Annual              | —    | —     | —    | —    | —    | — | —    |

|                     |      |      |     |      |      |   |     |
|---------------------|------|------|-----|------|------|---|-----|
| Apartments Mid Rise | 32.7 | 76.9 | 110 | 0.11 | 0.07 | — | 134 |
| Total               | 32.7 | 76.9 | 110 | 0.11 | 0.07 | — | 134 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO <sub>2</sub> | NBCO <sub>2</sub> | CO <sub>2</sub> T | CH <sub>4</sub> | N <sub>2</sub> O | R | CO <sub>2</sub> e |
|---------------------|------------------|-------------------|-------------------|-----------------|------------------|---|-------------------|
| Daily, Summer (Max) | —                | —                 | —                 | —               | —                | — | —                 |
| Apartments Mid Rise | 1,148            | 0.00              | 1,148             | 115             | 0.00             | — | 4,017             |
| Total               | 1,148            | 0.00              | 1,148             | 115             | 0.00             | — | 4,017             |
| Daily, Winter (Max) | —                | —                 | —                 | —               | —                | — | —                 |
| Apartments Mid Rise | 1,148            | 0.00              | 1,148             | 115             | 0.00             | — | 4,017             |
| Total               | 1,148            | 0.00              | 1,148             | 115             | 0.00             | — | 4,017             |
| Annual              | —                | —                 | —                 | —               | —                | — | —                 |
| Apartments Mid Rise | 190              | 0.00              | 190               | 19.0            | 0.00             | — | 665               |
| Total               | 190              | 0.00              | 190               | 19.0            | 0.00             | — | 665               |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO <sub>2</sub> | NBCO <sub>2</sub> | CO <sub>2</sub> T | CH <sub>4</sub> | N <sub>2</sub> O | R | CO <sub>2</sub> e |
|---------------------|------------------|-------------------|-------------------|-----------------|------------------|---|-------------------|
| Daily, Summer (Max) | —                | —                 | —                 | —               | —                | — | —                 |
| Apartments Mid Rise | 1,148            | 0.00              | 1,148             | 115             | 0.00             | — | 4,017             |
| Total               | 1,148            | 0.00              | 1,148             | 115             | 0.00             | — | 4,017             |
| Daily, Winter (Max) | —                | —                 | —                 | —               | —                | — | —                 |
| Apartments Mid Rise | 1,148            | 0.00              | 1,148             | 115             | 0.00             | — | 4,017             |
| Total               | 1,148            | 0.00              | 1,148             | 115             | 0.00             | — | 4,017             |
| Annual              | —                | —                 | —                 | —               | —                | — | —                 |

|                     |     |      |     |      |      |   |     |
|---------------------|-----|------|-----|------|------|---|-----|
| Apartments Mid Rise | 190 | 0.00 | 190 | 19.0 | 0.00 | — | 665 |
| Total               | 190 | 0.00 | 190 | 19.0 | 0.00 | — | 665 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R    | CO2e |
|---------------------|------|-------|------|-----|-----|------|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 22.3 | 22.3 |
| Total               | —    | —     | —    | —   | —   | 22.3 | 22.3 |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 22.3 | 22.3 |
| Total               | —    | —     | —    | —   | —   | 22.3 | 22.3 |
| Annual              | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 3.70 | 3.70 |
| Total               | —    | —     | —    | —   | —   | 3.70 | 3.70 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R    | CO2e |
|---------------------|------|-------|------|-----|-----|------|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 22.3 | 22.3 |
| Total               | —    | —     | —    | —   | —   | 22.3 | 22.3 |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | —    | —    |
| Apartments Mid Rise | —    | —     | —    | —   | —   | 22.3 | 22.3 |
| Total               | —    | —     | —    | —   | —   | 22.3 | 22.3 |
| Annual              | —    | —     | —    | —   | —   | —    | —    |

|                     |   |   |   |   |   |      |      |
|---------------------|---|---|---|---|---|------|------|
| Apartments Mid Rise | — | — | — | — | — | 3.70 | 3.70 |
| Total               | — | — | — | — | — | 3.70 | 3.70 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

## Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

## 4.8.2. Mitigated

## Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

## 4.9. User Defined Emissions By Equipment Type

## 4.9.1. Unmitigated

## Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

|        |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — |
| Total  | — | — | — | — | — | — | — |

#### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

##### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|----------|------|-------|------|-----|-----|---|------|
|----------|------|-------|------|-----|-----|---|------|

|                     |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |
| Annual              | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — |

#### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |



|             |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|
| Subtotal    | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| Removed     | — | — | — | — | — | — | — |
| Subtotal    | — | — | — | — | — | — | — |
| —           | — | — | — | — | — | — | — |

#### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

#### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Total               | —    | —     | —    | —   | —   | — | —    |

## 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|-------|------|-----|-----|---|------|
| Daily, Summer (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Daily, Winter (Max) | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |
| Annual              | —    | —     | —    | —   | —   | — | —    |
| Avoided             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Sequestered         | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| Removed             | —    | —     | —    | —   | —   | — | —    |
| Subtotal            | —    | —     | —    | —   | —   | — | —    |
| —                   | —    | —     | —    | —   | —   | — | —    |

## 5. Activity Data

### 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

| Land Use Type       | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year   |
|---------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|------------|
| Apartments Mid Rise | 17,680        | 15,957         | 13,293       | 6,134,607  | 103,429     | 93,352       | 77,762     | 35,887,644 |

#### 5.9.2. Mitigated

| Land Use Type       | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year   |
|---------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|------------|
| Apartments Mid Rise | 17,680        | 15,957         | 13,293       | 6,134,607  | 103,429     | 93,352       | 77,762     | 35,887,644 |

### 5.10. Operational Area Sources

#### 5.10.1. Hearths

##### 5.10.1.1. Unmitigated

| Hearth Type               | Unmitigated (number) |
|---------------------------|----------------------|
| Apartments Mid Rise       | —                    |
| Wood Fireplaces           | 0                    |
| Gas Fireplaces            | 0                    |
| Propane Fireplaces        | 0                    |
| Electric Fireplaces       | 0                    |
| No Fireplaces             | 0                    |
| Conventional Wood Stoves  | 0                    |
| Catalytic Wood Stoves     | 0                    |
| Non-Catalytic Wood Stoves | 0                    |

|                    |   |
|--------------------|---|
| Pellet Wood Stoves | 0 |
|--------------------|---|

5.10.1.2. Mitigated

| Hearth Type               | Unmitigated (number) |
|---------------------------|----------------------|
| Apartments Mid Rise       | —                    |
| Wood Fireplaces           | 0                    |
| Gas Fireplaces            | 0                    |
| Propane Fireplaces        | 0                    |
| Electric Fireplaces       | 0                    |
| No Fireplaces             | 0                    |
| Conventional Wood Stoves  | 0                    |
| Catalytic Wood Stoves     | 0                    |
| Non-Catalytic Wood Stoves | 0                    |
| Pellet Wood Stoves        | 0                    |

5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|------------------------------------------|------------------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------|
| 6318000                                  | 2,106,000                                | 0.00                                         | 0.00                                         | —                           |

5.10.3. Landscape Equipment

| Season      | Unit   | Value |
|-------------|--------|-------|
| Snow Days   | day/yr | 0.00  |
| Summer Days | day/yr | 180   |

5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|--------|------|-------|
|--------|------|-------|

|             |        |      |
|-------------|--------|------|
| Snow Days   | day/yr | 0.00 |
| Summer Days | day/yr | 180  |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use            | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|---------------------|----------------------|-----|--------|--------|-----------------------|
| Apartments Mid Rise | 16,118,850           | 135 | 0.0000 | 0.0000 | 11,445,292            |

### 5.11.2. Mitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use            | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|---------------------|----------------------|-----|--------|--------|-----------------------|
| Apartments Mid Rise | 16,118,850           | 135 | 0.0000 | 0.0000 | 11,445,292            |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use            | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---------------------|-------------------------|--------------------------|
| Apartments Mid Rise | 115,410,263             | 133,494,889              |

### 5.12.2. Mitigated

| Land Use            | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---------------------|-------------------------|--------------------------|
| Apartments Mid Rise | 92,328,210              | 133,494,889              |

## 5.13. Operational Waste Generation

## 5.13.1. Unmitigated

| Land Use            | Waste (ton/year) | Cogeneration (kWh/year) |
|---------------------|------------------|-------------------------|
| Apartments Mid Rise | 2,131            | —                       |

## 5.13.2. Mitigated

| Land Use            | Waste (ton/year) | Cogeneration (kWh/year) |
|---------------------|------------------|-------------------------|
| Apartments Mid Rise | 2,131            | —                       |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

## 5.14.1. Unmitigated

| Land Use Type       | Equipment Type                                          | Refrigerant | GWP   | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---------------------|---------------------------------------------------------|-------------|-------|---------------|----------------------|-------------------|----------------|
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Apartments Mid Rise | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |

## 5.14.2. Mitigated

| Land Use Type       | Equipment Type                                          | Refrigerant | GWP   | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---------------------|---------------------------------------------------------|-------------|-------|---------------|----------------------|-------------------|----------------|
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A      | 2,088 | < 0.005       | 2.50                 | 2.50              | 10.0           |
| Apartments Mid Rise | Household refrigerators and/or freezers                 | R-134a      | 1,430 | 0.12          | 0.60                 | 0.00              | 1.00           |

## 5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|----------------|-----------|-------------|----------------|---------------|------------|-------------|
|----------------|-----------|-------------|----------------|---------------|------------|-------------|

5.15.2. Mitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|----------------|-----------|-------------|----------------|---------------|------------|-------------|
|----------------|-----------|-------------|----------------|---------------|------------|-------------|

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|----------------|-----------|----------------|---------------|----------------|------------|-------------|
|----------------|-----------|----------------|---------------|----------------|------------|-------------|

5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|

5.17. User Defined

| Equipment Type | Fuel Type |
|----------------|-----------|
|----------------|-----------|

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.2. Sequestration

5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard               | Result for Project Location | Unit                                       |
|------------------------------|-----------------------------|--------------------------------------------|
| Temperature and Extreme Heat | 7.10                        | annual days of extreme heat                |
| Extreme Precipitation        | 7.50                        | annual days with precipitation above 20 mm |
| Sea Level Rise               | —                           | meters of inundation depth                 |
| Wildfire                     | 0.00                        | annual hectares burned                     |



Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about  $\frac{3}{4}$  an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard               | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|------------------------------|----------------|-------------------|-------------------------|---------------------|
| Temperature and Extreme Heat | N/A            | N/A               | N/A                     | N/A                 |
| Extreme Precipitation        | 2              | 0                 | 0                       | N/A                 |
| Sea Level Rise               | 1              | 0                 | 0                       | N/A                 |
| Wildfire                     | 1              | 0                 | 0                       | N/A                 |
| Flooding                     | N/A            | N/A               | N/A                     | N/A                 |
| Drought                      | N/A            | N/A               | N/A                     | N/A                 |
| Snowpack Reduction           | N/A            | N/A               | N/A                     | N/A                 |
| Air Quality Degradation      | 0              | 0                 | 0                       | N/A                 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard               | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|------------------------------|----------------|-------------------|-------------------------|---------------------|
| Temperature and Extreme Heat | N/A            | N/A               | N/A                     | N/A                 |
| Extreme Precipitation        | 2              | 1                 | 1                       | 3                   |
| Sea Level Rise               | 1              | 1                 | 1                       | 2                   |

|                         |     |     |     |     |
|-------------------------|-----|-----|-----|-----|
| Wildfire                | 1   | 1   | 1   | 2   |
| Flooding                | N/A | N/A | N/A | N/A |
| Drought                 | N/A | N/A | N/A | N/A |
| Snowpack Reduction      | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 1   | 1   | 1   | 2   |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator           | Result for Project Census Tract |
|---------------------|---------------------------------|
| Exposure Indicators | —                               |
| AQ-Ozone            | 3.12                            |
| AQ-PM               | 39.2                            |
| AQ-DPM              | 77.5                            |
| Drinking Water      | 4.21                            |
| Lead Risk Housing   | 61.6                            |
| Pesticides          | 0.00                            |
| Toxic Releases      | 61.3                            |
| Traffic             | 31.2                            |
| Effect Indicators   | —                               |
| CleanUp Sites       | 65.0                            |
| Groundwater         | 97.0                            |

|                                 |      |
|---------------------------------|------|
| Haz Waste Facilities/Generators | 93.0 |
| Impaired Water Bodies           | 90.1 |
| Solid Waste                     | 9.67 |
| Sensitive Population            | —    |
| Asthma                          | 81.1 |
| Cardio-vascular                 | 46.8 |
| Low Birth Weights               | 44.5 |
| Socioeconomic Factor Indicators | —    |
| Education                       | 26.4 |
| Housing                         | 55.1 |
| Linguistic                      | 6.27 |
| Poverty                         | 35.6 |
| Unemployment                    | 49.9 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator              | Result for Project Census Tract |
|------------------------|---------------------------------|
| Economic               | —                               |
| Above Poverty          | 59.38662903                     |
| Employed               | 93.82779417                     |
| Median HI              | 46.50327217                     |
| Education              | —                               |
| Bachelor's or higher   | 88.88746311                     |
| High school enrollment | 100                             |
| Preschool enrollment   | 74.06646991                     |
| Transportation         | —                               |
| Auto Access            | 13.06300526                     |
| Active commuting       | 96.25304761                     |

|                                              |             |
|----------------------------------------------|-------------|
| Social                                       | —           |
| 2-parent households                          | 16.38650071 |
| Voting                                       | 76.22225074 |
| Neighborhood                                 | —           |
| Alcohol availability                         | 4.516874118 |
| Park access                                  | 81.35506224 |
| Retail density                               | 82.84357757 |
| Supermarket access                           | 74.27178237 |
| Tree canopy                                  | 46.11831131 |
| Housing                                      | —           |
| Homeownership                                | 47.94045939 |
| Housing habitability                         | 50.7121776  |
| Low-inc homeowner severe housing cost burden | 19.67150006 |
| Low-inc renter severe housing cost burden    | 46.67008854 |
| Uncrowded housing                            | 60.05389452 |
| Health Outcomes                              | —           |
| Insured adults                               | 80.68779674 |
| Arthritis                                    | 60.6        |
| Asthma ER Admissions                         | 13.2        |
| High Blood Pressure                          | 62.1        |
| Cancer (excluding skin)                      | 38.7        |
| Asthma                                       | 61.7        |
| Coronary Heart Disease                       | 79.3        |
| Chronic Obstructive Pulmonary Disease        | 88.0        |
| Diagnosed Diabetes                           | 75.2        |
| Life Expectancy at Birth                     | 71.4        |
| Cognitively Disabled                         | 85.7        |
| Physically Disabled                          | 84.3        |

|                                       |      |
|---------------------------------------|------|
| Heart Attack ER Admissions            | 59.6 |
| Mental Health Not Good                | 82.3 |
| Chronic Kidney Disease                | 64.9 |
| Obesity                               | 68.7 |
| Pedestrian Injuries                   | 19.6 |
| Physical Health Not Good              | 84.3 |
| Stroke                                | 70.4 |
| Health Risk Behaviors                 | —    |
| Binge Drinking                        | 38.6 |
| Current Smoker                        | 87.1 |
| No Leisure Time for Physical Activity | 83.8 |
| Climate Change Exposures              | —    |
| Wildfire Risk                         | 0.0  |
| SLR Inundation Area                   | 0.0  |
| Children                              | 92.8 |
| Elderly                               | 43.9 |
| English Speaking                      | 71.2 |
| Foreign-born                          | 47.0 |
| Outdoor Workers                       | 90.9 |
| Climate Change Adaptive Capacity      | —    |
| Impervious Surface Cover              | 28.0 |
| Traffic Density                       | 29.2 |
| Traffic Access                        | 87.4 |
| Other Indices                         | —    |
| Hardship                              | 21.5 |
| Other Decision Support                | —    |
| 2016 Voting                           | 71.1 |

### 7.3. Overall Health & Equity Scores

| Metric                                                                              | Result for Project Census Tract |
|-------------------------------------------------------------------------------------|---------------------------------|
| CalEnviroScreen 4.0 Score for Project Location (a)                                  | 54.0                            |
| Healthy Places Index Score for Project Location (b)                                 | 82.0                            |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535)           | No                              |
| Project Located in a Low-Income Community (Assembly Bill 1550)                      | Yes                             |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No                              |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

| Screen                               | Justification                                                                                                                                                                                                |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Characteristics: Utility Information | East Bay Community Energy is the primary electricity provider. Intensity factors adjusted for consistency with Berkeley Housing Element methodology.                                                         |
| Land Use                             | Based on SPA SP growth assumption of 3,250 multi-family units and 8,125 new residents. Default acreage and building square footage. Landscape area set to zero and accounted for in Outdoor Water Use input. |
| Operations: Hearths                  | No woodstoves or fireplaces                                                                                                                                                                                  |
| Operations: Energy Use               | Assume 60% of development will not include natural gas pursuant to BMC Section 12.80 (Natural gas ban).                                                                                                      |
| Operations: Water and Waste Water    | EBMUD Wastewater treatment plant 100 percent aerobic. Outdoor water use estimated using default rate from v2022 - 41,075 gals/unit/year for multifamily units.                                               |

**APPENDIX C: STATE DENSITY BONUS ANALYSIS**



Planning and Development Department

From: Justin Horner, Principal Planner  
 Date: September 1, 2026  
 Subject: Analysis of State Density Bonus Projects in Berkeley

## INTRODUCTION

The *San Pablo Avenue Specific Plan Addendum to the 2023-2031 Housing Element Update Final Environmental Impact Report* (Addendum) incorporates development projections associated with the proposed rezoning San Pablo Avenue. These projections account for additional residential capacity that could be realized with the use of the State Density Bonus Law (SDBL).

The assumptions underlying this analysis anticipate that most projects would utilize the SDBL to construct buildings in the 6-8 story range. This memorandum reviews recent SDBL projects in Berkeley evaluate this assumption, suggests key construction cost factors associated with mid-rise and taller buildings, and summarizes a recent study on the marginal costs of increased building height.

## DENSITY BONUS PROJECTS IN BERKELEY

Pursuant to State law, the City prepares an Annual Progress Report (APR) each year on implementation of its General Plan, which is submitted to the State Department of Housing and Community Development. Each APR includes a list of all SDBL projects that received an entitlement, building permit, or Certificate of Occupancy during the prior year.

Attachment 1 compiles all SDBL projects reported in the City's APRs from 2020 to 2025. For each project, it identifies the address, total number of units, building height, zoning district, and the applicable maximum height limit for that district. Attachment 1 shows:

- Of the 82 SDB projects captured in the 2020-2025 APRs, **91%** of them (75 of 82) were 8 stories or fewer.
- Because the Addendum assumes a proposed maximum base height standard of 7 stories for San Pablo Avenue, Attachment 1 indicates in bold those SDB projects that are located on sites that allow 7 stories in their zoning district.

Of the 29 SDB projects on sites that allow 7 stories for the base project, **80%** (or 22 out of 26) were 8 stories or fewer.



- Of the 29 SDB projects on sites that allow 7 stories for the base project, three of them are located in the downtown core and were approved under special Zoning Ordinance provisions that permit an increased height allowance that applies only to a total of five buildings in the downtown core.

The proposed rezoning does not apply to the downtown and does not include provisions that would include an increased height allowance. Excluding those three special downtown projects leaves a total of 23 SDB projects on sites that allow 7 stories for the base project, 22 of which, or **96%**, of which are 8 stories or fewer.

## FACTORS IN CONSTRUCTION

Several factors help explain why many projects tend to top out at approximately 8 stories, most of which relate to construction requirements and associated costs.

- Beyond roughly 6-8 stories, projects typically can no longer rely on wood-frame construction (like Type V construction) and instead must transition to steel or reinforced concrete systems (Type I construction) which increase per square foot material costs. On average, Type 1 constructions costs approximately \$65 more per square foot than Type V construction.<sup>1</sup>
- Under the California Health and Safety Code and the California Building Code (CBC), a high-rise structure is defined as a building with an occupied floor located more than 75 feet above the lowest level of fire department vehicle access (Health & Safety Code §13210; CBC §202). Buildings meeting this definition are subject to the additional provisions of CBC §403 (High-Rise Buildings), which includes additional life-safety requirements that are not required for non-high-rise construction.

Together, these factors create meaningful cost and design constraints that can limit the feasibility of construction above the mid-rise range.

The chart on the following page, excerpted from Hannah Hoyt's 2020 paper *More for Less? An Inquiry into Design and Construction Strategies for Addressing Multifamily Housing Costs*,<sup>2</sup> summarizes findings from interviews with more than 30 building industry professionals and illustrates the increase in per square foot construction costs for projects exceeding approximately 6 to 7 stories

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<sup>1</sup> Turner Center for Housing Innovation, *The Hard Costs of Construction: Recent Trends in Labor and Materials Costs for Apartment Buildings in California*, March 2020. [https://turnercenter.berkeley.edu/wp-content/uploads/2020/08/Hard\\_Construction\\_Costs\\_March\\_2020.pdf](https://turnercenter.berkeley.edu/wp-content/uploads/2020/08/Hard_Construction_Costs_March_2020.pdf)

<sup>2</sup> Hannah Hoyt, *More for Less? An Inquiry into Design and Construction Strategies for Addressing Multifamily Housing Costs*, Harvard Joint Center for Housing Studies, 2020. [https://www.jchs.harvard.edu/sites/default/files/media/imp/harvard\\_jchs\\_gramlich\\_design\\_and\\_construction\\_strategies\\_multifamily\\_hoyt\\_2020\\_3.pdf](https://www.jchs.harvard.edu/sites/default/files/media/imp/harvard_jchs_gramlich_design_and_construction_strategies_multifamily_hoyt_2020_3.pdf)



|                          | Infill                                             | Low-rise                                                             | Mid-rise                                                               | High-rise                                                                      |
|--------------------------|----------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>Names</b>             | Duplex, two, three or four-family, garden, walk-up | 3-over-1                                                             | 5-over-1, 5-over-2, 4-over-2                                           | Tower                                                                          |
| <b>Construction type</b> | Typically wood                                     | Typically wood                                                       | Wood on concrete or steel podium                                       | Concrete or steel                                                              |
| <b># of Floors</b>       | 3 stories, up to 6 in older buildings              | 1-3 stories                                                          | 4-7 stories                                                            | Unlimited by IBC, dictated by zoning, usually 12 + stories                     |
| <b># of Units</b>        | ~1-4 units                                         | ~5-50 units                                                          | ~50-200 units                                                          | ~4-20+ units/floor                                                             |
| <b>Circulation</b>       | Typically single stair, no corridor                | Typically double-loaded corridor, multiple stair, sometimes elevator | Typically double-loaded corridor, multiple stairs and egress, elevator | Typically smaller floor plate, double-loaded corridor, elevator, egress stairs |
| <b>Location</b>          | Rural, suburban, urban                             | Rural, suburban, urban                                               | Suburban, urban                                                        | Urban                                                                          |
| <b>Cost PSF</b>          | Varied                                             | \$150-225                                                            | \$175-250                                                              | \$225-400+                                                                     |

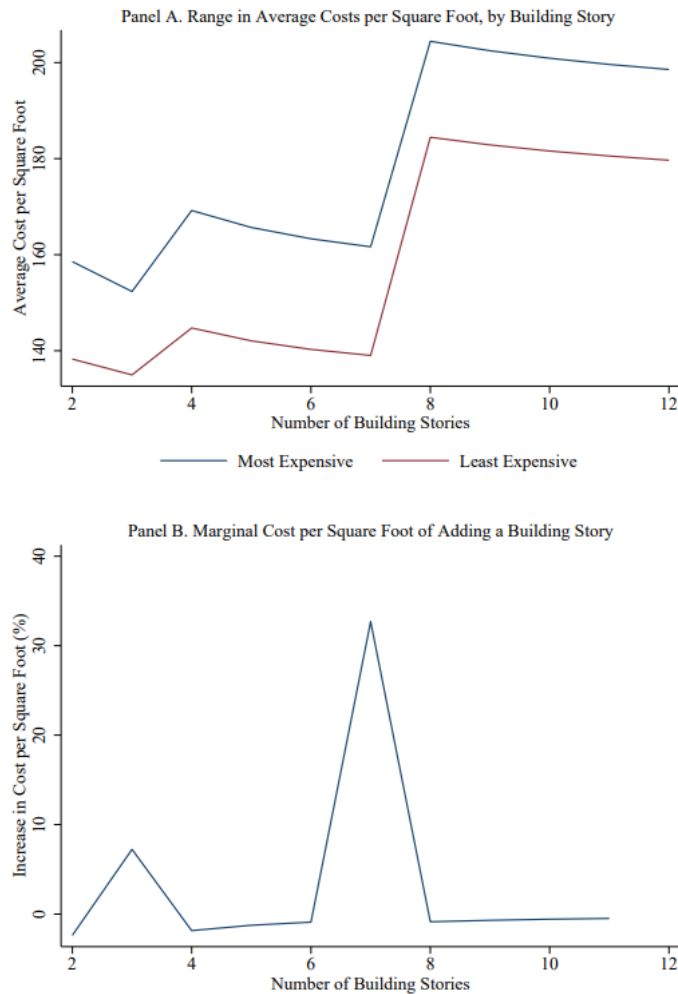
## EMPIRICAL ANALYSIS

These observations are consistent with findings by Michael Eriksen and Anthony Orlando in their 2021 paper *Returns to Scale in Residential Construction: The Marginal Impact of Building Height*.<sup>3</sup> Based on a survey of construction costs across the 50 largest U.S. cities, the authors estimate the marginal costs of developing multifamily housing at increasing heights.

Panel A of their study illustrates the non-linear relationship between building height and per-square-foot construction costs, while Panel B presents the marginal cost of adding each additional story. The analysis identifies a notable increase in marginal costs beginning at seven stories, with continued cost escalation for additional height.

<sup>3</sup> Michael Eriksen and Anthony Orlando in their 2021 paper *Returns to Scale in Residential Construction: The Marginal Impact of Building Height*. Real Estate Economics v. 50(2), March 2021.

These findings align with the projects summarized in Attachment 1 and reinforce the construction-related constraints described above.



## CONCLUSION

The Addendum's assumption that projects developed under the proposed San Pablo Avenue Specific Plan would generally top out at eight stories—even when utilizing the State Density Bonus Law—is supported by both recent development patterns in Berkeley and broader empirical research. The City's record of SDBL projects over the past five years demonstrates a consistent tendency toward mid-rise construction, while cost analyses indicate that buildings exceeding eight stories are often not economically feasible in districts with a seven-story base height limit. Together, this evidence supports the reasonableness of the Addendum's development assumptions.

# ATTACHMENT 1

## State Density Bonus Law Projects in the City of Berkeley

|                               | Units      | Height             | Zoning District         | Zoning Height Max                |
|-------------------------------|------------|--------------------|-------------------------|----------------------------------|
| <b>2025 APR (17 projects)</b> |            |                    |                         |                                  |
| 1701 San Pablo                | 110        | 6 stories          | C-W                     | 40 ft                            |
| 1740 San Pablo                | 54         | 6 stories          | C-W                     | 40 ft                            |
| 1752 Shattuck                 | 68         | 7 stories          | C-C                     | 40 ft                            |
| <b>2300 Ellsworth</b>         | <b>69</b>  | <b>7 stories</b>   | <b>R-SMU</b>            | <b>85 ft</b>                     |
| <b>2902 Adeline Street</b>    | <b>50</b>  | <b>6 stories</b>   | <b>C-AC</b>             | <b>6-8 stories</b>               |
| 2650 Telegraph                | 72         | 7 stories          | C-C                     | 40 ft                            |
| 2000 Dwight                   | 45         | 5 stories          | R-4                     | 35 ft                            |
| <b>2001 Ashby Ave</b>         | <b>86</b>  | <b>8 stories</b>   | <b>C-AC</b>             | <b>6-8 stories</b>               |
| 2440 Shattuck                 | 40         | 8 stories          | C-DMU Corridor          | 60 ft max (75 ft with UP)        |
| <b>2480 Bancroft</b>          | <b>28</b>  | <b>8 stories</b>   | <b>C-T</b>              | <b>85 ft</b>                     |
| 2555 College                  | 11         | 4 stories          | R-3                     | 35 ft                            |
| <b>2680 Bancroft</b>          | <b>79</b>  | <b>8 stories</b>   | <b>R-SMU</b>            | <b>85 ft</b>                     |
| <b>1975 Shattuck</b>          | <b>599</b> | <b>28 stories*</b> | <b>C-DMU Outer Core</b> | <b>60 ft max (75 ft with UP)</b> |
| <b>2274 Shattuck</b>          | <b>227</b> | <b>17 stories</b>  | <b>C-DMU Corridor</b>   | <b>60 ft max (75 ft with UP)</b> |
| <b>2442 Haste</b>             | <b>38</b>  | <b>8 stories</b>   | <b>C-T</b>              | <b>85 ft</b>                     |
| 2138 Kittredge St             | 66         | 8 stories          | C-DMU Outer Core        | 60 ft max (75 ft with UP)        |
| 2100 Milvia                   | 201        | 8 stories          | C-DMU Buffer            | 50 ft max (60 ft with UP)        |

Base zoning that allows 7 stories

Increased Height Allowance Proj.

| 2024 APR (21 projects)         |            |                    |                   |                                   |
|--------------------------------|------------|--------------------|-------------------|-----------------------------------|
| 1598 University                | 207        | 8 stories          | C-U               | 30 ft                             |
| <b>1750 Sacramento</b>         | <b>739</b> | <b>8 stories</b>   | <b>R-BMU</b>      | <b>8 stories</b>                  |
| 1752 Shattuck Ave              | 74         | 7 stories          | C-C               | 40 ft                             |
| <b>2000 University</b>         | <b>81</b>  | <b>8 stories</b>   | <b>C-DMU Core</b> | <b>60 ft max (75 ft with UP)</b>  |
| 2037 Durant Ave                | 74         | 8 stories          | C-DMU Buffer      | 50 ft max (60 ft with UP)         |
| 2099 Martin Luther King Jr Way | 72         | 7 stories          | C-DMU Buffer      | 50 ft max (60 ft with UP)         |
| <b>2115 Kittredge St</b>       | <b>214</b> | <b>15 stories</b>  | <b>C-DMU Core</b> | <b>60 ft max (75 ft with UP)</b>  |
| <b>2128 Oxford St</b>          | <b>485</b> | <b>26 stories*</b> | <b>C-DMU Core</b> | <b>60 ft max (75 ft with UP)</b>  |
| 2136 San Pablo Ave             | 126        | 6 stories          | C-W               | 40 ft                             |
| 2137 Dwight Way                | 58         | 6 stories          | C-SA              | 36 ft                             |
| 2300 Ellsworth St              | 69         | 7 stories          | R-SMU             | 85 ft                             |
| 2427 San Pablo Ave             | 78         | 5 stories          | C-W               | 40 ft                             |
| <b>2462 Bancroft Way</b>       | <b>66</b>  | <b>8 stories</b>   | <b>C-T</b>        | <b>85 ft max</b>                  |
| 2527 San Pablo Ave             | 63         | 6 stories          | C-W               | 40 ft                             |
| <b>2530 Bancroft Ave</b>       | <b>110</b> | <b>12 stories</b>  | <b>C-T</b>        | <b>85 ft max</b>                  |
| <b>2538 Durant Ave</b>         | <b>83</b>  | <b>8 stories</b>   | <b>C-T</b>        | <b>85 ft max</b>                  |
| 2555 College Ave               | 11         | 4 stories          | R-3               | 35 ft                             |
| <b>2587 Telegraph Avenue</b>   | <b>52</b>  | <b>8 stories</b>   | <b>C-T</b>        | <b>85 ft max</b>                  |
| <b>2701 Shattuck Ave</b>       | <b>57</b>  | <b>5 stories</b>   | <b>C-AC</b>       | <b>6-8 stories</b>                |
| 3030 Telegraph Ave             | 144        | 5 stories          | C-C               | 40 ft                             |
| 805 Jones St                   | 6          | 2 stories          | MU-R              | 35 ft                             |
|                                |            |                    |                   | Base zoning that allows 7 stories |
|                                |            |                    |                   | Increased Height Allowance Proj.  |

| 2023 APR ( 21 projects)    |            |                    |                         |                                  |
|----------------------------|------------|--------------------|-------------------------|----------------------------------|
| 1598 University Ave        | 207        | 8 stories          | C-U                     | 30 ft                            |
| 1717 University Ave        | 28         | 5 stories          | C-U                     | 30 ft                            |
| 1752 Shattuck Ave          | 68         | 7 stories          | C-C                     | 40 ft                            |
| 1773 Oxford St             | 24         | 5 stories          | R-4                     | 35 ft                            |
| 1820 San Pablo Ave         | 44         | 5 stories          | C-W                     | 40 ft                            |
| <b>2023 Shattuck Ave</b>   | <b>48</b>  | <b>7 stories</b>   | <b>C-DMU Core</b>       | <b>60 ft max (75 ft with UP)</b> |
| 2028 Bancroft Way          | 37         | 7 stories          | C-DMU Buffer            | 50 ft max (60 ft with UP)        |
| <b>2065 Kittredge St</b>   | <b>187</b> | <b>8 stories</b>   | <b>C-DMU Core</b>       | <b>60 ft max (75 ft with UP)</b> |
| <b>2067 University Ave</b> | <b>50</b>  | <b>7 stories</b>   | <b>C-DMU Outer Core</b> | <b>60 ft max (75 ft with UP)</b> |
| 2147 San Pablo Ave         | 128        | 6 stories          | C-W                     | 40 ft                            |
| <b>2190 Shattuck Ave</b>   | <b>326</b> | <b>25 stories*</b> | <b>C-DMU Core</b>       | <b>60 ft max (75 ft with UP)</b> |
| 2650 Telegraph Ave         | 45         | 5 stories          | C-C                     | 40 ft                            |
| 2712 Telegraph Ave         | 40         | 6 stories          | C-C                     | 40 ft                            |
| 2800 Telegraph Ave         | 16         | 6 stories          | C-C                     | 40 ft                            |
| 3000 San Pablo Ave         | 16         | 6 stories          | C-W                     | 40 ft                            |
| 3030 Telegraph Ave         | 144        | 5 stories          | C-C                     | 40 ft                            |
| 3031 Telegraph Ave         | 127        | 6 stories          | C-C                     | 40 ft                            |
| 3000 Shattuck Ave          | 166        | 10 stories         | C-SA                    | 36 ft                            |
| <b>2590 Bancroft Way</b>   | <b>87</b>  | <b>8 stories</b>   | <b>C-T</b>              | <b>85 ft</b>                     |
| <b>2532 Shattuck Ave</b>   | <b>204</b> | <b>8 stories</b>   | <b>C-AC</b>             | <b>6-8 stories</b>               |
| 2440 Shattuck Ave          | 40         | 8 stories          | C-DMU Corridor          | 60 ft max (75 ft with UP)        |

Base zoning that allows 7 stories

Increased Height Allowance Proj.

| <b>2022 APR (10 projects)</b> |           |                  |              |                           |
|-------------------------------|-----------|------------------|--------------|---------------------------|
| 1201 San Pablo Ave            | 66        | 6 stories        | C-W          | 40 ft                     |
| 1601 Oxford                   | 34        | 5 stories        | R-3          | 35 ft                     |
| 1950 Addison                  | 107       | 7 stories        | C-DMU Buffer | 50 ft max (60 ft with UP) |
| 2000 Dwight St                | 113       | 6 stories        | R-4          | 35 ft                     |
| 2000 University Ave           | 82        | 8 stories        | C-DMU Buffer | 50 ft max (60 ft with UP) |
| 2012 Berkeley Way             | 142       | 5 stories        | C-DMU Buffer | 50 ft max (60 ft with UP) |
| 2018 Blake                    | 12        | 6 stories        | R-4          | 35 ft                     |
| <b>2435 Haste St</b>          | <b>37</b> | <b>8 stories</b> | <b>R-SMU</b> | <b>85 ft</b>              |
| <b>2590 Bancroft</b>          | <b>87</b> | <b>8 stories</b> | <b>C-T</b>   | <b>85 ft</b>              |
| 2352 Shattuck Ave             | 204       | 8 stories        | C-DMU Buffer | 50 ft max (60 ft with UP) |

Base zoning that allows 7 stories

| <b>2021 APR(6 projects)</b> |           |                  |                   |                                  |
|-----------------------------|-----------|------------------|-------------------|----------------------------------|
| <b>2597 Telegraph Ave</b>   | <b>10</b> | <b>4 stories</b> | <b>C-T</b>        | <b>85 ft</b>                     |
| 3020 San Pablo Ave          | 29        | 5 stories        | C-W               | 40 ft                            |
| <b>2023 Shattuck Ave</b>    | <b>48</b> | <b>8 stories</b> | <b>C-DMU Core</b> | <b>60 ft max (75 ft with UP)</b> |
| 3000 San Pablo Ave          | 78        | 6 stories        | C-W               | 40 ft                            |
| 3031 Telegraph Ave          | 110       | 6 stories        | C-C               | 40 ft                            |
| 2015 Blake St               | 155       | 7 stories        | R-4               | 35 ft                            |

Base zoning that allows 7 stories

| <b>2020 APR (7 projects)</b> |            |                  |             |                    |
|------------------------------|------------|------------------|-------------|--------------------|
| 1367 University              | 39         | 4 stories        | C-U         | 30 ft              |
| 1200 San Pablo Ave           | 104        | 6 stories        | C-W         | 40 ft              |
| 2720 San Pablo Ave           | 25         | 6 stories        | C-W         | 40 ft              |
| 2000 Dwight                  | 113        | 6 stories        | R-4         | 35 ft              |
| 1500 San Pablo Ave           | 170        | 5 stories        | C-W         | 40 ft              |
| <b>2352 Shattuck Ave</b>     | <b>204</b> | <b>8 stories</b> | <b>C-AC</b> | <b>6-8 stories</b> |
| <b>2590 Bancroft</b>         | <b>87</b>  | <b>8 stories</b> | <b>C-T</b>  | <b>85 ft</b>       |

Base zoning that allows 7 stories





# SAN PABLO AVENUE SPECIFIC PLAN



# Plan Acknowledgments

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## Special Thanks

Marcel Pardo Ariza, Artist-in-Residence

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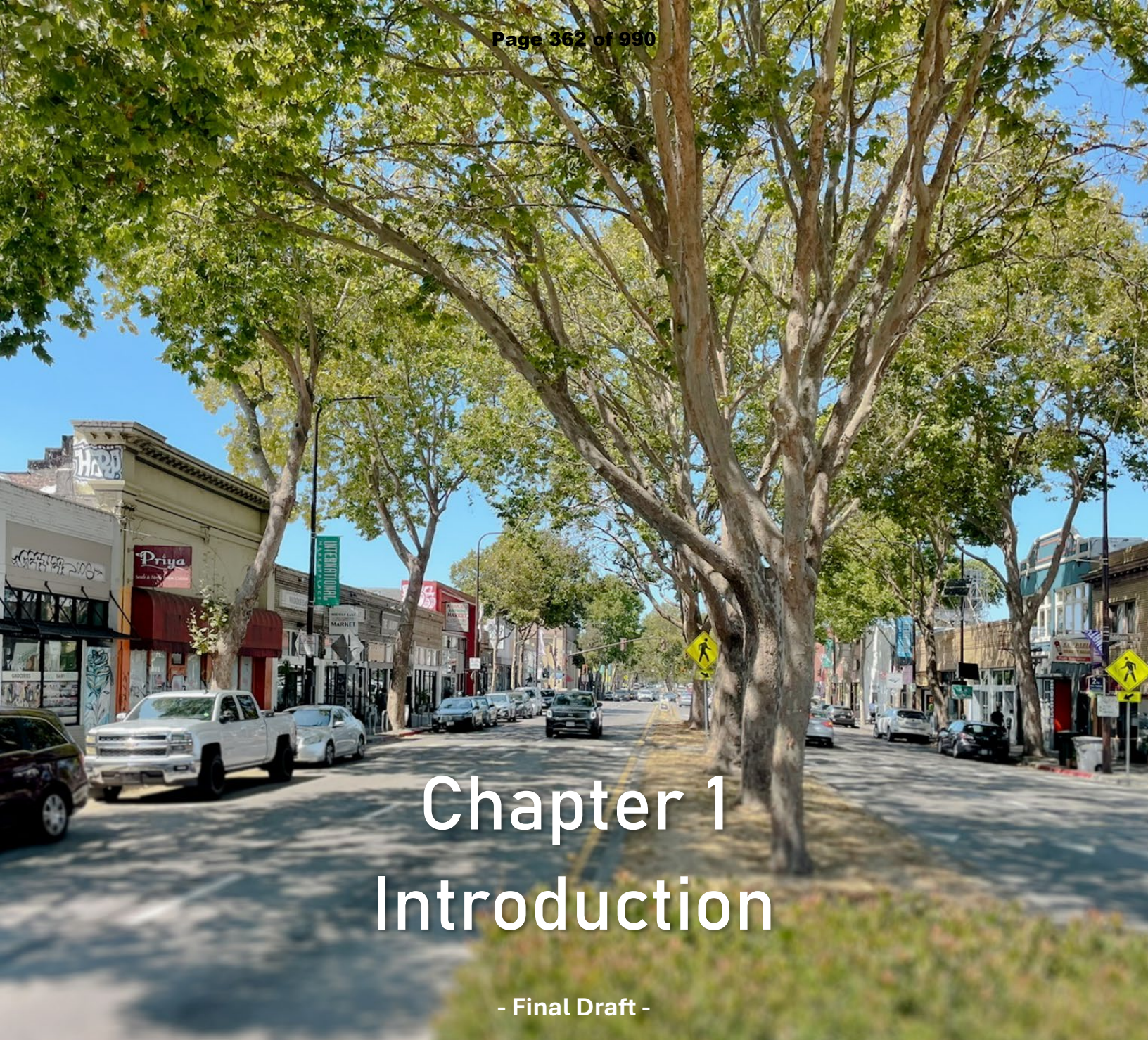
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# Chapter 1

# Introduction

- Final Draft -

San Pablo Avenue is a corridor in transition, shaped by growing demand for housing and fluctuating levels of commercial activity as new businesses open and others close. Existing zoning and State housing laws support additional housing development, but there is no cohesive vision to shape future growth toward a mixed-use district with stronger economic and social vitality.

In 2023, the City of Berkeley launched the San Pablo Avenue Specific Plan process to create a framework for equitable and sustainable development, safer streets, better access to the surrounding community, and a more vibrant economy and public realm. Building on City Council direction from 2015, the Specific Plan planning process prioritized inclusive engagement, with targeted outreach to those who live and work in and around the Specific Plan Area and multiple opportunities for the public to participate and shape the Specific Plan.



## Specific Plan Purpose

The Specific Plan responds to the question: *“What will the future of San Pablo Avenue look like?”* Its purpose is to establish community-based, context-sensitive regulations and policies that articulate a shared vision for a mixed-use district along San Pablo Avenue. Through the planning process, the City, in collaboration with the consultant team and the community, identified improvements and innovative programs that expand opportunities for living, working, shopping, and community life along San Pablo Avenue.

In February 2021, the City of Berkeley received a Priority Development Area (PDA) Planning Grant from the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) to create the San Pablo Avenue Specific Plan.

This Specific Plan establishes a comprehensive framework of land use, public space, transportation, and economic development policies and strategies, including revised standards for allowed uses in existing and new buildings, updated development standards, and design standards for new development. It also outlines programs and policies to support diverse housing options, strengthen new and existing businesses, enhance public amenities, and improve connections between the Specific Plan Area and surrounding neighborhoods and destinations.

### Mutual knowledge exchange

The Specific Plan planning process facilitated meaningful knowledge exchange between the community and the Specific Plan team:

- ❑ Stakeholders gained an understanding of how recent changes in citywide policies and State housing legislation have affected the housing development approvals process. The Specific Plan’s public engagement focused on where the community’s input can be meaningful in the context of streamlined project approvals.
- ❑ Stakeholders identified current community assets and expressed their vision for enhancing them, as well as their aspirations for other positive changes along San Pablo Avenue.
- ❑ Stakeholder input provided insight into the unique aspects of the community and their ideas for the future. This informed Specific Plan policies and standards, the land use map, implementation, strategies, and many other aspects of the Specific Plan.

### Desired outcomes of the planning process

The San Pablo Specific Plan:

- ★ Identifies a community vision and provides a plan for achieving the vision.
- ★ Includes a framework for transforming San Pablo Avenue into a multimodal street that functions well for all users, not just as a thoroughfare, but as a mixed-use place that provides a multitude of opportunities for living, working and taking part in community life.
- ★ Explains, updates and creates new local planning policies, development standards and practices, and highlights their interrelationship, relevancy, and adherence with State, regional, and citywide planning policies and processes.
- ★ Includes implementation strategies with clear actions and responsibilities.
- ★ Prioritizes equity, promotes inclusivity, and strives to eliminate disparities through the Specific Plan’s policies, programs, and implementation strategies.

# Specific Plan Area

## Location

San Pablo Avenue is one of the primary multi-jurisdictional transportation corridors in northern Alameda County and west Contra Costa County, extending as a major street from the Carquinez Bridge to Downtown Oakland, through the cities of Hercules, Pinole, San Pablo, Richmond, El Cerrito, Albany, Berkeley, Emeryville and Oakland. The Specific Plan Boundary (Specific Plan Area) encompasses the 2.35-mile corridor along San Pablo Avenue, from the Berkeley/Albany border in the north to the Berkeley/Oakland border in the south.

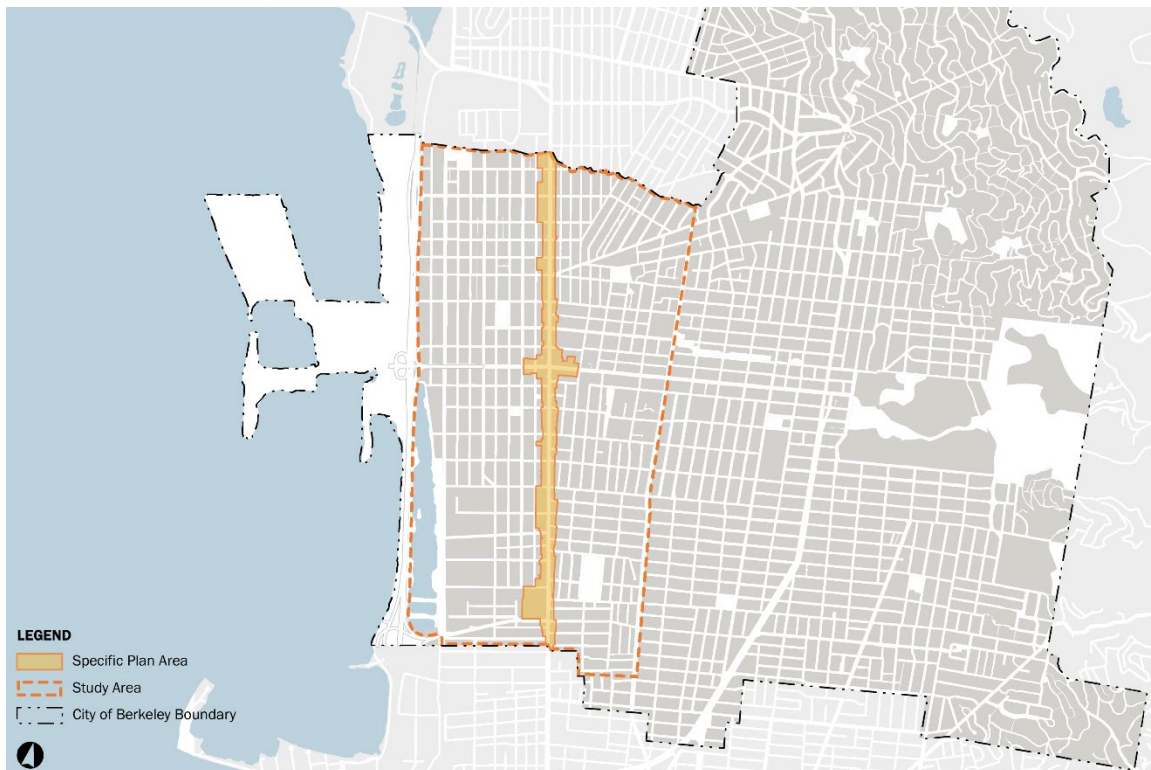
## Study Area

The Study Area includes the neighborhoods, commercial districts, and employment areas that are proximate to and have a strong relationship with the uses along San Pablo Avenue. The Study Area extends from the I-80 freeway in the west to Sacramento Street in the east and from the Albany border in the north to Emeryville and Oakland borders in the south (see Figure 1.2). The Study Area has been studied in select analyses throughout the Specific Plan process to gain an understanding of the



**Figure 1.1 San Pablo Avenue in Berkeley and adjacent cities**  
Data from CD+A, Google Earth. 2025

social and economic relationships between San Pablo Avenue and West Berkeley, to identify historic and culturally significant locations in proximity to San Pablo Avenue, and to identify parks, open spaces, and other community assets that can be used by people living and working in the Specific Plan Area.

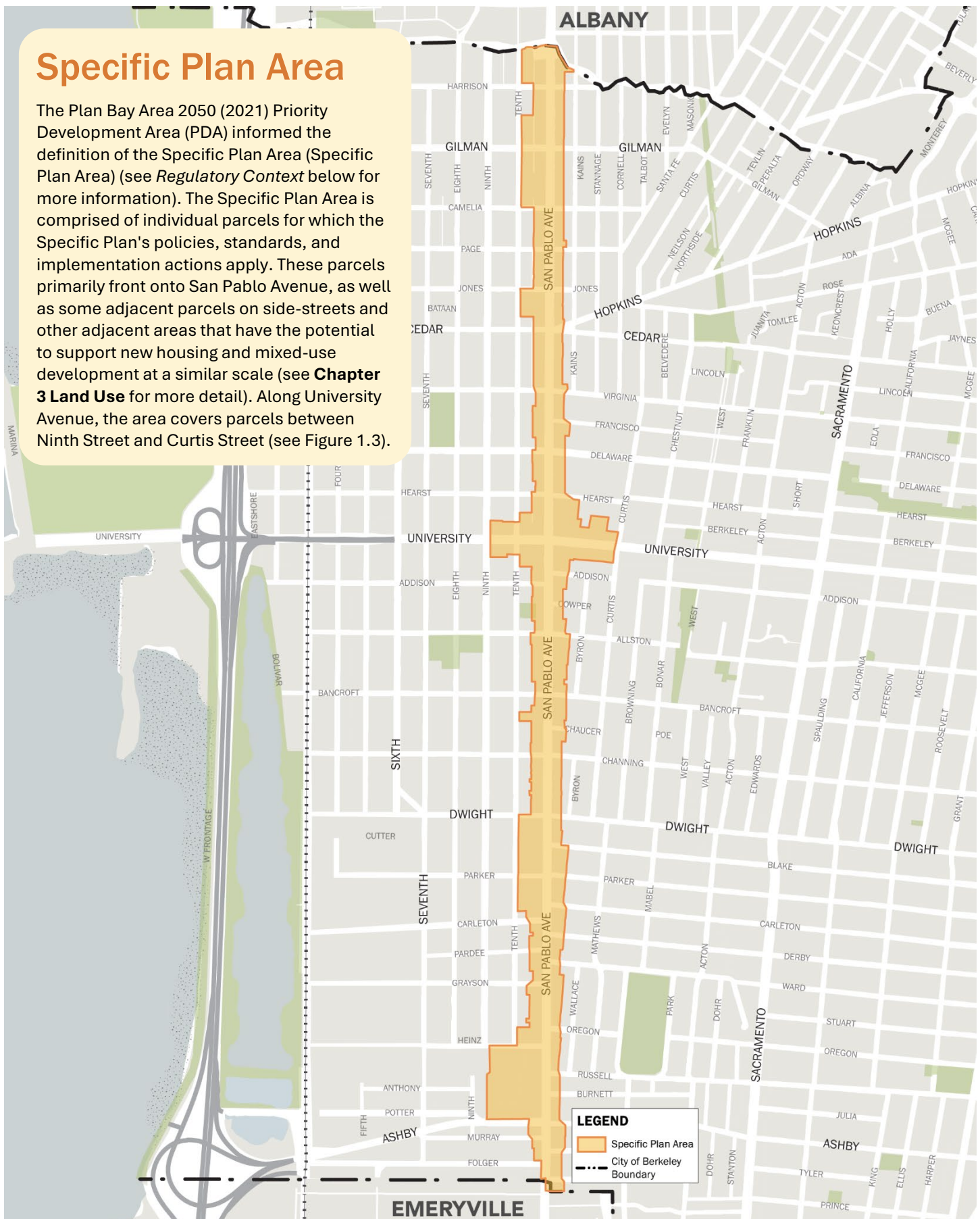


**Figure 1.2 Map of Study Area in relation to the City of Berkeley**  
Data from CD+A, City of Berkeley. 2025



## Specific Plan Area

The Plan Bay Area 2050 (2021) Priority Development Area (PDA) informed the definition of the Specific Plan Area (Specific Plan Area) (see *Regulatory Context* below for more information). The Specific Plan Area is comprised of individual parcels for which the Specific Plan's policies, standards, and implementation actions apply. These parcels primarily front onto San Pablo Avenue, as well as some adjacent parcels on side-streets and other adjacent areas that have the potential to support new housing and mixed-use development at a similar scale (see **Chapter 3 Land Use** for more detail). Along University Avenue, the area covers parcels between Ninth Street and Curtis Street (see Figure 1.3).



**Figure 1.3 Specific Plan Area**

Data from CD+A, City of Berkeley. 2025

## Significance of the San Pablo Avenue Corridor

Running parallel to I-80, San Pablo Avenue connects tens of thousands of people each day to residential neighborhoods, employment centers, schools, public gathering spaces, shopping, services, and other key destinations in the East Bay. The character and intensity of the streetscape, development, and uses along San Pablo Avenue vary along its length; its connectivity and diversity of uses establish it as a mixed-use corridor in the East Bay. As State Route 123, it also functions as a designated reliever route during incidents on the I-80 freeway. Due to this role, the right-of-way in Berkeley is under the jurisdiction of the State of California through Caltrans, requiring the City of Berkeley to obtain Caltrans approval before making physical changes to the street. For these reasons, San Pablo Avenue has been the subject of multiple regional planning efforts – such as the Association of Bay Area’s (ABAG) East Bay Corridor Initiative and Alameda County Transit Commission’s (Alameda CTC) San Pablo Avenue Corridor Projects. Berkeley has taken part in these efforts and has also followed the development and adoption of Specific Plans in neighboring jurisdictions with great interest.



**Figure 1.4 The Key System and Berkeley sign at San Pablo Avenue and University Avenue, ca. 1925.**  
*Photo from Berkeley Public Library. Calisphere, California Digital Library*

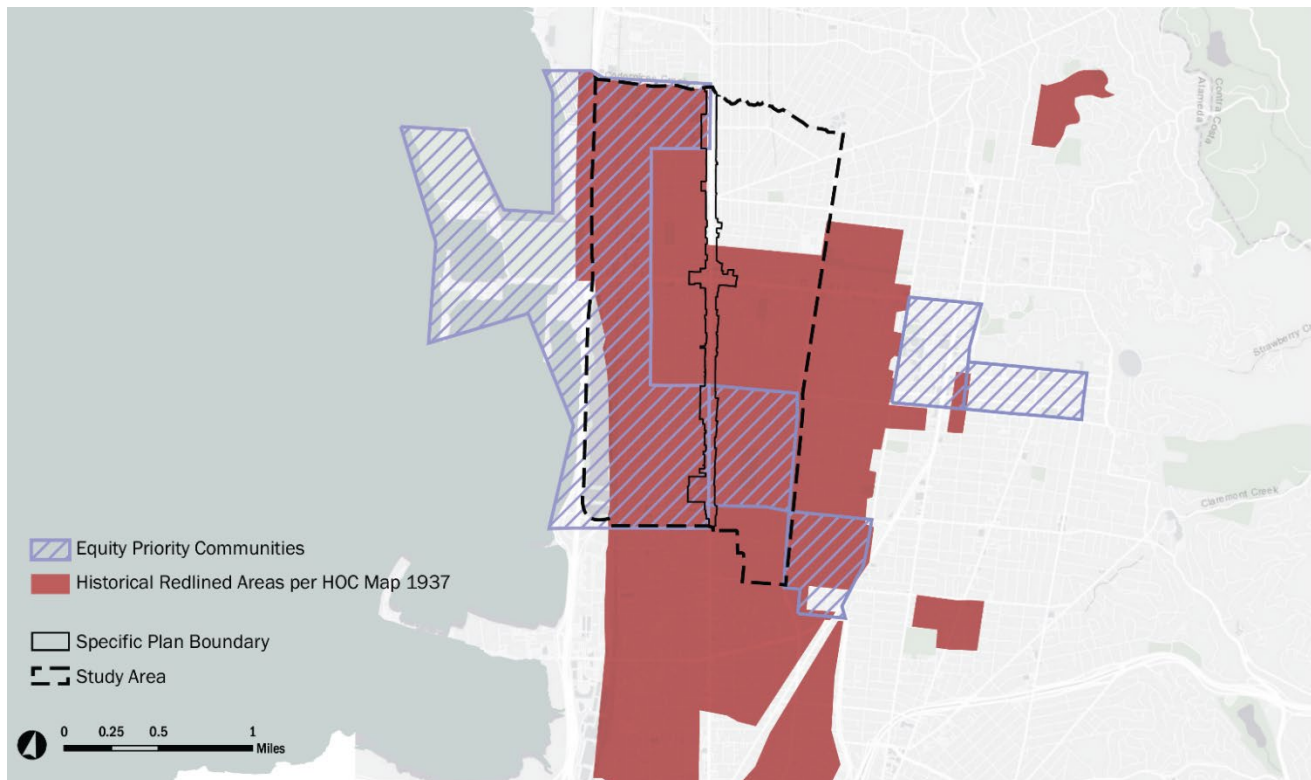
## Historical Context

Originally known as part of the Lincoln Highway in the early 1900s, San Pablo Avenue served as the primary north-south connection from Oakland, through Berkeley and to and through places to the north prior to the construction of I-80. Its original role as a key regional and national route contributed to its designation as a state highway and shaped the avenue's pattern of region-serving, auto-oriented land uses.

San Pablo Avenue and the Study Area are also part of West Berkeley's history of ethnic and racial segregation. On the 1937 federal Home Owners' Loan Corporation (HOLC) redlining maps, much of West Berkeley — particularly the neighborhoods near San Pablo Avenue — were marked in red and deemed “hazardous” for investment, largely because of the presence of African American, Asian American, and immigrant communities (see Figure 1.5).<sup>1</sup> These classifications led to systematic disinvestment, exclusion from mortgage lending, and lasting economic and environmental inequalities. As a result, West Berkeley became both a hub of diverse

working-class communities and a target of discriminatory practices limiting their access to housing elsewhere in the city.

At the same time, the area west of San Pablo Avenue developed as one of Berkeley's primary industrial and manufacturing centers. Industries such as ironworks, chemical production, food processing, and printing thrived, drawing on the surrounding diverse workforce. Although large-scale manufacturing declined after World War II, West Berkeley's industrial legacy remains visible in its historic building stock. Today, a new generation of small-scale manufacturers, makers, and biotechnology firms are located within the Study Area west of San Pablo Avenue, continuing the role of West Berkeley as a center of production and innovation. The Specific Plan Area's proximity to West Berkeley has led to some complementary businesses locating on San Pablo Avenue and supports general business vitality along San Pablo Avenue.



**Figure 1.5 Historical Redlined Areas and Equity Priority Communities Map**

Data from CD+A; R.K.Nelson and E.L.Ayers, *Mapping Inequality*, 2023; MTC, Equity Priority Communities, 2021

<sup>1</sup> A detailed review on the History of Redlining in the East Bay can be found here:

<https://dsl.richmond.edu/panorama/redlining/map/CA/Oakl>

[and/context#loc=12/37.8839/-122.2562](#). Last accessed 10/02/2025.



## Community Demographics

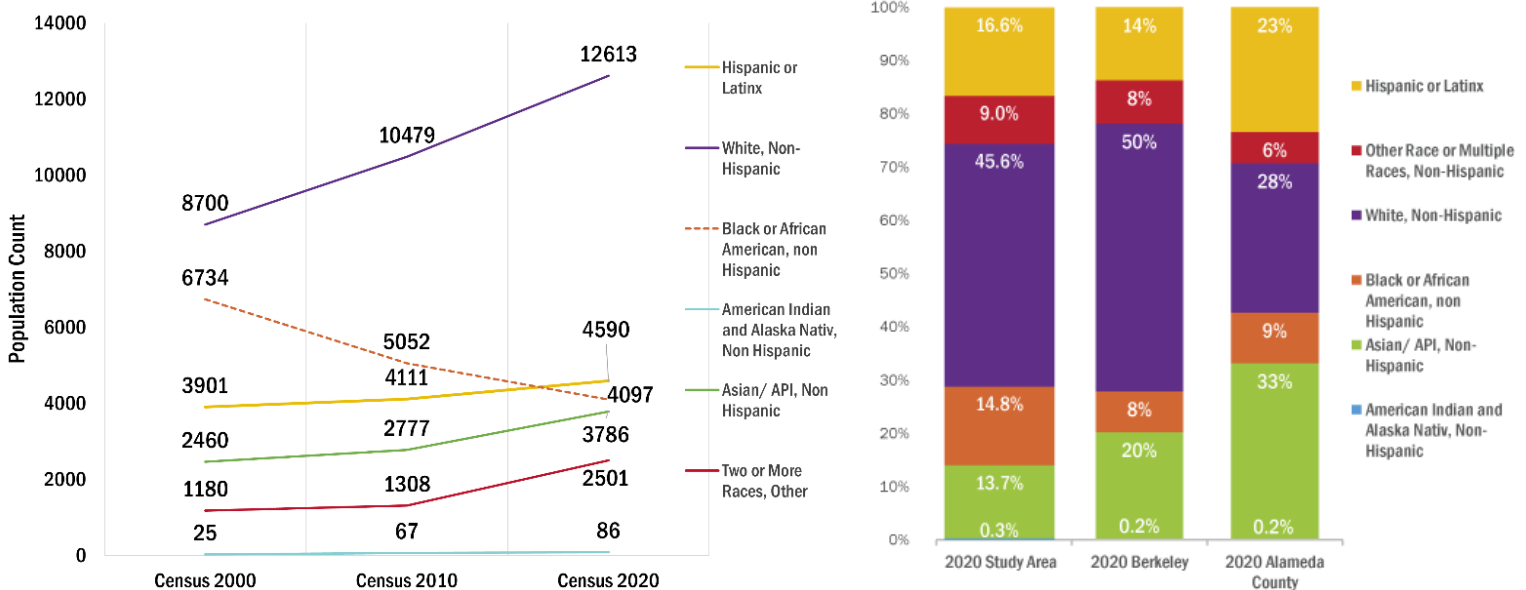
The Study Area has a greater racial and ethnic diversity compared to the city as a whole and Alameda County, with a notably higher Black population. This pattern reflects the legacy of historic redlining that shaped neighborhood demographics and limited mobility for communities of color. Although the Supreme Court ruled racially restrictive covenants unenforceable in *Shelley v. Kraemer* (1948), redlining persisted until the Fair Housing Act of 1968 prohibited the practice. Its impacts persist today, as formerly redlined areas continue to experience greater economic inequality and higher risk of displacement.

As neighborhoods within the Study Area continue to grow, demographic shifts have varied across racial and ethnic groups. From 2000 to 2020, the White population increased by over 3,900 (+45%), while the Black population decreased by over 2,600 (-39%) (see Figure

1.6). The population increase of Hispanic/Latinx, Asians/API, and other races during that period was moderate.

The Study Area's population in 2020 was 26,360. The population grew 16% between 2010 to 2020, representing 22% of the city's total population and outpacing the city's overall population growth of 9% in the same period.<sup>2</sup>

As a result of being historically underserved, some census blocks within the Study Area are part of the Metropolitan Transportation Commission (MTC)'s Equity Priority Communities (EPCs). The EPC designation helps provide funding and assistance to census tracts that have a significant concentration of underserved populations.<sup>3</sup>



**Figure 1.6 Study Area Demographic Change and Comparisons**

Left: Change in Study Area Racial and Ethnic Mix from 2000 to 2020. Data from United States Census Bureau. Decennial Census. 2000 and 2010, Table P7, and 2020, Table P1.

Right: Comparison of Racial and Ethnic Mix in Study Area, Berkeley, and Alameda County. Data from United States Census Bureau. Decennial Census. 2020, Table P1.

<sup>2</sup> United States Census Bureau. Decennial Census. 2010, Table P7. 2020, Table P1.

<sup>3</sup> To learn more about the MTC/ABAG's EPC designation and methodology, visit [mtc.ca.gov](https://mtc.ca.gov).

## Economic Vitality Conditions

San Pablo Avenue is a unique commercial corridor in Berkeley, historically defined by regional and specialty businesses, along with uses connected to industry and manufacturing. Previous city plans and economic assessments have characterized San Pablo Avenue in ways that remain relevant today:

- **Historic industrial identity:** Once a center for manufacturing and production, the West Berkeley neighborhoods adjacent to San Pablo Avenue still include industrially zoned areas. Automotive and repair-related businesses continue to operate in the Specific Plan Area, contributing to the local and regional economy.<sup>4</sup>

- **Commerce and production:** Many businesses in the Specific Plan Area produce goods on-site and sell directly to customers, occupying a niche at the intersection of commerce and light industry.<sup>4</sup>
- **Regional destination:** San Pablo Avenue functions primarily as a destination for specialized goods and services, such as auto repair, construction materials, home improvement, specialty retail, and restaurants, rather than serving as a walkable, neighborhood-serving retail district.<sup>5</sup>

This strong regional identity can at times be at odds with local aspirations for a more walkable, mixed-use environment that supports multi-modal transportation options, a broad range of businesses, and new infill housing.

## Vacancy and Broader Economic Impacts

San Pablo Avenue experienced a significant rise in ground-floor commercial vacancies in the years following the COVID-19 pandemic. Data from the City of Berkeley's Office of Economic Development indicates that San Pablo Avenue's ground floor commercial vacancy rate (by square footage) doubled from 5.5% in 2017 to 10.8% in 2022. The rate peaked in 2023 at 15.5%, reflecting ongoing challenges for local businesses.

By 2024, the vacancy rate had declined to 7.1% along San Pablo Avenue<sup>6</sup>, though there was a slight increase through 2025 to 8.44%<sup>7</sup>. By comparison, the average citywide vacancy rate was 7.5% in 2024 and 6.3%<sup>8</sup> in 2026.

During the planning process, there were several high-profile closures along San Pablo Avenue, many of which were establishments with broad name recognition and historic and cultural significance in Berkeley. KC's BBQ, for instance, was a Black-owned, family-run business that first opened in 1968; Kirsten Davis, a third-generation co-owner told [NBC Bay Area in April 2023](#) that "The brick and mortar are a monster for a lot of small businesses. People are trying to find funding and to hold onto and retain employees."

Despite these closures, the decline in vacancy rate and the arrival of new neighborhood-serving businesses

suggest that the Specific Plan Area could be on the cusp of a period of renewal. The Specific Plan aims to build on these conditions by encouraging small business retention, improving storefront vitality, and reinforcing the Specific Plan Area's role as a diverse, mixed-use district.



**Figure 1.7 Vacant Storefront along San Pablo Avenue.**  
Photo by CD+A. August, 2023

<sup>4</sup> City of Berkeley. Office of Economic Development's 2016 Economic Development Work Session, 2016. p.9, 13.

<sup>5</sup> City of Berkeley. [2022 Economic Dashboard](#). Office of Economic Development, 2022.

<sup>6</sup> City of Berkeley. [Berkeley Economic Dashboards Update](#), 25 Feb. 2025, p. 3. Accessed 6 May 2025.

<sup>7</sup> City of Berkeley. [2025 Commercial District Dashboard](#). Office of Economic Development, Feb. 2026.

<sup>8</sup> City of Berkeley. [2025 Economic Dashboard](#), Feb. 2026.

# Planning Context

The San Pablo Avenue Specific Plan is a key component of Berkeley's broader long-range planning efforts. The Specific Plan's policies and implementation strategy reflect recent changes in State housing and land use law that require a new approach to local planning. The Specific Plan is consistent with State guidance for the preparation of a specific plan, as identified in the California Government Code §65450-65457.

## Regulatory Context

### Citywide Policies

The City's **General Plan**, adopted in 2002, outlines Berkeley's long-range vision and priorities for growth, development, and conservation. It includes elements on Land Use, Transportation, Housing, Disaster Preparedness and Safety, Open Space and Recreation, Environmental Management, Economic Development and Employment, Urban Design and Preservation, Citizen Participation, and Implementation.

The Specific Plan will serve as an extension of the General Plan, providing policy and regulatory guidance tailored to the Specific Plan Area. All land-use decisions are consistent with the goals, objectives, and policies of the General Plan.

The **Housing Element** of the City's General Plan serves as the City's framework for housing goals, policies, and programs for meeting existing and future housing needs and increasing affordable housing opportunities to accommodate the Regional Housing Needs Allocation (RHNA) established by the State. In the 2023-2031 Housing Element Update, approximately 31%, or 2,023, of the housing units needed to accommodate the RHNA fall within the Specific Plan Area, indicating the Specific Plan Area's potential to accommodate a significant share of future housing. The Housing Element also identified land use and zoning actions to help meet the RHNA, including the implementation *Program 27- Priority Development Areas (PDAs), Commercial and Transit Corridors* to develop San Pablo Avenue as a PDA.

The **West Berkeley Plan** (adopted in 1993 and amended in 2011) defines the City's key land use, environmental, economic development, transportation, housing and social services, and physical form policies for West Berkeley, which includes the Specific Plan Area, as well as parts of the broader Study Area to the west of San Pablo Avenue. The West Berkeley Plan defines West Berkeley's land use to support desired economic

development, as well as identifies retail "nodes", including those that are now "designated nodes" in the C-W West Berkeley Commercial District zoning standards.

With the adoption of the San Pablo Avenue Specific Plan, the West Berkeley Plan would be retired.). Additional details can be found in **Chapter 3 Land Use** and in **Chapter 6 Administration Implementation**.

### Regional Policies

The PDA designation stems from **Plan Bay Area 2050**, which is a long-range regional plan developed by the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG).<sup>9</sup> Plan Bay Area 2050 includes strategies to improve housing, the economy, transportation, and the environment with a focus on the region. As part of this effort, PDAs in Berkeley were identified by the City and Bay Area Metro to promote sustainable development patterns for jobs and housing in walkable and transit-oriented infill locations. The PDA designation increases the City's eligibility for funding to support improvements in a PDA and improvements outside of a PDA that provide benefit to it.

<sup>9</sup> More information regarding Priority Development Areas (PDAs) can be found on the Metropolitan Transportation Commission's Website [mtc.ca.gov](https://mtc.ca.gov).

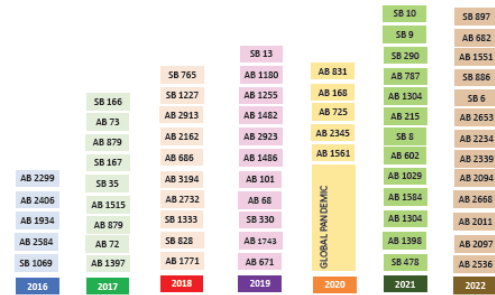


## State Legislation

Many State laws and regional policies related to housing and land use have been approved since the adoption of the City's General Plan in 2002. The Berkeley Municipal Code continues to be updated to remain consistent with these laws and policies. Many recent State laws have made changes to the development review and approval process, timeline, and requirements, as well as defined limitations on the City's discretion regarding project approval, conformance with certain development standards, and the applicability of the California Environmental Quality Act (CEQA).

### Key California Laws that Support Housing

- Housing Accountability Act – No net loss of housing capacity
- Senate Bill (SB) 330 - Streamlining
- SB 35 - Ministerial Approvals for affordable housing projects
- Density Bonus Law – waive or reduce development standards



Example of increase in approved housing-related legislation between 2016-2022

**Figure 1.8 Key California Laws that Support Housing**  
Graphic by UPP, 2025

## Relationship to other Planning Documents and Projects

Other related plans and improvements that support the goals of the Specific Plan are discussed in their respective chapters. Key connections to the Specific Plan are summarized below:

- The 2016 **San Pablo Avenue Commercial Corridor Report** highlighted the area's economic growth and diversity, identifying long-term opportunities for land use, transportation, and public realm improvements. While it did not propose immediate actions, its recommendations, such as sidewalk upgrades, public art, and branding, helped inform the goals of **Chapter 4 Economic Development**.
- Previous planning efforts have addressed streetscape issues along San Pablo Avenue. The **San Pablo Avenue Public Improvements Plan**, adopted on December 7, 2004, aimed to enhance San Pablo Avenue for pedestrians, cyclists, drivers, and transit users, while also supporting revitalization of the surrounding area. While some improvements have been implemented, others remain unaddressed or are outdated. The Specific Plan includes updated streetscape standards as part of its public realm improvement strategy, outlined in **Chapter 5 Streets**. The Public Improvements Plan will be retired with the adoption of the Specific Plan, see **Chapter 6 Administration and Implementation**.
- The **Transit-First Policy Implementation Plan** (2022) identifies San Pablo Avenue as a Primary Transit Route and a corridor for future study of transit infrastructure needs based on the AC Transit Major Corridors Study (2016). It describes the **Alameda CTC's San Pablo Avenue Corridor Project** as the lead effort for designing transit improvements along the Avenue. Concurrent with the Specific Plan development, the Alameda CTC San Pablo Avenue Corridor Project is providing key improvements in the Specific Plan Area to improve safety and transit reliability along San Pablo Avenue.
- The **2023–2031 Housing Element** includes aims to establish clear and objective development standards in compliance with State law, while reassessing land uses and permitting processes to support future growth along these key corridors. The **San Pablo Avenue Design Standards Document** has been developed with the goal of creating cohesive, high-level design guidance that aligns with the citywide approach.

# Community Engagement and Specific Plan Development Process

The Specific Plan's community engagement process provided multiple opportunities for participants to share perspectives, ideas and feedback, representing a broad range of existing and future residents, workers, business owners, property owners, and street users. The process also included close collaboration with City staff and included regular discussions with the Planning Commission and City Councilmembers, as well as collaboration with staff from regional planning and transportation agencies.

## Engagement Events and Methods

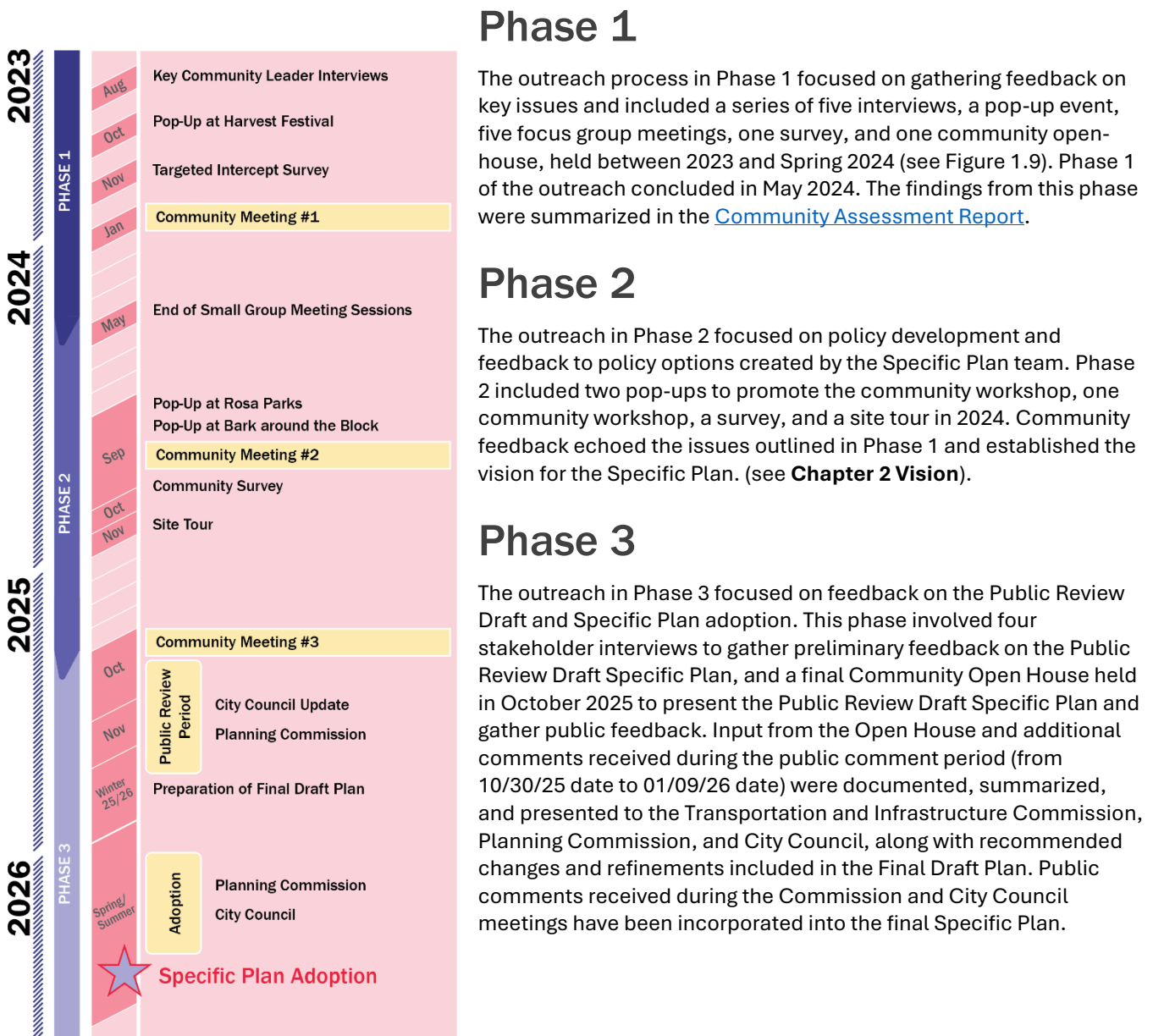


Figure 1.9 Community Engagement Timeline

### Phase 1

The outreach process in Phase 1 focused on gathering feedback on key issues and included a series of five interviews, a pop-up event, five focus group meetings, one survey, and one community open-house, held between 2023 and Spring 2024 (see Figure 1.9). Phase 1 of the outreach concluded in May 2024. The findings from this phase were summarized in the [Community Assessment Report](#).

### Phase 2

The outreach in Phase 2 focused on policy development and feedback to policy options created by the Specific Plan team. Phase 2 included two pop-ups to promote the community workshop, one community workshop, a survey, and a site tour in 2024. Community feedback echoed the issues outlined in Phase 1 and established the vision for the Specific Plan. (see **Chapter 2 Vision**).

### Phase 3

The outreach in Phase 3 focused on feedback on the Public Review Draft and Specific Plan adoption. This phase involved four stakeholder interviews to gather preliminary feedback on the Public Review Draft Specific Plan, and a final Community Open House held in October 2025 to present the Public Review Draft Specific Plan and gather public feedback. Input from the Open House and additional comments received during the public comment period (from 10/30/25 date to 01/09/26 date) were documented, summarized, and presented to the Transportation and Infrastructure Commission, Planning Commission, and City Council, along with recommended changes and refinements included in the Final Draft Plan. Public comments received during the Commission and City Council meetings have been incorporated into the final Specific Plan.



### What We've Heard

The community expressed strong support for developing more affordable, mixed-income housing, with a majority in favor of higher-intensity development along San Pablo Avenue. However, some participants voiced concerns that excessive building height or bulk could create a “tunnel effect” limiting sunlight and worsening the pedestrian experience.

There was broad agreement that the current sidewalks and mobility conditions are inadequate. Participants emphasized the need for safety and public realm improvements, including wider sidewalks, better pedestrian lighting, additional greenery, and public art to enhance comfort, livability and street identity.

Community members also supported activating ground floors with flexible commercial and creative uses. This approach is intended to reduce vacancies, prevent inactive storefronts, and strengthen the overall pedestrian experience in the Specific Plan Area.

## Marcel Pardo Ariza: Municipal Artist-in-Residence

As part of the 2023-2024 Print Public Municipal Artist-in-Residence at Kala Art Institute, artist Marcel Pardo Ariza worked with Robert Rivera and the San Pablo Avenue Specific Plan process. In response to the San Pablo Avenue Corridor Study and in dialogue with local community members, Marcel Pardo Ariza highlighted and celebrated seven local businesses along San Pablo Avenue: CASA LATINA, Belmo Cafe, Middle East Market, Heyma Yemeni Coffee, Rainbow Donuts, Everett & Jones, and Mi Ranchito Bayside Market. Through this exploration, Ariza emphasized the critical role these

businesses play in the fabric and legacy of the community, underscoring the urgent need for City support in a landscape where vacant retail spaces proliferate across the Bay Area.

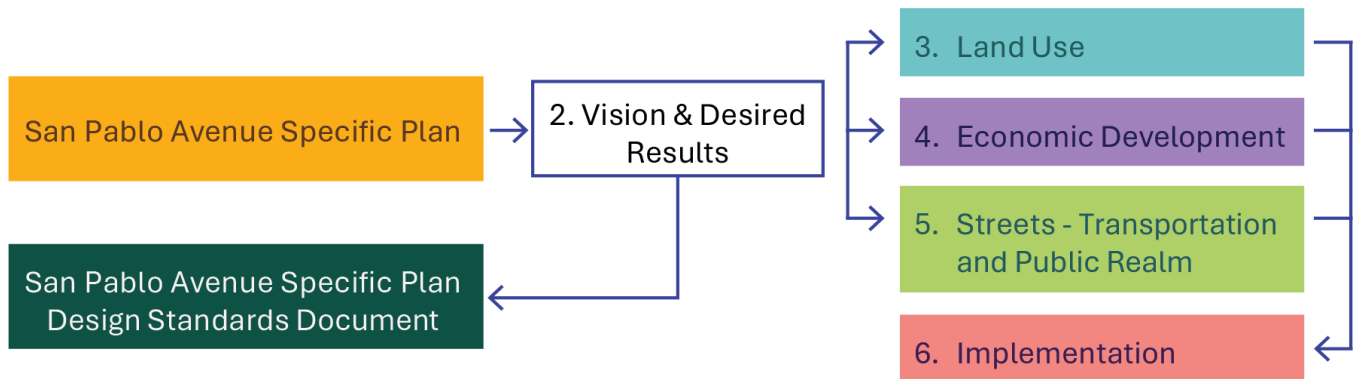
As part of the Municipal Artist-in-Residence, Marcel Pardo Ariza and Cheryl Derricotte presented their exhibition *Roadwork* at Kala Gallery from October 24, 2024, to February 14, 2025.



**Figure 1.10** Images of Marcel's work for the *Roadwork* Exhibition  
Photos by Marcel Pardo Ariza, 2024

# Specific Plan Organization

The Specific Plan is organized into six chapters.



**Chapter 1** serves as the introduction to the Specific Plan, while **Chapter 2** lays out the visions and goals of the Specific Plan. **Chapters 3 through 5** form the core of the Specific Plan, outlining the proposed policies, programs, and standards that advance the vision and goals established in Chapter 2. While each chapter focuses on a primary topic, they are not mutually exclusive, and therefore, many policies are interrelated and advance the overall vision and goals across multiple topic areas. For example, policies in the Land Use (Chapter 3) and Streets – Transportation and Public Realm (Chapter 5) chapters also support economic development (covered in Chapter 4) by shaping where commercial and retail activity is prioritized as well as the pedestrian experience throughout the Specific Plan Area.

The Specific Plan concludes with **Chapter 6 Administration and Implementation**, which summarizes key priorities and actions needed to carry out the Specific Plan across each topic area.

The Specific Plan is accompanied by the **San Pablo Avenue Design Standards Document (Design Standards Document)**. The Design Standards Document is a tool to help implement the vision and guiding principles of the Specific Plan. The intent of the Design Standards Document is to work in coordination with the policies of the Specific Plan to implement its vision. The Design Standards Document provides a clear set of objective standards while allowing flexibility and creativity in design. In addition to the standards contained in the Zoning Ordinance, projects must comply with the Design Standards Document.

## Appendices:

- Appendix A: Key Existing Conditions
- Appendix B: Opportunity Sites
- Appendix C: Buildout Summary Memorandum
- Appendix D: Street Improvements

## How to use this Document

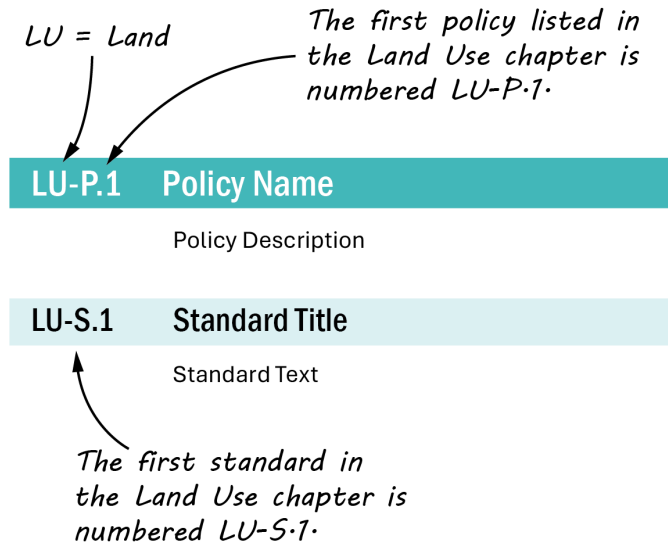
This Specific Plan includes land use, economic development, public space, and transportation policies and standards to support the Vision and Desired Outcomes outlined in **Chapter 2 Vision**. To ensure clarity and ease of use:

**Policies** are the core statements of intent that guide decision-making. They articulate the policies that will guide and shape future development, community benefits, public investment, and implementation actions to achieve the community's vision and desired outcomes for the Specific Plan Area. Policies are organized in the *Land Use, Economic Development, and Streets* chapters. Each policy is numbered using the first letters of their respective chapter, followed by a "P" and a sequential number. For example, the first policy listed in the **Chapter 3 Land Use** is numbered "LU-P.1". All policies appear in the chapter's designated color.

**Standards** are measurable requirements that implement the Specific Plan's policies. They include zoning regulations and development requirements. Standards follow the same numbering system as the policies, using "S" instead of "P". For example, the first standard in the **Chapter 3 Land Use** is numbered "LU-S.1". All Standards appear in the chapter's designated color.

Specific standards are provided directly under the policy they intend to implement. These standards indicate their direct relationship to the corresponding policy. The land use and development standards are summarized in the Specific Plan while the detailed standards are in the Berkeley Municipal Code and the Design Standards Document.

**Chapter 6 Administration and Implementation** includes a discussion of the environmental review of the Specific Plan; a series of Implementation Tables, which outlines implementation actions, responsibilities, timelines, and funding mechanisms to carry out the Specific Plan's goals, and a discussion of how the Specific Plan will be administered including how it can be amended over time.





# Chapter 2

## Vision and Guiding Principles

- Final Draft -

The community envisions the Specific Plan Area as a mixed-use district that is integrated with the neighborhoods and employment areas that surround it.

*“[We need a] [l]ively corridor where people from all walks of life can enjoy, mingle, and support local businesses. Good mix of housing, restaurants, stores (and grocery stores).”*

*– Open House Comment*

Central to this vision is redefining San Pablo Avenue not simply as a car-centric corridor, but as a place that connects east to west Berkeley and serves as an extension of surrounding neighborhoods.



## Vision

*“It is essential to ensure that the plan addresses the needs of the historically underserved communities around San Pablo Avenue.”*

– Community advocate from Beautiful San Pablo

### More Housing Choices

The Specific Plan encourages more housing along San Pablo Avenue, offering more variety of unit types and building designs that meet the needs of residents ranging from young singles to families, seniors, and others. New and refined design standards, land use, and other policies for new development, paired with incentives for community-oriented spaces, seek to foster social interaction, support local businesses, and strengthen connections between new residents and the broader community.

### Increased Business Activity to Support a Thriving Community

The Specific Plan envisions San Pablo Avenue as a vibrant and economically resilient corridor with welcoming storefronts, active ground floors, and businesses that contribute to an engaging public realm. Support for small and locally owned businesses encourages activation of ground-floor spaces and fosters a diverse mix of creative, community-oriented uses. Partnerships between businesses, the City, and neighborhood groups will facilitate community and cultural events that strengthen the identity of the Avenue and establish San Pablo Avenue as a distinctive mixed-use district.

*“It is our urban center or spine. Be more for the people that live here. [We are] [m]issing boutiques, groceries, and practical things.”*

– Open House Comment

### Enhanced Interaction Between Public and Private Spaces

The Specific Plan envisions streets where public and private spaces interact to support daily life and community vitality. Wider sidewalks, small plazas, and other gathering spaces provide welcoming places or “third spaces” for recreation, social interaction, and community events. Investments in street furniture, lighting, and landscaping aim to enhance safety, comfort, and accessibility for people of all ages and abilities, while preserving and expanding the tree canopy to create a greener, more inviting streetscape.

### Enhanced Local and Citywide Access

*“San Pablo Avenue is stressful. Just realized it acts as a border, and I hate crossing over it. Increase space for people, less space for cars (i.e. parklets, bulb outs, turn median into park.)”*

– Open House Comment

The Specific Plan aims to build upon ongoing City-led and broader, regional efforts to transform San Pablo Avenue into a safe, inclusive, and welcoming thoroughfare that prioritizes access and mobility for people of all ages and abilities. By improving crossings, lighting, and streetscape design, and by supporting reliable transit and active transportation options, the street network can better connect residents to neighborhoods, parks, jobs, and the waterfront. This integrated approach reduces reliance on cars while preserving essential vehicle access and circulation.

## Guiding Principles

How does the vision translate into guiding principles? The table below outlines the guiding principles for each policy area. The table also illustrates where to find more detailed information about each policy area within the Specific Plan. The Specific Plan chapters are abbreviated as follows: LU = Land Use, ED = Economic Development, PR = Streets and Public Realm, T = Streets and Transportation. The *Design Standards Document* is abbreviated: DS = Design Standards.

|                                                                                    |                                                                             |                |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------|
|    | <b>More Housing Choices</b>                                                 |                |
|                                                                                    | Revised Housing Development Regulations                                     | LU, DS         |
|                                                                                    | Increased Housing Affordability                                             | LU             |
|                                                                                    | Support a Range of Housing for Diverse Resident Needs                       | LU             |
|    | Encourage Engaging Buildings and Site Frontages                             | LU, DS         |
|                                                                                    | <b>Increased Business Activity to Support a Thriving Community</b>          |                |
|                                                                                    | Increased Local Business Vitality and Growth                                | LU, ED         |
|                                                                                    | Reduced Vacancy of Ground Floor Space                                       | LU, ED, PR, DS |
|   | Identifiable Commercial Areas with Stronger Business Presence               | LU, ED, DS     |
|                                                                                    | <b>Enhanced Interaction Between Public and Private Spaces</b>               |                |
|                                                                                    | Increased Amount and Quality of Sidewalk Space                              | LU, T, PR      |
|                                                                                    | Improved Streetscape                                                        | PR             |
|                                                                                    | More Public Open Space and Community Gathering Spaces                       | PR, DS         |
|                                                                                    | More Public Art in Public Space and on Buildings                            | PR, DS         |
|  | Increased Cultural Programming and other Community Activity in Public Space | LU, ED, PR     |
|                                                                                    | <b>Enhanced Local and Citywide Access</b>                                   |                |
|                                                                                    | Enhanced Pedestrian and Bicycle Safety and Access                           | T, PR, DS      |
|                                                                                    | Improved Transit Access and Frequency/Availability                          | T              |
|                                                                                    | Reduced Number and Severity of Collisions                                   | T              |
|                                                                                    | Improved Management of On-Street Parking and Loading                        | T              |





# Chapter 3 Land Use

-Final Draft -

The land uses along San Pablo Avenue have been shifting away from an historically regional-serving, auto-oriented land use pattern of primarily commercial and light industrial businesses. The Specific Plan Area is now seeing the addition of higher density residential and more local-serving commercial uses that are beginning to transform the Specific Plan Area into a more vibrant, mixed-use district.



This chapter establishes a land use and development framework to help achieve the community's vision, focusing on policies and development standards that will achieve the following outcomes:

- ★ Increase the variety of housing types and the supply of housing at all affordability levels;
- ★ Support commercial vitality and reduce ground-floor vacancies;
- ★ Promote active, pedestrian-oriented development and public realm improvements; and
- ★ Coordinate land use with transportation and infrastructure investments.

Together with policies and programs in **Chapter 4 Economic Development**, **Chapter 5 Streets - Transportation and Public Realm**, as well as the *Design Standards Document*, and **Chapter 6 Administration**

**and Implementation**, the Land Use policies and standards provide a unified framework to guide the continued transformation of the Specific Plan Area into a mixed-use district that supports Berkeley's housing, equity, and economic goals while strengthening its role as a central place for community life.

The Specific Plan supersedes the 1993 West Berkeley Plan for all properties within the Specific Plan Area while carrying forward its key goals related to land use and community character. All future development must comply with both this Specific Plan and the Berkeley Municipal Code (BMC). Title 23 of the BMC contains the zoning provisions that implement the Specific Plan, and any topics not addressed here are governed by the BMC, applicable building codes, and other local, County, State, and federal laws and regulations.



### Summary of Community Vision

As detailed in **Chapter 2 Vision and Guiding Principles**, the community envisions the Specific Plan Area as a mixed-use district that is integrated with the neighborhoods and employment areas that surround it. The Plan Area serves Berkeley's broad range of community members and continues to support citywide and regional needs.

# Existing Local and State Land Use Policies and Standards

The Specific Plan land use framework is guided by both recent State housing laws and the City's 2023-2031 Housing Element Update (HEU). State laws – including the Housing Accountability Act (HAA), Density Bonus Law, Senate Bills (SB) 35 and 330, and more recently Assembly Bill (AB) 130 and SB 131 – have made changes to the development review process, timelines, and requirements, and have defined limitations on the City's discretion regarding project approval, conformance with certain development standards, and the applicability of the California Environmental Quality Act (CEQA). These State laws have modified the City's review process and have resulted in more streamlined review.

At a local level, the City's Housing Element Update (HEU) establishes goals, policies, and programs to address housing affordability, preservation, production, and equity. Of particular relevance, **Program 27 – Priority Development Areas, Commercial and Transit Corridors**, directed the initiation of the Specific Plan to increase densities, evaluate design standards and public improvements, and incentivize affordable housing. The Specific Plan therefore functions as the primary tool to implement Program 27 while aligning with State housing requirements and advancing the City's adopted housing strategies. A full description of applicable State and local policies is provided in **Appendix A**.



## Berkeley's Planning Context on Affordable Housing

**Housing Element Update** establishes a framework to increase affordable housing opportunities, which was a driving factor for the creation of this Specific Plan.

**Berkeley's Housing Trust Fund** pools funding and administers grants for affordable housing construction and renovation.

**Inclusionary Housing Ordinance** (BMC 23.328) requires developers to contribute to the growth of affordable housing in the city.

**Berkeley's Affordable Housing Preference Policy (July 2023)** gives people who have lost or are at risk of losing housing in Berkeley priority when new affordable housing units become available.

For more detail on Affordable Housing, see **Appendix A – Affordable Housing Policies and Potential Production**.

## Land Use Plan

### Existing Land Use and Zoning

The Specific Plan Area contains a mix of residential, commercial, and light manufacturing uses. Residential uses include single-family, multi-family, mixed-use, and live/work uses. There are a variety of existing commercial uses; however, the most common uses include services<sup>1</sup>, vehicle service and sales, restaurants, manufacturing uses, and retail establishments. Common business types include automobile repair and home-improvement supply businesses. Many of these businesses are locally owned and operate with brick-and-mortar storefronts, contributing to the street's unique and varied economic profile. As of 2023, there were approximately 2,588 existing housing units in the Specific Plan Area. The

majority of those, about 2,018, are in multi-family buildings with 5 or more units (see Figure 3.1). The Specific Plan Area also includes approximately 1.49 million square feet of commercial space.

Land use is regulated by the City's General Plan and *Zoning Ordinance*. As shown in Figure 3.2, the General Plan land use designation along the entire San Pablo Avenue frontage is Avenue Commercial. As shown in Figure 3.3, the zoning district for properties fronting on San Pablo Avenue is West Berkeley Commercial (C-W). The portion of University Avenue within the Specific Plan Area includes parcels located within the C-W and C-U

<sup>1</sup> Services include personal services such as laundromats and cleaners, as well as professional services such as retail finance services. For additional information, see the *Key Existing Conditions* in **Appendix A**.

(University Avenue Commercial) zoning districts. Other zoning districts within the Specific Plan Area include Mixed Use-Light Industrial (MU-LI), Mixed Use-Residential (MU-R), Restricted Two-Family Residential (R-2), Restricted Multiple-Family Residential (R-2A), and Multi-Family Residential (R-4).

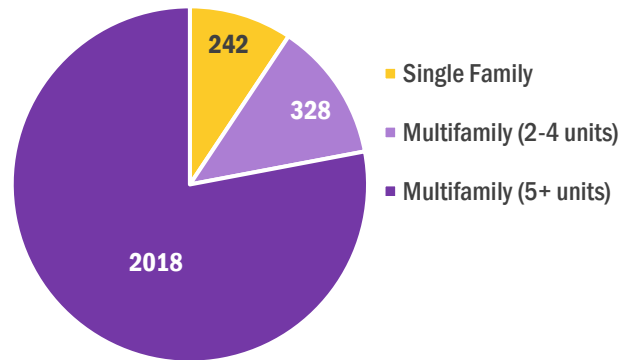
The 1993 West Berkeley Plan and the City's *Zoning Ordinance* also include Commercial Designated Nodes at the following major intersections along San Pablo Avenue: Gilman Street, Cedar Street, University Avenue, Dwight Way, and Ashby Avenue (see Figure 3.4). The purpose of the Designated Nodes is to intensify retail, commercial, and mixed-use activity to support a commercial and pedestrian-oriented environment by requiring new development to include certain ground-floor commercial uses. A full description of existing land uses is provided in **Appendix A**.

## C-W Zoning Evaluation

The current C-W zoning district establishes different height limits for single-use and mixed-use residential buildings. Single-use projects, whether residential or commercial, are limited to 3 stories (40 feet), while mixed-use projects may reach 4 stories (50 feet). The additional height allowance for a mixed-use project is intended to encourage the development of ground-floor commercial spaces.

However, feedback from real estate developers during the Specific Plan's community engagement process revealed that in many cases there is insufficient demand for ground floor commercial space. Nevertheless, many projects continue to include ground-floor commercial space because under State Density Bonus Law, the additional residential floor area granted to mixed-use projects typically outweighs the cost of constructing the commercial space, even if it remains vacant. This has contributed to an oversupply of ground-floor commercial space, diluting retail concentration and undermining the intended role of Designated Nodes as focal points for commercial activity.

Plan Area Existing Housing Units



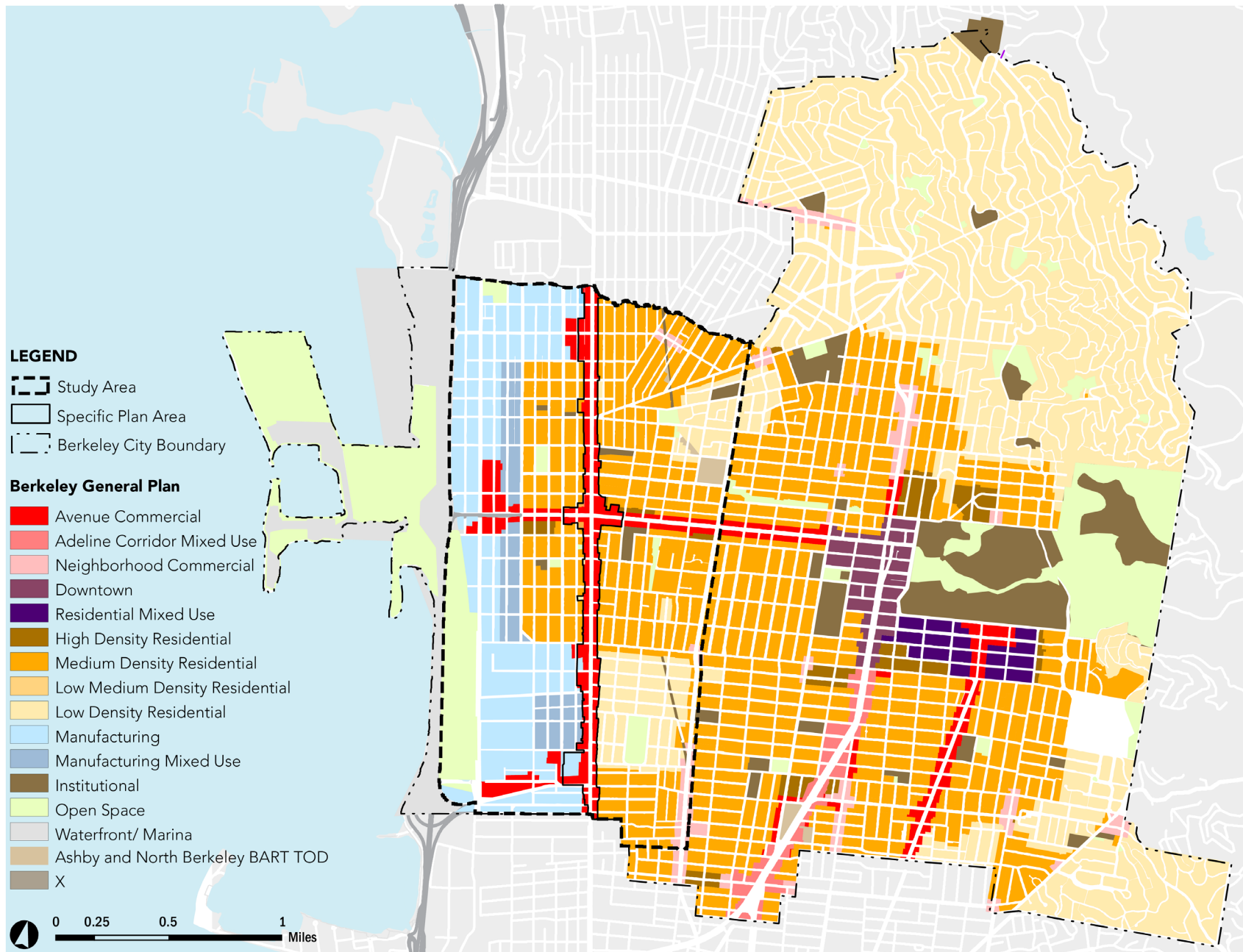
**Figure 3.1. Distribution of Existing Housing Units in the Plan Area by Type.**

Source: City of Berkeley, 2023.

In response, the Specific Plan process re-evaluated how maximum building height and ground floor use requirements can be structured along San Pablo Avenue to better align with market conditions and achieve the Specific Plan's goal of vibrant, active Designated Nodes.

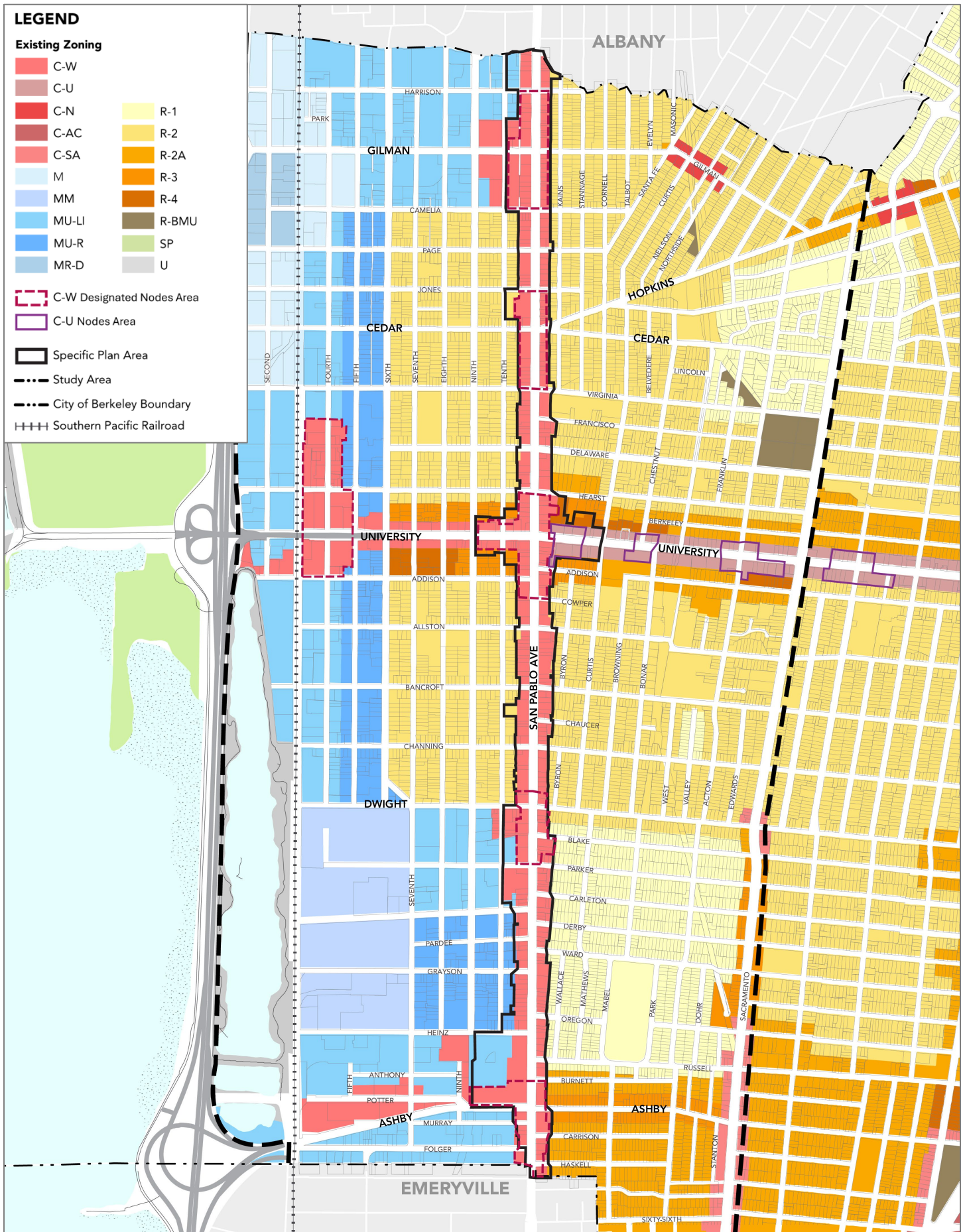
During the Specific Plan's community engagement process, many community members expressed support for increased residential density and building intensity along San Pablo Avenue to allow for greater housing capacity and economic activity. Overall, participants favored allowing a maximum building height between 8 to 12 stories, with taller buildings being primarily concentrated at the Ashby, University, and Gilman Designated Nodes.





**Figure 3.2. Existing Berkeley General Plan Land Use Designations**

Source: City of Berkeley, 2023 and CD+A, 2025



**Figure 3.3. Existing Zoning Map**

with C-W and C-U Designated Nodes in the Specific Plan Area. Source: City of Berkeley, 2023, CD+A, 2026.



# Land Use and Zoning Policies and Standards

This section details the land use and zoning policies and standards for the Specific Plan Area. The policies and standards reflect and align with current community needs, development patterns, and State and local legislation.

The land use policies and standards work in tandem with existing City policies, programs and standards, the *Zoning Ordinance*, the *Design Standards Document*, as well as with the Specific Plan’s policies regarding transportation, public realm, and economic development. These elements support the Specific Plan’s guiding principles, which are:

- More Housing Choices
- Increased Business Activity to Support a Thriving Community
- Enhanced Interaction Between Public and Private Spaces

- Enhanced Local and Citywide Access

In alignment with these guiding principles, the land use policies and standards seek to:

- Concentrate retail uses and active ground floor uses within Designated Nodes.
- Provide design standards to ensure the viability of newly constructed ground-floor commercial space.
- Provide incentives for development to enhance and expand the public realm.

## Zoning, Nodes, and Development Policies (P) and Standards (S)

The boundary of the Specific Plan Area was informed by MTC/ABAG’s Plan Bay Area 2050 (2021) Priority Development Area (PDA)<sup>2</sup>. During the boundary assessment, the PDA boundary was refined based on attributes such as split zoning, near-term development, ownership, or other boundary inconsistencies.

Within the Specific Plan Area, the following policies and standards apply as follows:

- Parcels located on San Pablo Avenue and select parcels on University Avenue are subject to the newly established Commercial San Pablo (C-SP) zoning district (see *LU-P.1 Establish the Commercial San Pablo (C-SP) District*). Select parcels within the MU-LI zoning district are eligible for affordable and family friendly housing (see *LU-P.5 Facilitate Housing on MU-LI Parcels*)
- Parcels within residential districts are not subject to any Specific Plan policy, unless explicitly mentioned.
- The San Pablo Avenue Density Bonus Program (*LU-P.10 Establish a Pilot San Pablo Avenue Density Bonus Program*) applies to all parcels within the Specific Plan Area.

Originally known as part of the Lincoln Highway in the early 1900s, San Pablo Avenue shaped West Berkeley’s history by fostering a hub of diverse working-class communities. San Pablo Avenue’s historic industrial identity is still visible today, with many businesses producing and selling goods on-site, and a highly diverse mix of commercial activities.

For more details on the history of San Pablo, see **Chapter 1, Significance of the San Pablo Avenue Corridor**.

### LU-P.1 Establish the Commercial San Pablo (C-SP) District

The Specific Plan establishes the Commercial San Pablo (C-SP) District to replace the existing Commercial West Berkeley (C-W) and Commercial University (C-U) zoning districts within the Specific Plan Area (see Figure 3.3). The C-SP zoning district increases residential and mixed-use development intensity within the Specific Plan Area by allowing greater building height, residential density and floor area ratio (FAR), and reducing minimum setbacks.

<sup>2</sup> See **Chapter 1, Definition of Specific Plan Area**

## LU-P.2 Focus Commercial Uses within Designated Nodes

The Specific Plan utilizes the existing Designated Node structure adopted with the West Berkeley Plan to strategically concentrate commercial uses at key intersections with crossing transit routes. These are the same Designated Nodes, with some modifications, identified in the West Berkeley Plan and the existing C-W zoning district regulations.

Designated Nodes are located at the intersections of San Pablo Avenue and the following cross streets: Gilman Street, Cedar Street, University Avenue, Dwight Way, and Ashby Avenue.

To preserve and encourage active street frontages with commercial, retail, and community-serving uses within Designated Nodes, ground-floor frontages, regardless of use, are required to provide a connection between the public realm and ground floor activities (see *LU-P.9 Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors* and the *Design Standards Document* for design standards). Recognizing the need for flexibility over the course of this long-range plan, land use policies expand allowed uses and promote short-term uses, while ensuring flexibility for changing uses and future adaptation (see *LU-P.8 Expand Allowed Primary and Temporary Uses*). Together, these policies are intended to balance near-term flexibility with long-term commercial viability.



**Figure 3.4. Proposed San Pablo Avenue Specific Plan Designated Nodes**

Source: CD+A, City of Berkeley, 2026.



### LU-P.3 Boundary Adjustments and Re-zonings

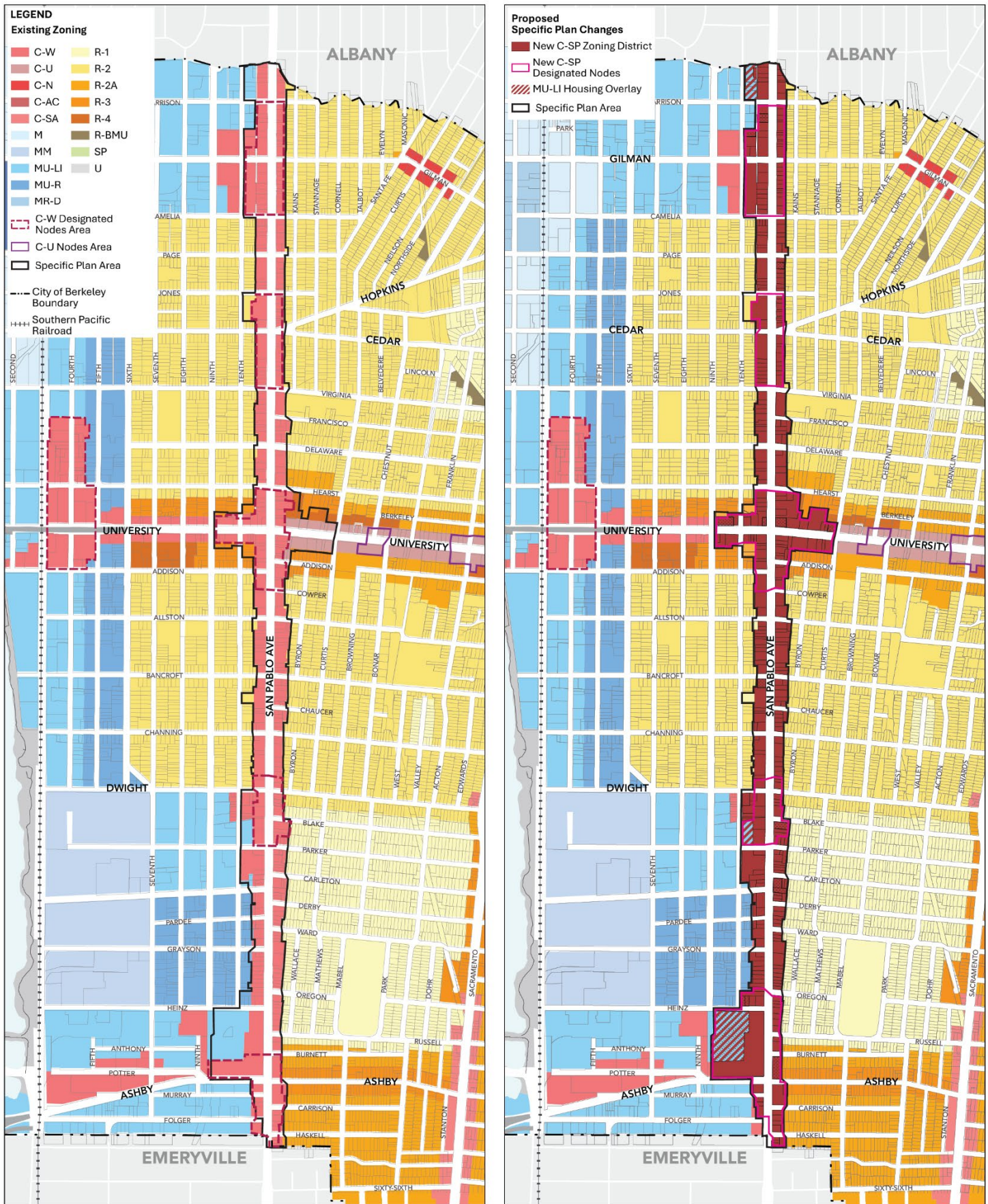
The Specific Plan establishes the C-SP zoning district (see Figure 3.5). The boundary derives from the Plan Bay Area 2050 (2021) Priority Development Area (PDA) (see **Chapter 1, Regional Policies** for more information); as outlined in *LU-P.1 Establish the Commercial San Pablo (C-SP) Zoning District* and the C-SP Designated Nodes, as described in *LU-P.2 Establish Nodes to Focus Commercial Uses*. To ensure consistency with the City's *Zoning Ordinance*, the following rezoning actions are included with adoption of the Specific Plan:

- Rezone all existing C-W parcels on San Pablo Avenue within the Specific Plan Area to C-SP.
- Rezone existing C-U parcels within the Specific Plan Area to C-SP.
- Rezone 12 parcels to C-SP. These parcels front either San Pablo Avenue or University Avenue. In cases where the split-zoned portion of a parcel fronts on a side-street, the split zone is maintained.
- Establish new C-SP Designated Nodes within the Specific Plan Area.

Parcels in the Specific Plan Area located within the MU-LI, R-1, R-2, or R-3 zoning districts would not be re-zoned to C-SP. While these parcels are located within the PDA boundary, they are not subject to any of the above rezoning actions. Only the following land use policies and standards in this chapter apply to these parcels: *LU-P.10 Establish a San Pablo Avenue Density Bonus Program* and *LU-P.11 Artist Housing and Cultural Districts*.

### LU-P.4 Amend the General Plan and Map

The Specific Plan requires amendments to the General Plan and Zoning Map to implement policies of the Specific Plan, such as establishing the C-SP zoning district, Designated Nodes, and Affordable and Family Friendly Housing on certain parcels in the MU-LI zoning district to support higher-density development in the Specific Plan Area. General Plan amendments include text changes to the Avenue Commercial Land Use designation to incorporate the C-SP zoning district and a map amendment to re-designate parcels within the C-SP zoning district as Avenue Commercial (AC), as well as amendments to the University Avenue Strategic Plan text to remove the existing San Pablo Avenue Node, and retirement of the West Berkeley Plan.



**Figure 3.5. Existing and Proposed Zoning Map with Designated Nodes in the Specific Plan Area**

Left: Existing Zoning. Right: Proposed Zoning. Source: City of Berkeley, 2023 and Community Design + Architecture, 2025.



### LU-P.5 Facilitate Housing on MU-LI Parcels

To support City efforts toward meeting regional housing goals, the Specific Plan enables housing to be developed on appropriate MU-LI parcels within the Specific Plan Area (see Figure in the BMC). Recognizing the unique constraints and value created by allowing housing on these parcels, the Specific Plan allows two types of housing:

- 100 percent Affordable Housing; and
- Family-sized housing projects that dedicate at least 50 percent of the project's total residential unit floor area to units containing either two or three bedrooms)

Eligible projects shall comply with the C-SP zoning district development standards (see *Zoning Ordinance*).

These two paths consider that in 2025, land values in the MU-LI district were approximately half the value of comparable residentially zoned sites. This is primarily due to the prohibition on residential use within the MU-LI district, as well as the lower rents commanded by industrial uses. By allowing the housing in development projects to be either 100 percent affordable and/or provide 50 percent of their gross residential unit floor area as family-sized units, this policy intends to improve the ability of affordable housing developers to acquire these sites and ensure that new housing better serves families in Berkeley.

While these parcels are in “moderate resource” census tracts and may be less competitive for some State affordable housing funding, this policy creates a clear zoning pathway that enables housing development as additional funding becomes available. It also addresses a gap in State housing laws, which generally do not permit residential development in manufacturing districts, by creating a local mechanism for housing that allows the development of mixed-use residential projects on MU-LI parcels in the Specific Plan Area if it meets the affordability and/or family-sized unit requirements.

### LU-P.6 Planning and Commercial Use Permit Streamlining

To support small business vitality in the Specific Plan Area, a one-time review of the City's efforts to streamline planning approval and building permit processes, including commercial uses, new residential and mixed-use development, commercial tenant improvements, event permits, and temporary use permits shall be conducted. The review shall include any relevant City processes affecting permitting feasibility and timeline for approvals in the C-SP District.

### LU-P.7 Public Open Space Enhancements

The Specific Plan incentivizes high-quality, publicly accessible open space within private development projects in the C-SP zoning district to enhance the pedestrian environment, support placemaking, and deliver community benefits along San Pablo Avenue. Projects that qualify for any of the incentives described in this policy may receive a reduction in the amount of Private Open Space required (see *Zoning Ordinance* for details).

### LU-S.1 Sidewalk Expansion Incentive

The Specific Plan incentivizes an additional ground floor front setback, beyond the minimum required setback, for new development that fronts San Pablo Avenue, Gilman Street, Cedar Street, Hopkins Street, University Avenue, Dwight Way, and Ashby Avenue (see *Zoning Ordinance* for details) to improve the pedestrian environment and support street activation along these streets.

Specifically, the incentive requires sidewalk widening of the **Frontage Zone** (see *PR-S.1 Sidewalk Zone Standards*) on all streets within the Specific Plan Area. Sidewalk design and use must comply with the policies and standards in **Chapter 5, Sidewalk Space** as well as the *Design Standards Document*.

## LU-S.2 Privately-Owned Publicly Accessible Open Space within Designated Nodes Incentive

The Specific Plan incentivizes the creation of high-quality privately-owned and publicly accessible open space (POPOS) within Designated Nodes to enhance placemaking and provide community open space (see *Zoning Ordinance* for details and *PR-P.18 Privately Owned Public Spaces*). POPOS design and use must comply with the applicable standards and requirements in the *Design Standards Document*.

## LU-S.3 Side-Street Plaza Incentive

The Specific Plan incentivizes the creation of side-street plazas to encourage the enhancement of the pedestrian environment and support placemaking along San Pablo Avenue (see *Zoning Ordinance* for details). Specifically, residential or mixed-use projects may contribute to designing and building side-street plazas that meet the design, access, maintenance and operation standards described in *PR-P.15 Side-Street Plazas* at certain intersections, subject to approval of the Public Works Department.

## LU-S.4 Mid-Block Passage Incentive

The Specific Plan incentivizes the creation of public mid-block passages within new through-lot development (defined as a development project site that exceeds more than 170 linear feet of frontage along either San Pablo Avenue or University Avenue). Mid-block passages must comply with the applicable standards and requirements in the *Design Standards Document* and the *Zoning Ordinance*.

When two adjacent sites are developed concurrently, developers are encouraged to coordinate site planning efforts to identify and implement opportunities for mid-block connections or shared access improvements that enhance pedestrian and multimodal circulation.

## LU-S.5 Development Standards

As described in *LU-P.1 Establish the Commercial San Pablo (C-SP) District* above, the *Zoning Ordinance* will be amended to establish the C-SP zoning district. The development standards in the C-SP zoning district, which include a maximum floor area ratio (FAR) of 4.25 for residential only and mixed-use development, will define the building envelope for new development in the Specific Plan Area. These standards ensure that new buildings contribute to an active, walkable, and inclusive public realm within the Specific Plan Area. The standards support a variety of building types and intensities to ensure flexibility over the course of this long-range plan. These standards are complemented by the *Design Standards Document* and other land use policies and standards in this chapter. Together, the development standards and design standards are intended to foster predictable development standards, and high-quality development outcomes throughout the Specific Plan Area. It is possible that modifications will be made to this Specific Plan over time to maintain consistency with changing State legislation and regulations, as well as to meet the Specific Plan's guiding principles.

## LU-S.6 Design Standards

Complementary to the development standards in *LU-S.5 Development Standards*, the Specific Plan establishes design standards to ensure that new buildings contribute to an active, walkable, and inclusive public realm within the Specific Plan Area. The design standards support a variety of building types and intensities to ensure flexibility over the course of this long-range plan. The *Design Standards Document* provides objective standards to further the vision and guiding principles of the Specific Plan by:

- Promoting a built form and architectural character that reinforces San Pablo Avenue's distinctive place in the city, that supports walking, and sustains a diverse, active and safe public realm.
- Requiring high quality design of street-facing building exteriors.
- Minimizing the visual impact of parking.

- Ensuring that building form gives special attention to corner locations to strengthen intersection identity and visibility.
- Ensuring that open space provided in new development supports social interaction and livable outdoor areas while providing a suitable level of privacy for residents.

## LU-S.7 Streetscape Standards

The Specific Plan continues to require that new development provide streetscape improvements that meet the Specific Plan's streetscape standards (see *Streetscape* in **Chapter 5**) in the Specific Plan Area. This is an existing requirement in the San Pablo Avenue Public Improvement Plan (2003) that is carried over to this Specific Plan.

## Allowed Uses

The Specific Plan aims to provide for a broad mix of land uses that contribute to a vibrant, economically resilient, and pedestrian-oriented Specific Plan Area. The mix of allowed uses serves the community while supporting small businesses, and preserving existing legacy businesses and cultural institutions. Specifically, the following uses are encouraged within the Specific Plan Area:

**Residential** – Residential uses are allowed anywhere in the Specific Plan Area, either as standalone residential or as part of a mixed-use project. Within Designated Nodes, live/work units are prohibited fronting any street, and residential units located on the ground floor are prohibited fronting certain streets (for required and allowed floor form types see *LU-P.9 Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors* and the *Design Standards Document*)

**Retail & General Commercial** – Retail and general commercial, including restaurants and cafés, are allowed throughout the Specific Plan Area, and encouraged at Designated Nodes. Temporary retail and general commercial uses are also permitted with streamlined approvals to reduce vacancies, enhance commercial vibrancy, and support small business.

**Public & Quasi-Public** – Community-serving and civic uses such as community centers, libraries, schools and cultural institutions are allowed throughout the Specific Plan Area, including fronting any street in Designated Nodes.

**Offices & Workspaces** – Professional and medical offices, makerspaces and light-industrial uses compatible with residential are permitted in the Specific Plan Area, including on the ground floor fronting any street in Designated Nodes.

**Arts & Entertainment** - Arts, entertainment, gallery, and studio spaces are encouraged throughout the Specific Plan Area, including on the ground floor fronting any street in Designated Nodes.

## LU-P.8 Expand Allowed Primary and Temporary Uses

The Specific Plan expands the list of allowed uses through the C-SP zoning district (see *LU-P.1 Establish the Commercial San Pablo (C-SP) Zoning District*), which increases flexibility for both primary and temporary uses. The Specific Plan also provides a pathway for affordable housing development to promote a diverse mix of land uses that support an active, pedestrian-oriented and economically resilient Specific Plan Area (see *LU-P.5 Facilitate Housing on MU-LI Parcels*).

Compared to the existing C-W District, the C-SP District allows for a more active, flexible, and community-oriented mixed-use environment through the following strategies (see the *Zoning Ordinance*):

- Expand the number of allowed uses while prohibiting heavy-industrial and manufacturing uses incompatible with residential uses.

Expanding allowable and temporary uses in the C-SP District provides flexibility to support changing business needs through varying economic conditions over the life of the Specific Plan. For more information and data, see **Chapter 1, Vacancy and Broader Economic Impacts**.

- Expand the number of primary uses permitted with a Zoning Certificate (by-right), such as office uses, public markets, co-working spaces, galleries, and makerspaces (a type of light-industrial use).
- Allow existing off-street parking to be used as a parklet for outdoor commercial and public use(s) by-right, and temporary uses (see Figure 3.6).
- Expand the list of temporary uses allowed with a Zoning Certificate to reduce ground floor vacancies and support small business creation.
- Allow 100% affordable housing conversion of existing non-residential buildings in the C-SP, consistent with State Law.<sup>3</sup>
- Allow 100% affordable housing or multi-family residential projects that include family-sized housing on certain MU-LI zoned parcels (See *LU-P.5 Facilitate Housing on MU-LI parcels*).
- In the Designated Nodes, allow a variety of uses beyond a 50 foot depth from the ground floor building frontage.

### Adaptive Reuse of Parking Lots

Along 4<sup>th</sup> Street in Long Beach, CA, a Street Corridor Visioning Study\* created a framework for opportunities to activate the pedestrian realm. An idea of “bulb-ins” created pilot plaza spaces at the edge of parking lots that fronted the sidewalk. There is one plaza at the corner of a parking lot that is permanent. The bulb-in concept provides an idea of the types of spaces and activation that are possible with underutilized parcels and parking lots along a commercial corridor.

For a number of years, the Bixby Knolls Business Improvement Association has hosted ‘Concerts in the Park (in Lot)’ which is a free series of early evening concerts/dances that take place in a portion of a commercial shopping center’s parking lot where people can get food from surrounding restaurants and enjoy the concerts. These events are similar to performances in the Berkeley Downtown Plaza on Shattuck Avenue.



**Figure 3.6. Examples of Adaptive Reuse of Parking Lots**

Left: Parking Lot “bulb-in” open space, 4th Street, Long Beach. Photo from Long Beach 4th Street Visioning Study, p.23. Right: Bixby Knolls Business Improvement Association, 2023. Photo by bixbyknollsinfo.com.

\* For more information, see City of Long Beach. Long Beach 4<sup>th</sup> Street Visioning Study, December 2025.

<sup>3</sup> Government Code Sections 65912.100–65912.140.



## Ground Floor Form Types

Ground floor design requirements play a critical role in shaping the pedestrian experience, supporting local businesses, and ensuring a vibrant street life. To support the Specific Plan's goals of a more active, pedestrian-oriented, and economically resilient area, the Specific Plan establishes four ground floor form types. These form types are designed to respond to different context conditions within the Specific Plan Area, while providing flexibility to adapt to changing demand over time.

### LU-P.9 Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors

The Specific Plan establishes four ground floor form types—Storefront, Active, Residential, and Live/Work—with tailored design standards to support an adaptable and walkable public realm and prioritize transparency, architectural articulation, and seamless adaptability between various commercial uses in the C-SP zoning district (see the *Zoning Ordinance* and the *Design Standards Document*).

### Ground Floor Types

**Storefront:** Designed to allow for visibility from the sidewalk in support of a pedestrian-oriented public realm. These standards allow spaces to respond to changing economic conditions while maintaining compatibility with a wider range of uses. Storefront Ground Floors are required within Designated Nodes with a few exceptions.



**Figure 3.7. Storefront Frontage Design**  
Building fronting San Pablo Avenue. Photo by CD+A

**Active:** Designed for all non-residential uses, Active Ground Floors provide more design flexibility than Storefront Ground Floors.



**Figure 3.8. Example of Active Frontage Design**  
Building fronting San Pablo Avenue. Photo by CD+A

**Residential:** Designed for residential units at the ground floor, Residential Ground Floors require a transition or connection from the public sidewalk to a residential unit, including entry patios, stoops, and shallow landscaped setbacks.



**Figure 3.9. Elevated Individual Residential Entries**  
Photo by AWP

**Live/work:** Designed for the unique needs of spaces that support both living and working at the ground floor outside of Designated Nodes, including requiring a storefront character.



**Figure 3.10. Street Facing Frontage of Live/Work Unit**  
Photo by AWP

## San Pablo Avenue Density Bonus Program

State Density Bonus law allows developers to increase the allowable residential density of a project in exchange for providing affordable housing on-site. The law also allows developers to waive, reduce or modify development standards, such as setbacks, design standards, and open space requirements, as needed to accommodate the affordable units.

Throughout the Specific Plan’s community engagement process, residents emphasized housing goals that extend beyond simply increasing unit production. Key priorities included improving housing affordability, ensuring high-quality housing design that fosters social connection, and increased public open space and community gathering areas.

Establishing a San Pablo Avenue Density Bonus Program provides an alternative to the State Density Bonus within the Specific Plan Area that allows the City to achieve affordable housing production while maintaining greater control over the form and character of development in the Specific Plan Area. By choosing the San Pablo Avenue Density Bonus Program, a project applicant can receive the same density benefits as though the State Density Bonus by paying into the City’s Affordable Housing Trust Fund instead of providing units on-site.

By offering a local alternative to the State Density Bonus, the City receives an affordable housing benefit, while maintaining control over which waivers and concessions apply to eligible projects. This Program ensures that important urban design standards and public realm improvements in this Specific Plan—such as active ground floor frontages and open space requirements—are provided.

The City’s Inclusionary Housing policies continue to apply to all market-rate development, meaning every project contributes to affordable housing—either through on-site units or in-lieu fees. The San Pablo Avenue Density Bonus Program provides an additional pathway for developers to achieve equivalent density while aligning new development with community objectives, particularly in housing affordability, urban design, and public realm improvements.

### LU-P.10 Establish a Pilot San Pablo Avenue Density Bonus Program

The Specific Plan establishes a pilot San Pablo Avenue Density Bonus Program through an affordable-housing benefit for new residential ownership (condominium) projects that is exclusively met through paying an in-lieu fee to the City’s Affordable Housing Trust Fund. The following components shall be included in the program:

#### Program Exclusivity

- Should a project utilize the San Pablo Avenue Density Bonus Program, the project must waive use of State Density Bonus.
- Developers must declare their choice to use either the San Pablo Avenue Density Bonus Program or State Density Bonus at the time of application.

#### Affordable Housing Contribution

- In-lieu fee shall be placed in the City of Berkeley’s Housing Trust Fund equivalent to the City’s inclusionary housing in-lieu fee (currently \$62.83 per square foot of residential floor area).
- Funds shall be prioritized for projects within the Specific Plan Area to support the creation and preservation of affordable housing.
- Fund management and allocation will be determined in accordance with the City of Berkeley Housing Trust Fund and Small Sites Program Guidelines, as amended.

#### Incentives

Bonus density, waivers, and concessions under this program shall mirror the structure of the State Density Bonus, with the exception that the City may identify certain standards (e.g., ground floor design) that are not eligible for waiver under the San Pablo Avenue Density Bonus Program.



## Art and Culture

The Specific Plan's policies supporting increased flexibility for temporary uses and encouraging pop-up uses in parking lots and otherwise vacant ground floor space creates opportunities for arts and craft galleries, studios, and makerspaces in the Specific Plan Area, which would support creation of an art and cultural district.

### LU-P.11 Artists Housing and Cultural Districts

State law allows for locally required affordable housing to be set aside for artists within one-half mile of a State-designated cultural district or a similar local designated district.<sup>4</sup> The Specific Plan Area is not currently within one-half mile of such a district. However, if the City designates a cultural district that is within one-half mile of the Specific Plan Area, consideration should be given to creating an affordable artist housing area within the Specific Plan Area. Creation of this area should be coordinated with the Civic Arts Commission and the Housing Advisory Commission to support additional affordable housing while strengthening craftsmanship, cultural representation and identity within the Specific Plan Area. See Figure 3.7 example of art within the Specific Plan Area.

As part of the 2023-2024 Print Public Municipal Artist-in-Residence at Kala Institute, artist Marcel Pardo Ariza researched and documented the culture and diversity along San Pablo Avenue. Interviews with business owners documenting hopes, fears and opportunities on the changing landscape are available in **Chapter 2, Interview with Business Owners.**



**Figure 3.11 Wall Mural**  
1901 San Pablo Avenue. Photo by CD+A

## Opportunity Sites and Potential Buildout

The most substantial redevelopment opportunities in the Specific Plan Area consist of the 51 Housing Opportunity Sites identified in the City's Housing Element Update (HEU), along with an additional 15 sites identified through the Specific Plan process.

In the HEU, Opportunity Sites are 1 of 3 categories in the State-required Housing Sites Inventory. The inventory demonstrates that there is adequate land for the City to meet its Regional Housing Needs Allocation (RHNA). The 3 site types are:

- Likely Sites – parcels with approved housing projects (at the time of the HEU).
- Pipeline Sites – parcels with housing applications in process (at the time of the HEU).
- Opportunity Sites – parcels without active redevelopment applications that are either vacant or underutilized and have near-term potential for residential or mixed-use development.

The classification of Opportunity Sites is important for State housing law because it establishes a jurisdiction's ability to meet RHNA targets. Opportunity Sites are typically those where development standards, parcel size, infrastructure capacity, and market conditions make residential development feasible within the HEU's planning period.

The full Housing Element Site's Inventory is available in the adopted HEU on the City's website.<sup>5</sup>

<sup>4</sup> California Government Code Section 65914.8.

<sup>5</sup> City of Berkeley, Housing Element Sites Inventory, dated 7/28/2023.

[https://berkeleyca.gov/sites/default/files/documents/HEU\\_Sites%20Inventory\\_Tables-webpage.pdf](https://berkeleyca.gov/sites/default/files/documents/HEU_Sites%20Inventory_Tables-webpage.pdf)

During the Specific Plan process, an additional 15 parcels were identified that meet the HEU Opportunity Site criteria but were not included in the original inventory (see **Appendix B**). These include parcels that meet at least one of these criteria:

- Have become eligible as Opportunity Sites since adoption of the HEU,
- Share ownership with a HEU-listed Opportunity Site, and/or
- Have site-specific characteristics warranting inclusion despite being omitted from the original list.

## Development Potential and Buildout

The Specific Plan estimates the amount of new development that could occur in the Specific Plan Area during the planning period. The estimates are based on 4 categories of development potential:

1. HEU Likely and Pipeline Units – already developed or assumed to develop under existing C-W zoning and development standards.
2. HEU Opportunity Units – assumed to develop under proposed Specific Plan zoning and development standards.
3. New Specific Plan Area Opportunity Units – assumed to develop under proposed Specific Plan zoning development standards.
4. SDB Opportunity Units – assumed to develop from the utilization of State Density Bonus (SDB) on every opportunity site in the Specific Plan Area up to 8-stories.

In addition to housing, the buildout analysis estimates changes in commercial square footage as parcels redevelop. The results are summarized in Table 3.2.

As shown, under maximum buildout assumptions, the Specific Plan Area can accommodate approximately 8,000 new multi-family housing units. This level of housing growth supports an estimated 20,000 new residents, based on the HEU's average household size for multi-family residential.

This potential residential growth represents a significant share of the City's overall housing strategy. In the context of the Housing Element, the Specific Plan Area accounts for a substantial portion of new housing capacity in transit-rich locations. Accordingly, the Specific Plan leverages existing infrastructure and facilitates the creation of a more walkable, mixed-use district near transit.

Approximately 3,500 of these housing units are already anticipated in the HEU, meaning the Specific Plan increases the maximum potential buildout by roughly 4,500 units. This figure represents the maximum theoretical development capacity; actual development depends on market conditions, property owner decisions, and other factors. Not all sites are expected to redevelop within the Specific Plan's time horizon, so the maximum buildout is unlikely to occur.

The increase in development capacity proposed as part of the Specific Plan may affect the amount of commercial square footage within the Specific Plan Area. Although a net decrease in commercial square footage is estimated, it is difficult to quantify the extent of this change under existing zoning regulations given the shifting demand for commercial uses and the high rate of ground floor vacancy. It is expected that the increase in residential development will incrementally reduce opportunities for new commercial uses and eliminate some existing

**Table 3.2 Estimated Maximum Buildout**

| Type                                      | Unit / Sq. Ft.   |
|-------------------------------------------|------------------|
| Residential (Multi-Family)                | Units            |
| HEU Likely and Pipeline Units             | 1,500            |
| HEU Opportunity Units                     | 3,900            |
| New Specific Plan Area Opportunity Units  | 1,500            |
| SDB Opportunity Units                     | 1,100            |
| <b>Total New Dwelling Units (rounded)</b> | <b>8,000</b>     |
| Commercial                                | Sq. Ft.          |
| New Commercial                            | 92,000           |
| Lost due to New Housing                   | 411,000          |
| <b>Net Change</b>                         | <b>-319,000</b>  |
| Existing                                  | 1,491,000        |
| <b>Total After Buildout (rounded)</b>     | <b>1,171,000</b> |

commercial uses. This net reduction may appear counter to economic development goals, but the intent of the policies outlined in this chapter is to facilitate redevelopment of underutilized properties over time (i.e., properties consisting of low-intensity uses with limited pedestrian engagement) with higher-quality, more flexible commercial spaces integrated into mixed-use buildings, particularly within Designated Nodes. These improvements spill over to other commercial uses and promote overall business viability, supporting a diverse mix of uses and reducing long-term vacancy without compromising an engaging public realm.

A full description of the Specific Plan Buildout is provided in **Appendix C**.





# Chapter 4

# Economic Development

- Final Draft -

San Pablo Avenue has long served as a vital commercial corridor in West Berkeley – home to many small, locally owned businesses, light industrial uses, auto-related uses, service providers, and community institutions that reflect the neighborhood’s cultural and economic diversity. Today, the Specific Plan Area faces both opportunities and challenges; shifting retail dynamics, market conditions, storefront vacancies are transforming the business landscape. An increased focus on adding new mixed-use development in the area will create new market opportunities.



Throughout the Specific Plan process, the community voiced that San Pablo Avenue should be a lively and inclusive area that represents and serves the people who live nearby and supports new residents as homes are built in the Specific Plan Area. Community members, local business owners, and stakeholders voiced concerns about the risk of commercial displacement, the loss of their historically diverse cultural identities, and the lack of support for existing businesses. For example, business owners are not aware of existing City programs for small business loans, business planning, and other supports. Several mention concerns about lack of parking enforcement having a negative effect on clientele being able to conveniently access their business, and lack of maintenance in the street and with adjacent properties. Participants at community engagement events emphasized the need to retain and grow small businesses, fill empty storefronts with active and relevant uses, and improve San Pablo Avenue's overall appeal and visibility. Many shared a vision of San Pablo Avenue as a culturally vibrant, economically inclusive mixed-use district where it is possible to live, work, and shop locally; and referenced some current and past businesses that reflect their vision for the Specific Plan Area.

***"It is our urban center or spine. Be more for the people that live here. [We are] missing boutiques, groceries, and practical things."***

– Community Member

An assessment conducted as part of the Specific Plan process indicates about 90 percent of the brick-and-mortar businesses are locally owned. Those establishments continue to provide a diverse mix of commercial activities (see Figure 4.1).

This chapter establishes policies that respond to these concerns and aspirations. It presents strategies to retain and grow local businesses, activate vacant or underutilized spaces, and foster a thriving commercial environment that

reflects the diversity of the Specific Plan Area, and that can serve the growing needs of the community as population increases with the implementation of the Specific Plan. There is a desire to create a commercial and community environment in which residents can satisfy their shopping, service, recreational and social needs within a walkable distance of their home. The policies advance the community's vision for a more vibrant business environment and supportive public realm, including the following objectives:

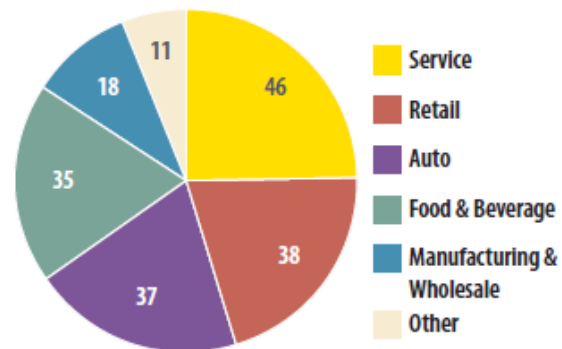
- Increase business activity by supporting existing businesses and making it easier for new local

businesses to locate and thrive within the Specific Plan Area.

- Support commercial vitality and reduce ground-floor vacancies by encouraging the concentration of new commercial development within Designated Nodes.
- Strengthen connections between public and private spaces by establishing partnerships for indoor and outdoor events and identifying collaborative opportunities to fund and maintain streetscape and public realm improvements.

The topics addressed in this chapter are interrelated. While this chapter is focused on strategies for commercial vitality, many of the Specific Plan's economic goals are also advanced through policies in other chapters –particularly **Chapter 3 Land Use** and **Chapter 5 Streets –**

**Transportation and Public Realm.** These chapters address how and where ground floor commercial and other business uses are encouraged, how storefronts are designed to engage pedestrians, and how San Pablo Avenue's physical environment supports a vibrant mixed-use district. **Chapter 3 Land Use's** policies, and implementing standards in the Berkeley Municipal Code, shape the distribution of commercial activity by establishing new strategies to focus retail and services at Designated Nodes and allow for flexible uses between Designated Nodes. **Chapter 5 Streets – Transportation and Public Realm's** policies and standards aim to improve multimodal accessibility through bus stop and bicycle improvements, parking management policies, and the pedestrian experience through wider sidewalks, pedestrian-scaled lighting, street trees, and other amenities to make San Pablo Avenue more inviting for customers, residents, and workers.



**Figure 4.1. Locally-Owned Businesses on San Pablo Avenue.**

Data from Financial Department, City of Berkeley. Active Business License Data and SLA. August, 2023.

Together, these policies and programs create a framework to implement the vision of San Pablo Avenue as a mixed-use district that welcomes everyone—residents, workers, artists, entrepreneurs, and visitors—

and enables a diverse, stable, and essential local business community that supports community life.

### Relevant Policies in Other Chapters

#### Chapter 3 - Land Use

- LU-P.2 *Focus Commercial Uses within Designated Nodes*
- LU-P.6 *Planning and Commercial Use Permit Streamlining*
- LU-P.8 *Expand Allowed Primary and Temporary Uses*
- LU-P.9 *Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors*

#### Chapter 5 - Streets

- PR-P.2 *Sidewalk Incentive*
- PR-P.3 *Improve Street Lighting for the Safety and Comfort of all Users*
- PR-P.12 *Facilitate Wayfinding and Placemaking Programs*
- PR-P.15 *Create Side-Street Plazas*
- PR-P.16 *Support Use and Creation of Parklets*
- PR-P.20 *Privately Owned Public Open Spaces*



## Interviews with Business Owners

Marcel Pardo Ariza, the Specific Plan's Municipal Artist-in-Residence, conducted interviews with business owners along San Pablo Avenue. Here are 2 of those conversations:

### Shirley Everett-Dicko, Everett & Jones

**Hi, Shirley!** I'm so excited to be here at Everett and Jones Barbecue. It's such an iconic place, especially with all the changes happening in the neighborhood. Can you tell us a bit about yourself and your role here?

**Shirley Everett-Dicko:** Absolutely! My name is Shirley Everett-Dicko, and I'm one of the original owners of this location, which opened in 1974. My mom, Dorothy Turner, along with my 7 sisters and brother, helped start it. This was our second location—the first was in Oakland.

**Can you share a little about your mom's journey into the barbecue business?**

My mom's story began on seventh Street in West Oakland, once known as the "Harlem of the West." In the 1960s, she worked at Jenkins Barbecue, run by Reverend Jenkins, our church pastor. Later, she became the first manager at Flint's Barbecue. With help from Harry Mott, she opened Everett and Jones in 1973.

**And how did you all choose the name "Everett and Jones"?**

Everett is my dad's name, and Jones was my sister's married name. It's always been a family affair!

**Tell us about your famous barbecue sauce.**

That's Mom's recipe! We started bottling it in 1983 after a customer suggested it, and it's been a hit ever since.

**I've heard this place also has ties to the Black Panther movement.**

Yes! The East Bay Dragons Motorcycle Club—one of the oldest Black motorcycle clubs in the U.S.—used to provide security for the Black Panther Party. Our first location was next to their clubhouse, so we've always shared that community connection.

**How have you seen the San Pablo corridor change over the years?**

It's changed a lot. There used to be several barbecue restaurants and plenty of foot traffic from university students. Now there are fewer spots, but we're still holding our ground!

**For someone visiting for the first time, what should they order?**

Definitely the ribs and links combo—with potato salad and our homemade sauce. It's the best way to experience our barbecue.

**Anything else you'd like people to know?**

Just that Everett and Jones has always been a gathering place. We're proud to keep our family legacy and community spirit alive.



**Figure 4.2. Shirley Everett-Dicko and her family at Everett & Jones**  
Located at 1955 San Pablo Ave. Photo by Marcel Pardo Ariza, 2023



## Jaime Alejo, Mi Ranchito Market

**Hi, Jaime!** We're here at Mi Ranchito Market. Could you tell us a bit about yourself and your role here?

**Jaime Alejo:** Of course! I'm Jaime Alejo, the store manager. I've been here for many years and love being part of this family dream that started over 24 years ago. My dad wanted to build something for our family, and now my 4 siblings and I work together to keep it going.

### How did it all begin?

It all started with my dad's dream to create a place where the community could feel at home. In the beginning, we were a small store, but over time we've grown. Despite challenges and changes in the neighborhood, we're still here—always dreaming big and providing good service.

### How has the community around the market changed?

It's changed a lot. Most of our customers used to be Latino, and now there's a mix of cultures from everywhere. Sadly, many Latinos have had to leave because of the high cost of living. Most of our current customers are students or new residents. Gentrification has really impacted our community.

### How have you adapted to these changes?

The key has been to stay flexible and welcoming. We try to keep a family-friendly environment where everyone feels at home. Many customers tell us they find comfort here, and we love helping them discover products that remind them of their homeland.

### What kind of products do you offer?

We carry a wide range of Mexican products—fresh foods, household items, meats, and even some Brazilian and Peruvian goods. Our fresh meat section is one of our biggest draws.

### What would you say to someone who's never visited Mi Ranchito?

Come anytime! We're open from 8 to 8, and there's always something new to discover. Whether you're looking for a specific ingredient or just want to chat, you'll feel welcome here.

### What changes would you like to see in Berkeley to support small businesses?

I hope the City provides more support and subsidies for small businesses. Gentrification has raised costs, making it hard to compete.

### Anything else you'd like to add?

Even though times are tough, we're still here thanks to our community's support. Every customer matters, and we hope to keep being a place where everyone feels at home.



**Figure 4.3. Jaime Alejo and his brother at Mi Ranchito Bay Side Market**  
Photo by Marcel Pardo Ariza, 2025



# Economic Development Policies and Programs

## Small Business Support

Throughout the Specific Plan engagement process, community members expressed the importance of retaining existing businesses and called for greater City support to improve conditions for new small businesses.

A key concern raised by business owners, developers, commercial real estate agents, and the City's Office of Economic Development (OED) staff is the high cost of tenant improvements (TI) required to make existing ground floor retail spaces move-in ready. For both new and existing spaces, the need for infrastructure such as grease ducts, commercial kitchen ventilation systems, and ADA-compliant restrooms poses significant barriers for small business owners, even when lease terms are favorable. In many cases, new commercial spaces enter the market as "cold shell," meaning they lack not only the necessary infrastructure but also basic finishes such as concrete slab floors, wall finishes, or ceilings. While this provides flexibility for tenants to customize their spaces, it also results in higher TI costs and ultimately, higher rents, which often negate the value of any owner-contribution toward buildout.

To address this issue in future mixed-use development, the *Design Standards Document* includes ground-floor interior standards. In combination with the economic development and land use policies of this Specific Plan, the goal is to reduce TI cost, shorten start-up periods, and help decrease commercial vacancies.



**Figure 4.4. Vik's Chaat Parking Lot**  
In response to the 2020 Pandemic, Vik's Chaat in Berkeley converted its parking lot into a dining area, which remains in use today. Photo from Vik's Chaat, [vikschaatcafe.com](https://vikschaatcafe.com), accessed April 2025.

### ED-P.1 Outdoor Business Activation Toolkit

The Specific Plan expands opportunities for existing businesses to activate outdoor space across private property and adjacent public access easements, and public sidewalks, and plazas. Along major roads in the Specific Plan Area, narrow sidewalks and limited on-site space constrain businesses' ability to provide outdoor seating, merchandise displays, and other amenities to support business and community activity. To overcome these constraints, the Specific Plan seeks to enable businesses to use available space more effectively, strengthening economic vitality and enhancing the pedestrian experience. The following policies and programs function as a flexible toolbox that businesses and the City can apply to expand outdoor activation.

#### Toolbox:

- **Parking Lot Parklets Program:** *LU-P.8 Expand Allowed Primary and Temporary Uses* introduces a program to allow properties with existing businesses to convert existing off-street parking spaces into Private Parklets for outdoor commercial use. Figure 4.4 shows an example of such conversion in Berkeley.
- **Sidewalk Use:** *PR-S.1 Sidewalk Zone Standards* allows businesses to extend installations, such as merchandise displays, café, or restaurant seating on sidewalk provided they apply and receive an encroachment permit and meet design, access, time of use, and other standards.
- **Parklets on Side-Streets:** *PR-P.16 Support Use and Creation of Parklets* reduces or waves the Outdoor Commerce Use Fee for businesses creating and maintaining parklets that satisfy City standards.

## EP-P.2 Support Flexible Commercial Spaces

The Specific Plan's policies will provide flexibility for businesses to utilize existing and new commercial spaces.

An example of this is the Keep Innovation in Berkeley effort undertaken by the Planning and Development Department and OED (see *Supporting Policies and Programs* section at the end of this chapter). This effort permitted more streamlined land use approvals in commercial corridors, in response to the growing innovation sector. West Berkeley has long been a center of production and innovation, and the Specific Plan Area serves as a transition zone between West Berkeley's industrial uses and residential districts east and west of San Pablo Avenue. As demand for mixed-use and residential development along San Pablo Avenue grows, certain industrial uses would no longer be compatible with residential uses due to noise, fumes, or storage needs. However, many other light industrial and related uses can be compatible with residences.



**Figure 4.5. Hybrid Makerspace and Coworking Space in West Berkeley**

Photo from Filma Collective, [filmacollective.org](http://filmacollective.org), 2025

### Makerspaces:

Bridging the gap, the Specific Plan establishes *Zoning Ordinance* provisions to support **makerspaces** as a form of light manufacturing use, targeting small-scale fabrication and artisan producers that operate solely indoors. Makerspaces can include workspaces, hardware businesses or woodworkers (see example in Figure 4.5), equipped with tools such as laser cutters, 3D printers, and sewing machines, that do not produce significant amounts of noise, vibration, or air pollution.

### Co-Working Spaces:

The Specific Plan also ensures that **co-working spaces** would be viable, providing flexibility for businesses to utilize existing and new commercial spaces. Co-working spaces allow for a flexible mix of businesses, making it possible for retail, office, galleries and art studios - owned by different businesses or independent professionals - to collaborate and define their workspace based on their individual needs. Typical businesses that would operate in a co-working space are allowed with a Zoning Certificate, streamlining the land use review process and allowing the mix of specific uses to be flexible in response to changing needs and market conditions (See example in Figure 4.6).

For details, see *LU-P.8 Expand the List of Allowed Uses and Allowed Temporary Uses*.

## ED-P.3 Establish Public-Private Partnerships to Activate the Specific Plan Area

The Specific Plan encourages the creation of partnerships between the City and community organizations, local institutions, merchant groups, property owners, and other stakeholders to create vibrant, welcoming spaces and culturally relevant, artistic, and family-friendly activities.

### Strategies:

- Promotion of new businesses and events in the Specific Plan Area, including developing a robust calendar of happenings that draw people from surrounding neighborhoods and the region.
- Pop-up activations in vacant storefronts.
- Transformation of underused parking lots into spaces for food trucks, outdoor markets, or community gatherings.



- Side-street closures for block parties, neighborhood festivals, events sponsored by adjacent businesses, and seasonal celebrations.
- Assistance with permitting and other logistics to support organizations in implementing activities and events.

Nurturing partnerships with existing and new associations and neighborhood groups will strengthen the identity of the Specific Plan Area as a lively and inclusive commercial district. City partnerships with businesses can demonstrate the potential role a business improvement district (BID) could play in the Specific Plan Area.

### Programs

Example partners and initiatives include:

- Partnering with existing organizations such as the West Berkeley Design Loop, or the International and the University Avenue Association. These organizations already coordinate events and business promotion in the Specific Plan Area; see also *ED-P.4 Support and Expand Existing Business Clusters*. The City should strengthen and expand these efforts by supporting their capacity to organize Specific Plan Area-wide initiatives, co-advertise, and partner with businesses.
- To support event planning, the City should clearly communicate how permit processes work, provide technical assistance to organizers, and help facilitate applications with the appropriate departments for activities such as encroachment permits, temporary street closures, or outdoor vendor activations. The City should also leverage networks such as the Berkeley Business District Network (BBDN) to connect associations and event organizers with City staff and resources. These meetings are critical opportunities to share information on local trends and conditions affecting small businesses, district events, policy issues, and other relevant topics.



**Figure 4.6. Example of a Co-Working Space for Personal Services**

At 1518 San Pablo Avenue, Berkeley, a large commercial space was subdivided into smaller suites and then rented out to small businesses. Photo by CD+A.

## Business Organizations

There are two main ways that business organizations can define and organize themselves in the Specific Plan Area. First, they can be geographically defined, such as the Berkeley International Marketplace (Figure 4.7) focused to San Pablo Avenue and University Avenue. Others, like the West Berkeley Design loop, are more strongly defined by business type and the market they serve. Given the diversity of businesses within the Specific Plan Area, it is likely that both types of business organizations will continue to exist. Those with a more focused geography have the potential to become a business improvement district (BID) and potentially grow into a larger BID covering the entire Specific Plan Area. Those that serve a business type or market sector have the potential to coexist with a BID. These two types of business organizations can define roles that are mutually supportive.



**Figure 4.7. Berkeley International Marketplace Participating Businesses**  
Photo from Berkeley International Marketplace, [binmar.org](http://binmar.org), 2025

### ED-P.4 Support and Expand Existing Business Clusters

The Specific Plan supports capacity-building of existing business “cluster” organizations and the formation of new organizations. These organizations promote and organize businesses in the Specific Plan Area and adjacent areas, with the goal of enhancing local identity, improving business coordination, and laying groundwork for future collective action. These organizations, such as merchant associations, property-owner groups, and promotional collaboratives should be flexible in their geographic scope and business membership, modeled after existing efforts like the West Berkeley Design Loop and the Berkeley International Marketplace.

The intent is to facilitate coordination among businesses based on geographic location (Specific Plan Area-wide, within specific Designated Nodes, and connections with related businesses in adjacent areas), business type, or ownership structure, in order to enhance visibility, branding, and mutual support. Implementation of this policy further supports inclusive and flexible organizational models that reflect the Specific Plan Area’s diverse mix of retail, service, light industrial, and cultural uses, extending beyond traditional business improvement districts (BIDs).

### City Support and Technical Assistance

The Office of Economic Development (OED) will take the lead to coordinate with other City departments and existing business organizations in these efforts:

#### Marketing

- Continue to provide access to City branding and marketing tools (e.g., #DiscoveredinBerkeley local marketing campaign, and connections to the City’s Convention and Visitors Bureau known as visitberkeley).

#### Berkeley International Marketplace

In 2006, local business owners, in partnership with the City’s Office of Economic Development, established the “[Berkeley International Marketplace](http://BerkeleyInternationalMarketplace)” to celebrate the cultural diversity of businesses near the San Pablo Avenue and University Avenue intersection. While the initiative faded over time, remnants of its identity remain visible through banners on light poles, and many existing businesses continue to reflect the area’s international character. In 2025, local businesses began working together to revitalize the neighborhood designation<sup>1</sup>, expanding outreach and featuring more businesses along both San Pablo Avenue and University Avenue on their [website](http://website).

<sup>1</sup>Nathan Dalton. “Is This West Berkeley Intersection About to Be Revived?” *Berkeleyside*, May 14, 2025.

## Business Improvement and Community Benefit District(s)

The community expressed frustration with the lack of comfort and poor maintenance of existing public spaces along San Pablo Avenue. Property and business owners in the Specific Plan Area and West Berkeley have shown interest in working together to enhance the business and community environment in the Specific Plan Area. Members of the West Berkeley Design Loop and others in the business community have also indicated interest in forming a business improvement district (BID) to expand on business support efforts such as co-marketing, event programming, and enhanced maintenance and safety, similar to those of the Downtown Berkeley Association. A business improvement district (BID) or community benefit district (CBD) can take on a key role in addressing these community concerns through sidewalk maintenance and streetscape beautification, security, business attraction and retention, and community outreach.



### What is a Business Improvement District (BID)?

A BID is an independent non-profit organization funded primarily through property-owners and/or business owners within a defined geographic area who agree to assess (or tax) themselves to support specific improvements and/or services beyond those typically provided by the City. A BID provides a dedicated management structure, with a governing board, annual work plan, and budget, ensuring accountability and transparency. This structure gives local businesses a unified voice and increases capacity to collaborate with the City and other community organizations. Existing BIDs in Berkeley include Downtown Berkeley, Telegraph, North Shattuck, Solano, and Elmwood.

### What is a Community Benefit District (CBD)?

A CBD is a public-private partnership between the City and local communities within a defined geographic area, with a funding structure similar to a BID. CBDs typically include commercial, mixed-use, and residential property owners and businesses. Unlike BIDs, CBDs offer a broader scope by engaging the community to preserve and celebrate the area's identity. Existing CBDs in Oakland include the Downtown Oakland Association and the Black Cultural Zone (BCZ).

## ED-P.5 Study Feasibility of Forming a Business Improvement District (BID) or Community Benefit District (CBD)

The Specific Plan supports collaboration between the City and local businesses and property owners to study the feasibility and scope of establishing one or more BIDs or CBDs within the Specific Plan Area. The study should assess potential boundary options ranging from Specific Plan Area-wide to targeted areas around Designated Nodes and may also explore extensions into adjacent areas of West Berkeley where commercial synergies and business interest are strongest.

### Study Objectives:

- 1) Analyze the feasibility of different boundaries and implementation approaches. Options to consider include:
  - Establishing a pilot BID focused on 1 or 2 high-potential Designated Nodes (such as Cedar Street and/or University Avenue). A high potential Designated Node is a place where public investments and community business interest are already concentrated, long-term businesses



with pedestrian-oriented storefronts are clustered, and planned or completed mixed-use developments are increasing residential density.

- Exploring hybrid models that begin with merchant associations or business clusters and evolve toward more formal entities.
  - Examining the possibility of organizing a BID that extends outside the Specific Plan Area or a thematic district that includes parts of West Berkeley, such as the West Berkeley Design Loop or includes a portion of the Specific Plan Area in the discussion of a Gilman District BID.
- 2) Include an equity-centered outreach process that engages with a broad range of groups active in the Specific Plan Area, such as existing businesses and property owners, Black-owned businesses and cultural institutions, community-based organizations, nonprofits, arts groups, and unhoused residents who engage with the Specific Plan Area's public realm. The City should partner with CBOs and business networks to facilitate this outreach (see *ED-P.3 Establish Public-Private Partnerships to Activate the Specific Plan Area*). The study should also define equity principles and guiding principles to guide the creation and operation of any future entity, ensuring alignment with community goals.

This effort should be coordinated with existing or proposed district initiatives in nearby areas and explore opportunities for shared services or partnerships. Lessons from other Berkeley BIDs and national models—particularly those with cultural district components—should inform the structure, governance, and service priorities of a potential San Pablo Avenue District.

## ED-P.6 Economic Development Technical Assistance

To facilitate the implementation of the policies in this chapter, OED staff will provide technical assistance in the following areas:

- Implementation of Public-Private Partnerships in alignment with *ED-P.3 Establish Public-Private Partnerships to Activate the Specific Plan Area*.
- Implementation of *ED-P.5 Study Feasibility of Forming a Business Improvement District (BID) or Community Benefit District (CBD)* to initiate the study.
  - Conduct outreach and engagement, with businesses and property owners within the Specific Plan Area to assess interest in forming business cluster organizations, a BID, or a CBD.
  - Provide technical assistance in navigating legal and financial requirements related to BID or CBD formation.
  - Work with the businesses, cultural institutions and artist groups in the community to identify potential commercial and cultural districts along San Pablo Avenue, such as a maker/light industrial district, international district, or State-designated cultural district. Report on the feasibility of integrating commercial and cultural districts into marketing efforts and BID/CBD feasibility study.
- Facilitate discussions among businesses and property owners.
- Coordinate early marketing and/or events to build momentum and community identity.

## Public Investment

### ED-P.7 Establish a Process to Prioritize Public Investment in Designated Nodes

The Specific Plan seeks to concentrate resources within Designated Nodes for the purpose of delivering visible, coordinated improvements that can attract new businesses, enhance safety, and build community identity. By targeting grant and capital funding to these locations, ongoing transportation projects can be leveraged and aligned with public and private investments.

A process and criteria shall be established to prioritize public investments in Designated Nodes that strengthen safety, catalyze economic development and build momentum for the Specific Plan Area. The following metrics should be incorporated - number of existing businesses, number of residential units, number of commercial vacancies - and outreach should be conducted in an equitable manner. Initial public investment – such as pedestrian-scale lighting, transit-supportive infrastructure, and amenities for gathering – should be made within the highest priority Designated Node(s).

## Supporting Policies and Programs

The policies within this Specific Plan, including those in **Chapter 3 Land Use** and **Chapter 5 Streets – Transportation and Public Realm**, are designed to work together to strengthen the Specific Plan Area as a whole, including the local economy along San Pablo Avenue.

Land Use policies that increase housing capacity will bring more residents within walking distance of local businesses, thereby expanding the customer base and supporting neighborhood-serving retail and services. Concentrating activity in Designated Nodes and promoting a broader mix of uses will enhance the vitality of these areas, helping them evolve into distinct commercial destinations. Building design standards require either storefront or active ground floor frontage within Designated Nodes, allowing the extent of retail and restaurant uses to adapt over time as the population in the Specific Plan Area grows (See *LU-P.9 Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors*).

Transportation policies are designed to make San Pablo Avenue more attractive, accessible and comfortable for pedestrians, cyclists, and transit riders. Enhancing multimodal connections both within Berkeley and to the broader East Bay region will increase foot traffic, improve accessibility for surrounding neighborhoods, and expand regional connectivity to the Specific Plan Area. These improvements will draw more potential customers and support the diverse mix of local and specialized businesses along San Pablo Avenue (**Chapter 5 Streets – Transportation and Public Realm**).

Public realm policies and standards to create consistent lighting and street furnishings, street trees, and public realm expansions, will improve comfort and encourage longer, more frequent visits that support commercial activity (**Chapter 5 Streets – Transportation and Public Realm**).

Together, these measures are designed to enhance the livability of the Specific Plan Area while driving long-term economic growth.

In addition, the City's [Revolving Loan Fund](#) program can provide access to capital for businesses and entrepreneurs who seek to grow and retain jobs, but do not qualify for a traditional bank loan. The loan can be used to fund business expansion, fixed assets, equipment, working capital, and real estate.



# Chapter 5 Streets – Transportation and Public Realm

- Final Draft -

Originally part of the Lincoln Highway, San Pablo Avenue has long served as a major regional and national transportation route and remains designated as a State highway. This legacy established a pattern focused on regional mobility and vehicle access, influencing the form of adjacent development. This function has historically prioritized automobiles and resulted in a street environment that favors vehicles but offers limited comfort and safety for multimodal travel, along with fewer high-quality public spaces. **Chapter 1 Introduction** provides more detail about the historical context of San Pablo Avenue.



Some stretches along San Pablo Avenue feature a consistent tree canopy and active storefronts that introduce a pedestrian-friendly setting, but these remain exceptions. New mixed-use developments and streetscape improvements are gradually transforming San Pablo Avenue into a multimodal corridor. These ongoing efforts aim to enhance comfort, safety, and accessibility for people walking, biking, and using transit, while creating a more attractive and functional public realm that reflects the changing needs of the street.

Community feedback gathered through the outreach process reinforces this shift in priorities. Participants expressed strong support for improving the pedestrian, bicycle, and transit environment along and across San Pablo Avenue. Survey responses identified walking as the second most common mode of travel to and from destinations along San Pablo Avenue. At the first

community open house, focus group meetings, and other engagement events, community members emphasized the need for safe streets and streetscape improvements. Many also voiced concerns about existing traffic speeds and noise, highlighting the ongoing tension between vehicular centered conditions and the community's vision of a vibrant mixed-use place where people live, work, shop, and socialize.

This chapter defines policies, programs and standards that aim to balance the transportation, land use, and public realm functions of San Pablo Avenue and the evolving mixed-use district along it. The focus is to transform San Pablo Avenue into a multimodal street that not only facilitates safe and efficient travel for all users but also enhances the availability and quality of public space.



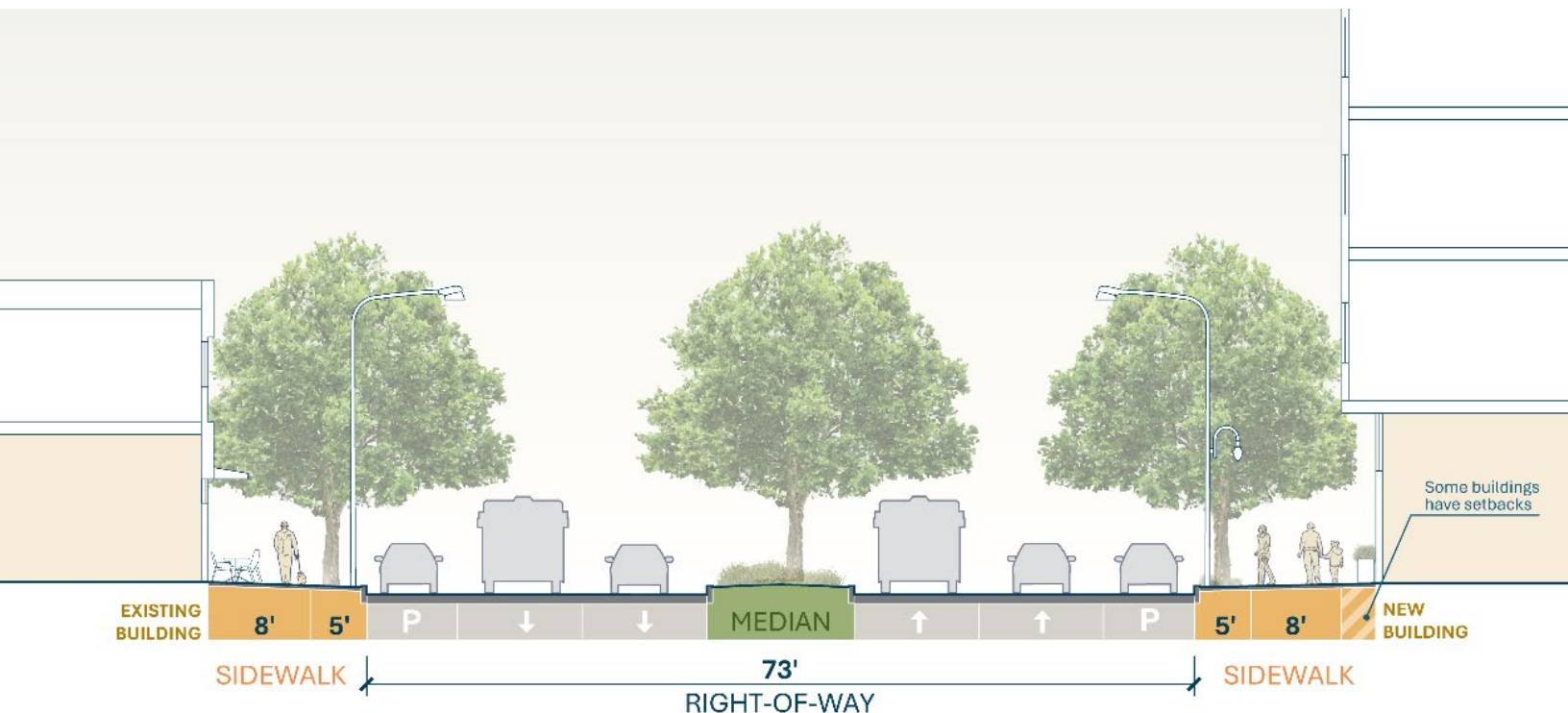
## Existing Conditions

This section provides an overview of existing transportation conditions, including transit access, and multimodal mobility, safety and comfort and summarizes existing public realm conditions. A detailed assessment is available in **Appendix A: Key Existing Conditions**.

## Public Realm

The public realm experience varies along San Pablo Avenue –some areas support street life, while others feel inactive at the pedestrian scale. There are engaging places with a combination of active street life and vibrant businesses, such as the blocks south of University Avenue and Dwight Way (see Figure 5.2). At these locations, one can find outdoor seating, decorative plantings and other amenities that invite potential customers and create a comfortable environment for people walking along the street. On stretches where business activity is slow, sidewalks are more likely to be in poor condition, landscaping is less likely to be maintained, and the street edge is framed by vacant or vandalized building frontages, or tall fencing. These segments experience less foot traffic and fewer parked cars, as the public realm offers little reason for people to linger as they pass through.

San Pablo Avenue is also physically wide, with a typical right-of-way measuring 73 feet from curb to curb (see Figure 5.1). This includes four travel lanes (two in each direction), street parking, and a landscaped median. There are no designated bicycle facilities or markings along San Pablo Avenue, so cyclists ride in the roadway, on the sidewalk, or more commonly, use nearby streets which include parallel bicycle routes. While this configuration supports vehicle traffic movement and access, it creates a sense of separation between the two sides of the street and confines pedestrian space to the standard 13-foot sidewalks on either side. Sidewalks are narrow compared to the preferred width guidance set in the 2020 Pedestrian Plan<sup>1</sup> and offer limited protection from adjacent vehicle traffic. During community engagement activities, participants frequently expressed concern about narrowness, their exposure to vehicle traffic, and associated noise levels.



**Figure 5.1 Section Graphic of the Typical Right-of-Way Configuration at San Pablo Avenue**  
Graphic by CD+A

<sup>1</sup> City of Berkeley. [Pedestrian Plan Appendix B: Toolbox of Pedestrian Improvements](#). Adopted 2020, p. 8



# Transportation

## Multimodal Mobility, Safety and Comfort

According to the Vision Zero Policy and Plan (see page 58) San Pablo Avenue is classified as a High-Injury Street, one of the City's streets with the highest number of severe injury and fatality traffic crashes. Risk and discomfort associated with crossing the street is driven by the absence of dedicated bicycle crossing infrastructure, limited pedestrian visibility, and high vehicle speeds and related traffic noise. These conditions create an environment that is less safe for non-motorized users.

As mentioned previously, many cyclists avoid riding directly on San Pablo Avenue and instead rely on parallel bicycle routes. However, crossing San Pablo Avenue remains difficult. The 2017 Berkeley Bicycle Plan (see page 58) identified all intersections at key east-west bicycle routes designated as class III bicycle boulevards—specifically Virginia Street, Channing Way, and the Russell Street and Heinz Avenue connection—as

high-stress locations for cyclists and present significant barriers to safe and comfortable bicycle travel.

Several safety improvement projects are underway to address some of these conditions. For project details, see **Appendix D: Street Improvements**. The Specific Plan (the Plan) establishes policies and standards for further improving mobility, safety, and comfort for all users. **Appendix D** also outlines recommended projects that may be implemented with future development.

## Transit Network

Transit service within the Specific Plan Area is provided by the Alameda-Contra Costa Transit District (AC Transit), which operates local bus routes, a limited stop bus line along San Pablo Avenue, and transbay service connecting the area to the Salesforce Transit Center in San Francisco. AC Transit routes 72, 72L, 72M, 52, 51B, 36, 12, J, G, FS, and San Pablo All Nighters (800 & 802) connect the Specific Plan Area to North Berkeley, Downtown Berkeley, or Ashby BART Stations, and San Francisco.



**Figure 5.2 Sidewalk with Bus Stop and Café Seating**

*On the West Side of San Pablo Avenue and Dwight Way Intersection. Photo by CD+A, 2025*

# Objectives

San Pablo Avenue does not need to look the same from end to end; in fact, the distinct character of different places along San Pablo Avenue is one of its valued assets (See Figures 5.3 and 5.4). However, many of these areas can benefit from stronger visual and physical connections. By establishing guidance for shared elements like trees, lighting, and street furnishings, the Plan seeks to create a sense of continuity while allowing for places along San Pablo Avenue to develop their own unique identity.



## Transportation

Improve San Pablo Avenue's function as a multimodal street that safely and efficiently serves pedestrians, cyclists, transit riders, drivers, deliveries, freight, emergency response and evacuation, and maintenance access. Enhance access to transit and reduce collisions. Improve the balance between regional mobility and local access. Better manage on-street parking and loading to support diverse uses along San Pablo Avenue.



**Figure 5.3 Daytime Traffic**  
San Pablo Avenue near Blake Street Intersection.  
Photo by CD+A, 2025



## Public Realm

Transform San Pablo Avenue into a welcoming and vibrant public realm, with public spaces that enhance the distinct character of places along the street and neighborhoods they connect to. Expand and improve sidewalks and streetscape elements and encourage public art, and cultural activities to support a more active street life.



**Figure 5.4 Sidewalk with Storefront**  
San Pablo Avenue Sidewalk South of Dwight Way.  
Photo by CD+A, 2025

# Transportation Policies, Standards and Projects

The Specific Plan Area needs improved local and citywide multimodal access to support anticipated growth in population, employment, and business activity in the Specific Plan Area and adjacent neighborhoods in West and South Berkeley. Meeting the transportation needs of this growth will require reducing dependence on personal vehicles and expanding access to safer and more equitable travel options. This approach aligns with regional and City goals for climate action, economic vitality and equity. The following section outlines strategies to support this transition, including safer street crossings for all users, enhanced transit access and reliability, parking and curb management to support businesses, and measures to reduce collisions while improving overall mobility.

## Existing Policies and Standards

### City of Berkeley

#### Vision Zero Policy and Plan

In 2020, the City of Berkeley adopted its **Vision Zero Action Plan** with the goal to eliminate all traffic fatalities and severe injuries by 2028. The plan focuses on engineering and design strategies that improve safety for everyone travelling in Berkeley. Between 2011 and 2020, multiple collisions along San Pablo Avenue resulted in severe injuries to people walking, biking, and driving, including one fatality. According to the City's 2022 Annual Report<sup>2</sup>, 42 percent of Berkeley's severe and fatal traffic collisions during that same timeframe occurred within Metropolitan Transportation Commission designated Equity Priority Communities<sup>3</sup>, which includes most of the Specific Plan Area.

To help meet Vision Zero goals, several safety improvements are already planned or in progress, and many are part of Alameda CTC's San Pablo Corridor Safety Enhancements Project. The Specific Plan also includes transportation safety related policies, improvements, and an implementation strategy that supports Vision Zero goals.

#### Berkeley Bicycle Plan

The City of Berkeley Bicycle Plan Update was adopted by City Council on June 16, 2026. The update began with Phase 1 public outreach in 2022 and drafting of the plan with additional engagement in 2025. Parallel

development with the Specific Plan allowed for coordination between both documents. The following information is drawn from the Final Draft of the Bike Plan, dated January 2026 which was adopted as the Final Plan. The Bicycle Plan seeks to increase bicycle use as a day-to-day mode of transportation. San Pablo Avenue, as one of the City's and AC Transit's Primary Transit Routes, was identified for further study to evaluate options for improved Class IV bicycle access along the street. San Pablo Avenue is designated as a Tier 2 Priority Project in the Bicycle Plan based on the project's scoring for safety, community support, equity, Safe Routes to Schools, and project feasibility. As part of the Bike Plan's Complete Streets Corridor Study Recommendations<sup>4</sup>, it recognizes the earlier multimodal study completed by Alameda CTC and states "*Further study and design of parallel residential street bikeways, ped and bike crossing improvements, and transit service improvements in progress.*"<sup>5</sup>

Since the adoption of the initial 2017 Bicycle Plan, the City has partnered with Alameda CTC through its San Pablo Avenue Safety Enhancements Project and Parallel Bike Improvements Project to implement crossing upgrades at several designated bicycle boulevards and to establish new and improve existing parallel bicycle boulevard routes. Additional information about planned safety and mobility improvements along San Pablo Avenue is provided in the following section, which discusses the Alameda CTC San Pablo Corridor Projects.

<sup>2</sup> City of Berkeley. [Vision Zero Annual Report 2021–2022](#). June 2022. Accessed 6 May 2025.

<sup>3</sup> See Chapter 1 Introduction for definition of Equity Priority Communities.

<sup>4</sup> City of Berkeley Bicycle Plan update, [Final Draft](#), January 2026. Accessed 20 May 2026. Pp. 124-126

<sup>5</sup> City of Berkeley Bicycle Plan update, pp. 126



## Berkeley Pedestrian Plan

The **2020 Pedestrian Plan**<sup>6</sup> outlines strategies to improve pedestrian travel along Berkeley’s high-injury streets and enhance overall pedestrian safety consistent with the Vision Zero Action Plan. The plan identifies San Pablo Avenue—from University Avenue to Dwight Way—as a priority corridor, ranking it among the top 10 locations for capital projects focused on pedestrian safety.

The Plan’s proposed improvements at key intersections along San Pablo Avenue align closely with the Alameda CTC San Pablo Avenue Safety Enhancements Project and include curb extensions, raised medians, high-visibility crosswalk markings, and pedestrian hybrid beacons (PHBs)/rapid-reflective flashing beacons (RRFBs).

Additional recommendations go beyond the current scope of the Safety Enhancements Project. These include evaluating the feasibility of lowering speed limits to 25 mph and introducing separate pedestrian signal phases that do not conflict with turning vehicles.

## Transportation Demand Management Policies

The City of Berkeley Municipal Code establishes a **Transportation Demand Management (TDM) Program**<sup>7</sup> that supports the goals of the City’s Transportation Element and Climate Action Plan by reducing automobile travel, encouraging transit ridership, and promoting bicycle and pedestrian safety. This program requires new residential developments of ten or more units to:

- Provide unbundled parking that is sold or leased separately from units to incentivize reduced automobile ownership
- Offer monthly transit passes at no cost to residents to encourage transit use
- Provide real-time transportation information on displays in common areas to facilitate transit use

Before a Certificate of Occupancy is issued, site inspection is required to confirm that all required physical improvements have been installed. Following occupancy, property owners are responsible for

ongoing compliance and reporting to ensure that required TDM measures remain in place and effectively achieve the objectives of the program.

Additionally, the City requires employers with ten or more employees to provide a **Commuter Benefit Program**<sup>8</sup> that encourages the use of transit, vanpools, or bicycles by providing pre-tax payroll deductions, direct payment of expenses, or a company-funded shuttle service.

## goBerkeley On-Street Parking Meter Policy

In 2022, the City of Berkeley launched the goBerkeley SmartSpace pilot, funded by MTC and FHWA, to explore ways to reduce the need for residents to move their vehicles every two hours due to on-street parking restrictions in neighborhoods near the Elmwood and Southside/Telegraph commercial districts. As a result of the pilot, the City adopted an **on-street parking meter pricing policy**<sup>9</sup> for single-space meters and pay stations within the goBerkeley meter zones that allows for parking fee adjustments based on published parking occupancy data. The goal is to maintain 65–85% occupancy, or roughly 1–2 open spaces per block, to minimize circling and improve parking availability. Rates are adjusted two to three times per year.

## On-Street Accessible Parking and Passenger Loading Requirements

Accessible parking in the public right-of-way is required and must comply with the U.S. Access Board’s **Public Right-of-Way Accessibility Guidelines (PROWAG)**, federally adopted in 2024.<sup>10</sup> Where on-street parking is metered or designated by signage or pavement markings, the required number of accessible spaces and their design must follow PROWAG standards for dimensions, clearances, and connection to the pedestrian access route. If individual spaces are not marked, each 20 feet of designated curb space is counted as one parking space.

The following exceptions apply to implementation of on-street accessible parking:

<sup>6</sup> City of Berkeley. [Berkeley 2020 Pedestrian Plan](#). 2020. Accessed 17 June 2025.

<sup>7</sup> City of Berkeley. [Berkeley Municipal Code § 23.334 - Transportation Demand Management](#). Accessed 16 June 2025.

<sup>8</sup> City of Berkeley. [Berkeley Municipal Code § 9.88 – Commuter Benefit Program](#). Accessed 2 July 2025.

<sup>9</sup> City of Berkeley. [Berkeley Municipal Code § 14.52.120 – Parking Meter and Pay Station Fees](#). Accessed 23 June 2025.

<sup>10</sup> U.S. Access Board. [Public Right-of-Way Accessibility Guidelines \(PROWAG\), 36 CFR Part 1190, Final Rule published in the Federal Register, 88 FR 54336](#). August 2023. Effective 7 September 2024. Accessed 23 June 2025.

- Spaces reserved exclusively for residential, commercial, or law enforcement use are exempt and not counted toward required totals.
- If on-street spaces are altered, requirements apply only to the modified spaces until the minimum required number is reached.

Accessible passenger loading zones in the public right-of-way are also required. At least one accessible loading zone must be provided per 100 feet (or fraction thereof) of designated loading area, excluding transit stops.

## Off-Street Parking Maximums in Transit-Rich Areas

In 2021, the City of Berkeley adopted parking reforms that established **off-street parking maximums** for new residential developments well-served by transit, limiting vehicle parking to a maximum of 0.5 spaces per dwelling unit.<sup>11</sup> Parking reductions are also defined for all uses in mixed-use buildings within the existing C-W zoning district.<sup>12</sup> This policy is intended to support TDM measures by discouraging car dependency and encouraging transit-oriented, sustainable growth in areas with good transit service. The cap applies within a quarter mile of rail stations and bus transit corridors with peak period frequency of 15 minutes or better, which includes the entirety of the Specific Plan Area.

## Bicycle Parking Policies

Bicycle parking facilities that are secure, accessible, and weather-protected support TDM measures by encouraging bicycle use. Bicycle parking is also included in the *Pre-Occupancy TDM Program and Bicycle Parking Ongoing Monitoring and Reporting Statement*, which new developments are required to complete.

Building on the goals of the 2017 Berkeley Bicycle Plan, the City of Berkeley Municipal Code requires **long- and short-term bicycle parking** for new commercial construction, development that expands floor area, and new residential projects, including residential portions of mixed-use developments.<sup>13</sup> Bicycle parking spaces are required on a per square-

foot basis for commercial development and per bedroom basis for residential development.

Detailed siting and design standards for bicycle parking are outlined in the **Bicycle Facility Design Toolbox**, provided as Appendix F of the 2017 Bicycle Plan.<sup>14</sup> This guidance accounts for a range of bicycle types and sizes and recommends long-term parking strategies based on lot coverage. Projects on parcels with high lot coverage (over 85%) are encouraged to provide indoor long-term bike parking, such as a secure room or cage. Sites with lower lot coverage may use outdoor solutions like bike lockers or covered, secure enclosures.

**Bike corrals** are a form of on-street bicycle parking that provide high-capacity, short-term parking by consolidating racks within the paved right-of-way, typically in areas with high demand and limited sidewalk space. In Berkeley, corrals may replace a vehicle parking space or be installed adjacent to a red curb. Merchants or property owners may request a bike corral in front of their business.<sup>15</sup> Requests are reviewed based on safety, demand, and feasibility, and installations must follow design standards outlined in the City's Bicycle Facility Design Toolbox. The City may also create bike corrals in locations with high bike parking demand and limited sidewalk space, such as in multimodal Mobility Hubs.

## Transit-First Policy Implementation Plan

The **Transit-First Policy Implementation Plan (2023)** provides policies and guidelines for implementing the City's Transit-First Policy (Berkeley General Plan Policy T-4) and for future planning for the City's existing transit priority corridors. It is a standalone document but planned to be implemented into a future update of the Berkeley Strategic Transportation (BeST) Plan.

The Plan designates San Pablo Avenue as a Primary Transit Route and a priority corridor for further study of transit infrastructure needs, building on the findings of AC Transit's Major Corridors Study (2016). Together with Telegraph and University Avenues, San Pablo Avenue is identified as a potential Bus Rapid Transit corridor in AC Transit's Long-Term Improvements Plan (targeted for implementation by 2040). Further, the

<sup>11</sup> City of Berkeley. [Berkeley Municipal Code § 23.322.070 – Off-Street Parking Maximums for Residential Development](#). Accessed 16 June 2025.

<sup>12</sup> City of Berkeley. [Berkeley Municipal Code § 23.322.050.A.7 – All Uses in Mixed-Use Building](#). Accessed 11 March 2025.

<sup>13</sup> City of Berkeley. [Berkeley Municipal Code § 23.322.090 – Bicycle Parking](#). Accessed 2 July 2025.

<sup>14</sup> City of Berkeley. [Berkeley Bicycle Facility Design Toolbox](#). May 2017. Accessed 16 June 2025.

<sup>15</sup> City of Berkeley. [Bicycle Parking Program](#). 2025. Accessed 26 June 2025.

Plan highlights Alameda CTC's San Pablo Corridor Project as the lead effort for shaping future transit improvements and recommends ongoing coordination with Alameda CTC, Caltrans, and neighboring cities to develop a long-term implementation strategy.

### Council Referral for BRT in Berkeley

In September 2023, the Berkeley City Council directed the City Manager to explore a feasibility analysis of Bus Rapid Transit (BRT) options along AC Transit's 51B route, including University Avenue. University Avenue bus service provides a key east-west connection between San Pablo Avenue and Downtown Berkeley and is designated a Primary Transit Route in AC Transit's Major Corridors Study.

Future BRT service on University Avenue could enhance transit access between the Specific Plan Area and major destinations such as Downtown Berkeley, UC Berkeley, BART, and the Berkeley Amtrak Capitol Corridor Station. Completed improvements in

the Southside area include bus-only lanes on Durant Avenue and Bancroft Way that are used by the 51B and 6 routes. The referral proposes future budget allocations for corridor studies and ADA improvements.

## San Pablo Avenue Public Improvement Plan

The San Pablo Avenue Public Improvements Plan, adopted on December 7, 2004, was developed to support pedestrians, cyclists, drivers, and transit users, while also revitalizing the area along and surrounding San Pablo Avenue. While many improvements have been completed, the Plan itself is now outdated and replaced by this Specific Plan. The Improvement Plan's recommendations served as a foundation for the Specific Plan's public realm framework, informing its policies, programs and design standards.

## Caltrans

As described in **Chapter 1 Introduction**, San Pablo Avenue is a California state highway (State Route 123). Any improvements within the street right-of-way must be approved by Caltrans, while the City of Berkeley is responsible for maintaining sidewalks, roadway surface and medians, street trees, landscaping, and electrical work. Any modifications to the roadway itself, such as lane configurations, signal equipment and timing, speed

limits, curb changes, or median design, must comply with Caltrans design standards and receive their approval.

Because San Pablo Avenue functions as a freeway reliever route for I-80, it is prioritized for regional vehicle movement. This limits the feasibility of changes that could reduce vehicular capacity.

## AC Transit

AC Transit provides bus service across Alameda and Contra Costa counties, operating 12 routes that serve the Study Area and connect directly to San Pablo Avenue.

### Realign Plan

In response to evolving travel patterns, AC Transit developed the Realign Plan, a redesigned bus network, which launched in August 2025. Under the new network, bus service frequency along San Pablo Avenue in Berkeley is expected to remain the same consistent with previous levels, while overall schedule reliability is anticipated to improve.

AC Transit first introduced the RAPID bus, Line 72R, service in 2003, a service that continues under 72L today. The agency further upgraded transit efficiency with the

San Pablo Avenue Rapid Corridors Project, completed in 2023. This effort improved traffic signals, installed GPS-enabled Transit Signal Priority (TSP) technology, and enhanced overall operations from downtown Oakland to the City of San Pablo.

### Major Corridors Study

AC Transit's 2016 Major Corridors Study laid out both short- and long-term strategies for improving service along San Pablo Avenue. The long-term vision calls for Bus Rapid Transit (BRT) to boost capacity and reliability. In the short- and mid-terms, the Rapid Corridors project and on-going planning and design led by Alameda CTC are improving transit infrastructure along San Pablo Avenue in Berkeley and adjacent communities. For more details on their current work, see **Appendix D**.



## Existing Transportation Projects

At the time of writing the Plan, several transportation and streetscape improvements are anticipated to take place over the next several years. The improvements proposed in the Plan build upon these ongoing and planned efforts, treating them as baseline conditions. For a comprehensive list and description of these projects, refer to **Appendix D**.

### City of Berkeley Projects

The City moved forward with the implementation of several projects identified in the 2017 Bike Plan and 2020 Pedestrian Plan, including several projects that cross or parallel San Pablo Avenue. These efforts were

coordinated with Alameda CTC's San Pablo Avenue Corridor Projects to support broader multimodal safety goals. For a map of current connections and a full list of projects, see **Appendix D** and see Figure 5.8.

### Alameda CTC Projects

The Plan does not focus on transportation improvements to San Pablo Avenue, because the Alameda County Transportation Commission (Alameda CTC) has completed a multimodal planning study for San Pablo Avenue throughout Alameda County. The study led to three improvement projects (see Figure 5.5). These projects will result in construction of safety improvements for all users, bus stop improvements, and parallel bicycle facility improvements, as well as a short segment of bicycle and bus lanes on the southern end of San Pablo Avenue in Berkeley. For detailed project descriptions and timelines, refer to **Appendix D**. The Bus Lanes and Bike Lanes project which is planned to extend

from Oakland to the south up to Heinz Street in Berkeley has experienced some planning delays and is not expected to be finished with construction by 2035 at the earliest. The Parallel Bike Improvements and Safety Enhancement projects are expected to be completed by 2027 to 2028.

#### Alameda Countywide Bikeways Network

San Pablo Avenue is designated as a major bus and bikeway corridor within the Alameda Countywide Bikeways Network<sup>16</sup>; it is subject to regional All Ages and Abilities (AAA) bikeway design expectations. For additional details, see **Appendix D**.



**Figure 5.5 Alameda CTC San Pablo Avenue Multimodal Corridor Overview Map**

Map by Alameda CTC, CD+A

<sup>16</sup> Alameda CTC. [Alameda Countywide Bikeways Network](#) Executive Report. December 2022. P.3. Accessed August 2025.

# Transportation Policies and Standards

## Multimodal Mobility and Access

Ongoing and planned improvements to transportation infrastructure along San Pablo Avenue establish a foundation for improving mobility and access for all users. Future efforts will build on this momentum to provide infrastructure and operation systems that best serve the community’s vision for the Specific Plan Area as a vibrant mixed-use district.

### T-P.1 Improve Mobility, Access, and Safety for All People

The Specific Plan will improve conditions for people walking, biking, taking transit, driving, making deliveries, as well as emergency response and evacuation and maintenance access along San Pablo Avenue and throughout the Specific Plan Area. The Specific Plan considers particular needs of vulnerable users, including children, seniors, and people with disabilities.

The Specific Plan will support implementation the goals for the City’s Complete Streets Policy and the Vision Zero Action Plan by designing all street and transportation improvements within the Specific Plan Area to enhance mobility, access and safety for people who are walking, biking, taking transit, and driving while providing access for deliveries, freight, emergency response, evacuation and maintenance. The Specific Plan will ensure that design and implementation consider the needs of vulnerable users, including children, seniors, and people of all abilities.

The City is planning to update the Pedestrian Plan and the Vision Zero Action Plan starting in 2026 or 2027. These updates provide the opportunity to further assess pedestrian and other multimodal conditions along San Pablo Avenue, and to prioritize multimodal recommendations and implementation of improvements identified in this Plan at a citywide level. As a part of these plan updates, the City will review and update regulations for maintaining accessibility for bicyclists, pedestrians, and transit riders during construction in the Specific Plan Area, as well as coordinating with Caltrans to receive their agreement with the regulations. See also **Chapter 6 Administration and Implementation** and other specific recommendations in this chapter.

### T-P.2 Future Transportation Study Needs for San Pablo Avenue

The Alameda CTC Bus and Bike Lanes Project currently ends at Heinz Street and San Pablo Avenue. Through previous planning and engagement efforts, the community expressed concerns regarding feasibility and the significant roadway changes required to extend dedicated bus or bicycle facilities through Berkeley along San Pablo Avenue. These challenges include removal of all or some portions of the medians which hold mature street trees. With a growing population and reduced off-street parking requirements for all developments given proximity to high-quality transit (See off-street parking requirements discussion in the *Parking and Curb Management* section of this chapter), the demand for alternative transportation options is likely to increase. It is expected that the City will need to revisit the design of Berkeley’s portion of San Pablo Avenue in the future.

The Specific Plan recommends that the City, in partnership with Alameda CTC, AC Transit and Caltrans, and the City of Albany, explore a potential follow-up planning and design process to evaluate multimodal conceptual design options for San Pablo Avenue from Heinz Avenue to the Alameda County line. This potential future process could study a range of potential bike and bus improvements, including bus rapid transit, bus only lanes, and separated bike lanes. Depending on development activity in Berkeley and other San Pablo Avenue communities there may also be some future interest in studying the potential for streetcar service.

A multimodal study for San Pablo Avenue is a priority for the Project Plan Area, but it has not been identified as a priority in the on-going update to the City of Berkeley Bicycle Plan, and has not been identified as a priority in other City transportation documents. The upcoming updates to the Vision Zero Action Plan and the Pedestrian Plan should consider identifying a multimodal study as a city-level priority.

### T-P.3 Maintain and Improve Bus Service in Collaboration with Alameda CTC and AC Transit

Maintain existing transit service levels along San Pablo Avenue and preserve key east-west “secondary route” connections identified in the City of Berkeley’s General Plan. In alignment with the City of Berkeley’s Transit First Policy (Policy T-2)<sup>17</sup>, the City will continue to coordinate with AC Transit to improve service on San Pablo Avenue as needed to enhance east-west service and improve infrastructure. This includes continuing to explore the implementation of AC Transit’s recommendations for primary transit routes and the need for improved connections to the Ashby and North Berkeley BART stations, which is further discussed in BART’s station and access plan.<sup>18</sup> A key element of this approach will be identifying the appropriate lead agency for such studies and project development, as well as adequate funding. Efforts will be guided by the Transit First Policy Implementation Plan to ensure a coordinated and effective approach.

### T-P.4 Implement Signal Timing and Transit Signal Priority (TSP)

In collaboration with Caltrans and AC Transit, identify and implement additional TSP improvements at signalized intersections and signal timing that favors transit operations to increase transit reliability and encourage ridership. This effort will build upon improvements made by AC Transit. This signal timing assessment will also identify changes to signal timing to manage mixed flow traffic speeds, encouraging travel at or below the speed limit. TSP provisions should also require emergency-vehicle preemption or prioritization, and the Fire Department should participate in the design, testing and performance monitoring of any TSP changes.

## Parking and Curb Management

Many businesses along San Pablo Avenue depend on on-street parking for customer access and loading, particularly those without private parking lots or off-street loading.

With new residential developments, community members have raised concerns about parking availability to support the growing population. Business owners have also noted issues such as reduced storefront visibility due to parked cars and lack of parking enforcement leading to vehicles blocking parking spaces throughout the day.

Curb space in the Specific Plan Area, both on San Pablo Avenue and crossing streets, will be managed to support the needs of both businesses and residents, with a shared goal of maintaining available on-street parking access even during periods of peak demand. The Specific Plan recommends a strategy to ensure that on-street parking remains available for customers and other visitors arriving by car.

Provision of parking along San Pablo Avenue needs to be balanced with multimodal needs of all people that use San Pablo Avenue. See *T-P.2 Future Transportation Study Needs for San Pablo Avenue* regarding the need to study and implement multimodal improvements along San Pablo Avenue.



#### Off-Street Parking Requirements

**Assembly Bill (AB) 2097** is a California law that prohibits public agencies or cities from imposing minimum automobile parking requirements on most developments located within a half-mile radius of major transit stops.

**BMC 23.322.070** Establishes off-street parking maximums for residential development.

As San Pablo Avenue is a major transit corridor (See *Transit Network*), most of the Specific Plan Area falls under both guidelines and is largely exempt from minimum parking requirements.

<sup>17</sup> City of Berkeley [Transit-First Implementation Plan](#), 2023. Pp. 7-8. Accessed 20 May 2026

<sup>18</sup> BART, [Berkeley-El Cerrito Corridor Access Plan](#), February 2023. P. 66. Accessed 4 September 2025.

## T-P.5 Create an Active Parking and Loading Management Program for the Specific Plan Area

The program will include strategies such as adjusting parking meter rates and time limits through the City's goBerkeley Parking Program. It will also consider expanding metered parking locations to side streets with commercial frontages to maintain the City's target occupancy rate of 65 to 85 percent on metered blocks. Increased enforcement will accompany these measures to ensure compliance and support consistent parking turnover.

Currently, the City of Berkeley is not encouraging the establishment of additional Residential Parking Permit (RPP) areas, primarily due to cost considerations. As the effectiveness of pipeline and potential future multimodal improvements are assessed, the City will have an opportunity to reassess parking and loading needs along San Pablo Avenue and surrounding neighborhoods. Based on these assessments, the City Council will consider whether to establish new RPP area(s) in adjacent neighborhoods and whether to allow merchants to purchase permits to park in those areas.

## Implement Mobility Hubs

The Metropolitan Transportation Commission (MTC) defines a Mobility Hub as an access point for “[...] travelers of all backgrounds to access multiple transportation options and supportive amenities. Built on the backbone of frequent and high-capacity transit, Mobility Hubs offer a safe, comfortable, convenient, and accessible space to seamlessly transfer across different travel modes.”<sup>19</sup> Identifying a Mobility Hub can strengthen eligibility for the Transit-Oriented Communities (TOC) program, improve transit access, and potentially improve eligibility for some funding sources. In 2020, MTC identified the University Avenue Node as a potential Mobility Hub.<sup>20</sup>

## T-P.6 Implement Mobility Hub Features in the University Avenue Node

In collaboration with MTC and AC Transit, the City will explore implementation of Mobility Hub strategies and features outlined in the [Mobility Hub Implementation Playbook](#).

**Improvements** Potential mobility hub features in the University Node include:

- Improvements to bus stops and transit wayfinding.
- Bike share and shared micromobility stations.
- Bike corrals in parking lanes, and designated loading areas for ride-hail services, urban freight and delivery.

Install a bike corral near the bike boulevard crossing improvement at Addison Street as a first step toward creating a mobility hub in the University Avenue Designated Node.

## T-P.7 Evaluate Other Locations for Some Mobility Hub Features

Evaluate the potential for Mobility Hub features at other Designated Nodes or on a Specific Plan Area-wide basis, especially when transit service levels change. Even in locations that may not fully meet MTC's criteria for a designated Mobility Hub, the City will consider incorporating select hub features.

<sup>19</sup> Metropolitan Transportation Commission. [MTC Mobility Hub Implementation Playbook](#). 30 April. 2021, p. 5. Accessed June 4, 2025

<sup>20</sup> Metropolitan Transportation Commission. [San Francisco Bay Region Mobility Hubs](#). ArcGIS Online Map Viewer. Accessed June 4, 2025



## Multimodal Safety

Collision data identifies San Pablo Avenue as one of Berkeley's most high-injury corridors, indicated the need for targeted safety interventions that reduce vehicle speeds, enhance visibility, and improve safety for all travel modes (See Figure 5.6). Improving sidewalk safety must also include interventions to support personal security and comfort. Measures such as pedestrian-scale lighting, wider sidewalks and Universal Design are further discussed in the Public Realm section of this chapter (see *PR-P. 14 Design for People of All Ages and Abilities*).

### Manage Vehicle Speeds and Lowering Speed Limit

Reducing vehicle speeds along San Pablo Avenue can help create a safer, quieter, and more welcoming environment that supports the transformation of the Specific Plan Area into a vibrant mixed-use district.



**Figure 5.6 Dwight and San Pablo Avenue Intersection**

*The existing crossing lacks safety interventions.  
Photo by CD+A*

### T-P.8 Lower Speed Limit on San Pablo Avenue

San Pablo Avenue currently has a posted speed limit of 30 mph. In California, speed limits are primarily established based on rounding the 85th percentile speed<sup>21</sup> observed in an Engineering and Traffic Study (E&TS) to the nearest five mph. However, Assembly Bill 43 (2022) allows for greater flexibility in setting speed limits that better reflect safe road conditions for all users through the following mechanisms:

Agencies may round the 85th percentile speed observed in an E&TS down to the nearest five mph, even when the 85th percentile speed is ordinarily be rounded up.

For roadways where the 85th percentile speed is ordinarily be rounded down, agencies may reduce the speed limit by an additional five mph if the reasons for the lower limit are documented in an E&TS.

Local agencies may reduce the speed limits calculated in an E&TS by an additional five mph on designated Safety Corridors or corridors adjacent to land generating high bicycle and pedestrian volumes.

Regardless of the findings of the E&TS, local agencies may retain the existing speed limit or, if the immediately prior speed limit was lower than the existing speed limit, reduce the speed limit by five mph.

Local agencies may reduce speed limits from 30 mph to 25 mph (or from 25 mph to 20 mph) in Business Activity Districts without needing an E&TS.

Because San Pablo Avenue is operated by Caltrans, only the first two listed provisions apply<sup>22</sup>. The City will coordinate with Caltrans and AC Transit to conduct an E&TS, with the goal of reducing the posted speed limit from 30 mph to 25 mph. A lower speed limit would complement other proposed traffic calming measures and pedestrian and bicycle safety enhancements along San Pablo Avenue. Signal timing adjustments at the intersections may also be needed to support this change. Ultimately, Caltrans has the authority to set the speed limit on San Pablo Avenue, because the full length of the street in Berkeley is a

#### Speeding and safety

Collision data for San Pablo Avenue in Berkeley indicates that from 2018 to 2022 unsafe speed was the primary collision factor in 26 percent of collisions that resulted in an injury or fatality, more than any other collision factor.

<sup>21</sup> The 85th percentile speed is the speed at or below which 85% of vehicles are observed to travel under free-flowing conditions.

<sup>22</sup> California Department of Transportation. [California Manual for Setting Speed Limits](#). Revised March 2025, pp. 19, 31-24

State Highway. The E&TS should include a supplementary assessment of how lowering the speed limit would affect transit performance in terms of speed and reliability.

If the E&TS process results in the speed limit remaining at 30 mph, but the E&TS shows that a high proportion of drivers are exceeding the speed limit. This information could be used for the City to continue advocating to expand the AB 645 speed safety pilot program to include Berkeley and potentially San Pablo Avenue as a pilot urban state highway high-injury corridor pilot.<sup>23</sup>

## Continue to Improve Intersections

Completed and ongoing intersection improvement projects along San Pablo Avenue (see **Appendix D**) demonstrate a broad commitment to improve safety and multimodal connectivity. While these efforts addressed important locations, they represent only a portion of a comprehensive, long-term commitment to improving intersections throughout the street. Opportunities remain to expand existing improvements – for example, by adding pedestrian lighting – and to apply consistent safety enhancements across all intersections. The following policies will inform the design and upgrades to San Pablo Avenue and other streets throughout the Specific Plan Area.

Note that improvements to San Pablo Avenue and its intersections with other streets are required to be approved by Caltrans.

### T-P.9 Pedestrian Crossing Frequency

In an urban mixed-use area, frequent and safe pedestrian marked crossings are desired. According to the City of Berkeley Pedestrian Plan (2020), the average distance between marked crosswalks along San Pablo Avenue is 380 feet, with the longest gap reaching 625 feet between Gilman Street and Harrison Street.

**Guideline** To improve pedestrian convenience and reduce unsafe crossings at unmarked locations, the City should consider adding mid-block marked crosswalks at locations where the distance between marked crosswalks exceeds 600 feet.<sup>24</sup>

- With the expansion of multiple multifamily residential developments between Gilman Street and Harrison Street, the long distance (approximately 620 ft.) between these intersections makes it a strong candidate for installation of a mid-block crossing to support increased pedestrian activity.
- Other locations to consider new mid-block marked crosswalks include the blocks between Gilman Street and Camelia Street (~600 feet), Cedar Street and Virginia Street (~615 feet), Allston Way and Bancroft Way (~615 feet), and Channing Way and Dwight Way (~590 feet).
- Safe crossing features to align with *T-P.10 Intersection Improvements*.

### T-P.10 Intersection Improvements

San Pablo Avenue has undergone several intersection improvements and continues to be the focus of additional planned improvements led by both Caltrans and Alameda CTC. A follow-up safety study should be explored after the completion of these projects to identify additional locations where improvements are needed and to assess whether any additional elements could enhance the effectiveness of previously implemented upgrades.

**Improvements** To consider at intersections include the following (Intersection specific lists of potential improvements are in **Appendix D**):

- **Signalized Intersections** – These locations are to be evaluated for potential improvements such as curb extensions on side-streets, median refuge islands where they do not currently exist, and

<sup>23</sup> This is consistent with the Berkeley City Council's April 29, 2025 adoption a resolution asking the State Legislature to add the City to the existing program or similar program. (See [Resolution No. 17,744-N.S.](#))

<sup>24</sup> City of Berkeley. [Pedestrian Plan Appendix B: Toolbox of Pedestrian Improvements](#). Pedestrian Plan Appendix B: Toolbox of Pedestrian Improvements, adopted 2020. P. 10

improved roadway lighting and pedestrian-scale lighting to enhance visibility of people entering and crossing the street. Improvements for bicycles should be considered pursuant to the toolbox recommendations of the Bike Plan, where they do not exist. The need and benefit of adding protected left turns at intersections that lack them should be assessed, along with consideration of right-turn-on-red prohibitions.

- **Un-Signalized Intersections** – These intersections are to be evaluated for physical and lighting improvements similar to those listed for signalized intersections. The need for additional or upgraded traffic flashers or signals should be evaluated, such as rectangular rapid flashing beacons (RRFB), pedestrian hybrid beacons (PHB), or full traffic signals.

### Street Improvements (Appendix D)

Potential improvements are scoped to build upon those of the San Pablo Avenue Safety Enhancement project which have not been constructed at the time of this Plan's adoption. Other intersection improvements have been recently completed. The combination of these changes defines the baseline for future transportation design and investment. The list of improvements in **Appendix D** is a compilation of improvements defined by the 2020 Pedestrian Plan and additional potential improvements. This list may be further refined as part of a planned update to the Pedestrian Plan.

In the long term, as population grows in the Specific Plan Area, and therefore pedestrian and bicycle activity increases within the Specific Plan Area, particularly in Designated Nodes, intersections have to be evaluated for the potential addition of full pedestrian signal phases. A full pedestrian phase stops all vehicle traffic while pedestrians cross in all directions, including diagonal crossings, also known as pedestrian scrambles. These signal phases improve pedestrian safety at intersections with high pedestrian volumes and complex turning movements. Detailed guidance on all-way pedestrian crossings is provided in the [Berkeley Pedestrian Plan \(2020\), Appendix B: All-Way Pedestrian Crossings, p. B-18.](#)

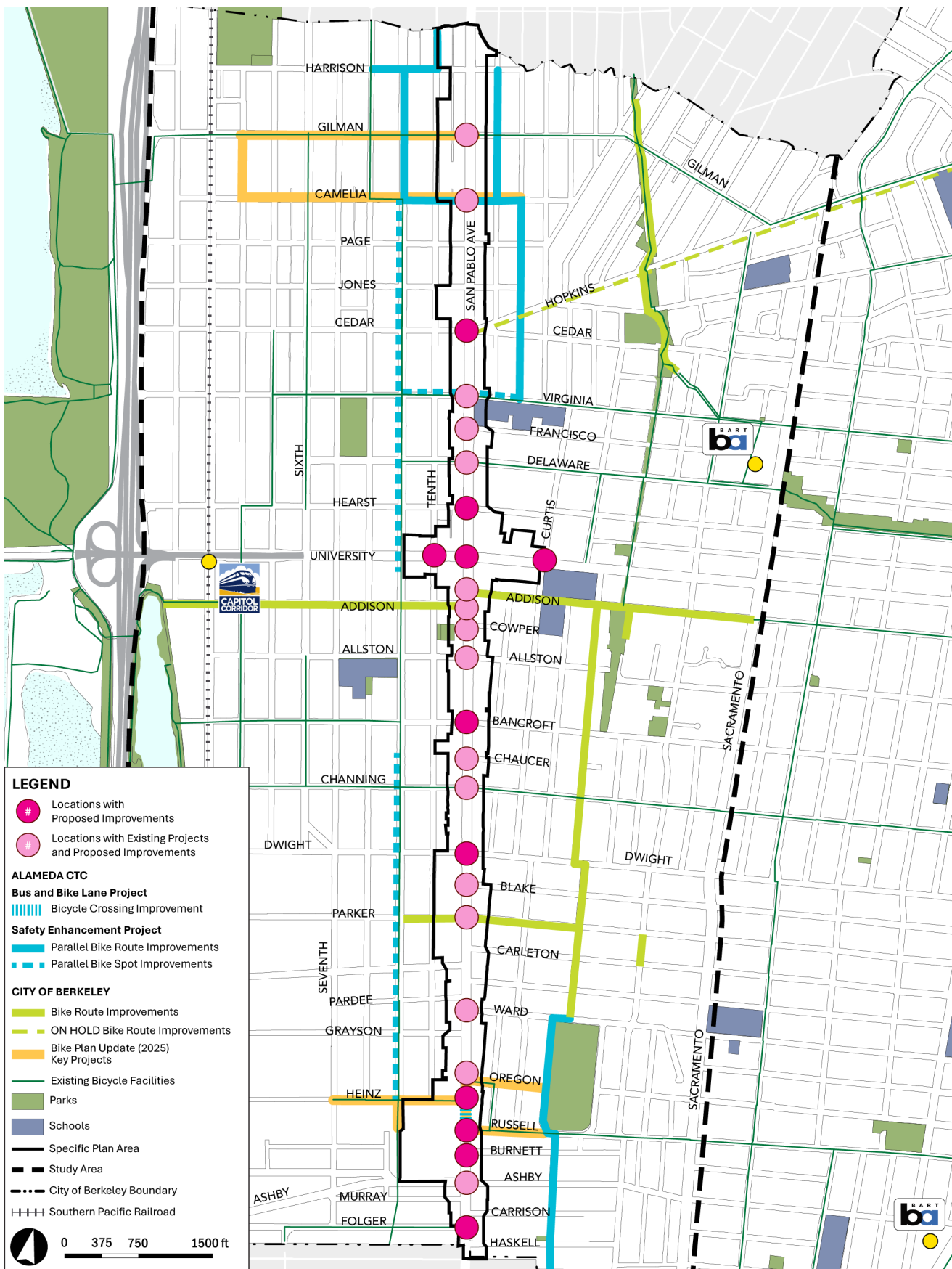
## T-P.11 Pedestrian Crossing Design

Pedestrian crossing design in Berkeley is guided by the City of Berkeley Pedestrian Plan (2020), Appendix B: Engineering & Design Guidance. Improvements to pedestrian crossings along San Pablo Avenue must also comply with the requirements of the Caltrans Highway Design Manual or receive approval for an exception from Caltrans.

**Improvements** along San Pablo Avenue shall prioritize the following:

- **Curb extensions** – The Alameda CTC Safety Enhancements project is planning bus curb extensions at select locations on San Pablo Avenue. While curb extensions into San Pablo Avenue can interfere with the potential for future multimodal improvements to use the full roadway width between existing curbs (see *T-P.2 Future Transportation Study Needs for San Pablo Avenue* for discussion of future multimodal study), the City should evaluate additional bus stop locations as potential opportunities for bus stop curb extensions. These also have the potential to be extended to provide additional public space, see *PR-P.17 Design and Use of Curb Extensions*.
- **Crossing islands** as integral part of medians and crosswalks to shorten the crossing distance.
- **Pedestrian-scale lighting**, where needed per *PR-P.3 Improve Street Lighting for the Safety and Comfort of All Users*.

A map with the crossing locations and improvements is provided in Figure 5.7.



**Figure 5.7 Locations with Need for Intersection Improvements**

For detailed list, see Appendix D. Source: Alameda CTC, AC Transit, City of Berkeley. 2025.



## T-P.12 Minor Side-Street Intersection Improvements

The City will review collision data and monitor driver behavior at minor side-street intersections and make improvements as needed.

### Improvements:

- **Raised crosswalks on side-streets** – Elevating the crosswalk between minor side-streets will slow drivers as they enter the minor street. Raising crosswalks should be considered in the context of service and emergency vehicle turn movements. Detailed guidance is provided in the [Berkley Pedestrian Plan Appendix B: Toolbox of Pedestrian Improvements, p. B-19](#).
- **Side-street curb extensions** – When space is available on side-streets provide a curb extension to shorten pedestrian crossing distance. Curb extensions narrow the opening for vehicles and allow for reduced curb radii, which will slow drivers entering the minor street and provide more space for directional curb ramps. Detailed guidance is provided in the [Berkley Pedestrian Plan Appendix B: Toolbox of Pedestrian Improvements, p. B-13](#). (see *PR-P.17 Design and Use of Curb Extensions on Side-Streets* for design and use of curb extensions for public space).
- **Encourage more perpendicular (right-angle) turning movement** at intersections to improve driver visibility of pedestrians in crosswalks. This can be done by extending medians to the crosswalk and providing a median nose to protect the crosswalk where turn movements allow. Intersection legs without medians should have hardened centerlines (see Figure 5.8).

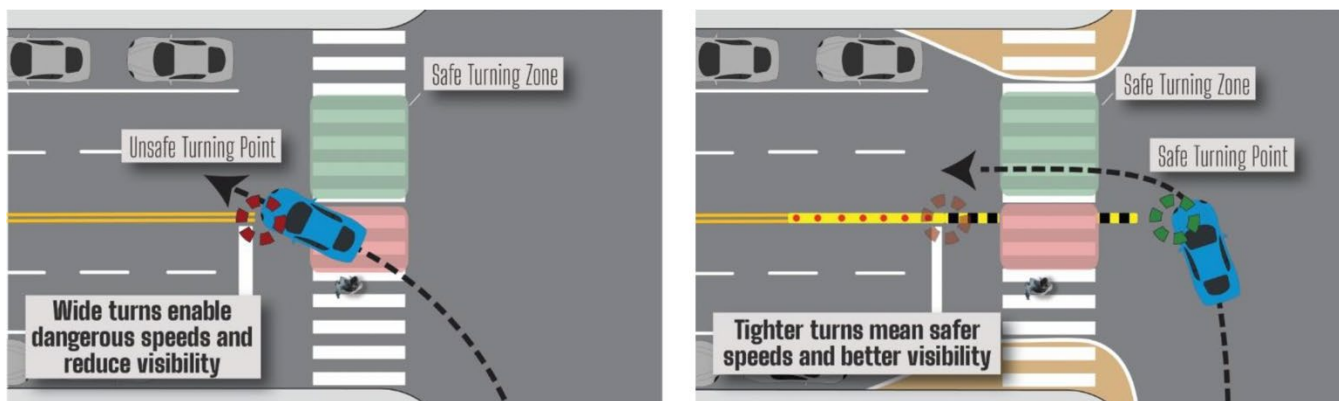


Figure 5.8 Before and After Hardened Centerline Improvement  
Graphics by Chicago.gov

## T-P.13 Make Safety Improvements at Driveways

Some driveways in the Specific Plan Area have poor visibility for drivers accessing the street from the parking lot, such as the southern driveway at REI/Chipotle/Walgreens center. Driveways will be assessed for adequate sightlines and red curbs provided where sightlines need to be improved. Priority should be given to driveways with more activity, such as along Major Streets and Collector Streets<sup>25</sup> and in locations that have a record of collisions.

## T-P.14 Prioritizing Multimodal Safety Improvements

The following factors will be used in determining priorities for multimodal safety improvements in the Specific Plan Area.

San Pablo Avenue intersections with Gilman Street, Cedar Street, University Avenue, Addison Street, and Ashby Avenue which are high-injury streets, as defined in the Vision Zero Plan, 2020, and segments of these streets within

<sup>25</sup> For definitions of Major Streets and Collector Streets, see General Plan – [Transportation Element](#). Adopted December 18 2001, p.T-31

the Specific Plan Area (see Figure 5.7). Prioritization of improvements to segments of these streets is discussed in *T-P.18 Prioritize connections with Surrounding Neighborhoods and Districts*.

San Pablo Avenue from University Avenue to Dwight Way is a priority area for multimodal improvements as the 2020 Pedestrian Plan identifies this segment as a Prioritized High-Injury Street.

The planned update to the Pedestrian Plan provides an opportunity to reassess all the streets in the Specific Plan Area for designation as Prioritized High-Injury Streets. For example, the Vision Zero Action Plan identifies the full length of San Pablo Avenue in Berkeley as a high-injury street and identifies several fatal injury collisions outside of the University Avenue to Dwight Way segment.

Consider traffic speed and traffic levels when identifying priority locations for safety improvements within the Specific Plan Area.

Intersection improvements at Russell Street and Heinz Street are part of Alameda CTC’s Bus and Bike Lane Project (**Appendix D**). Improvements for bicycle and pedestrian safety and access are identified in the 2026 Bicycle Plan Update in this area.<sup>26</sup> Given the Alameda CTC project’s projected completion date of no sooner than 2035, the City should coordinate with Alameda CTC to pursue more immediate upgrades at these intersection and potential bicycle connections on San Pablo Avenue between them.

The Specific Plan calls for continuous review of transportation collision data and the Annual Vision Zero Report to identify safety “hot spots” for targeted assessment and improvements, and to prioritize improvements at intersections that serve key connections, in alignment with *T-P.18: Prioritize connections with Surrounding Neighborhoods and Districts*.

## Improve Connections Outside of the Specific Plan Area

Community members consistently described San Pablo Avenue as a barrier separating West Berkeley from the rest of the city. This perception is driven not only by the lack of safe crossings for people walking and biking, but also by the limited number of multimodal, east-west connections to places outside of the Specific Plan Area.

Although several parks are located within a few blocks of San Pablo Avenue, access to these is often hindered by unsafe or indirect pedestrian and bicycle routes. Side-streets that connect current and future residents along San Pablo Avenue to nearby parks and facilities require targeted multimodal improvements. Strengthening these connections will improve equitable access to help overcome the street’s physical divide.

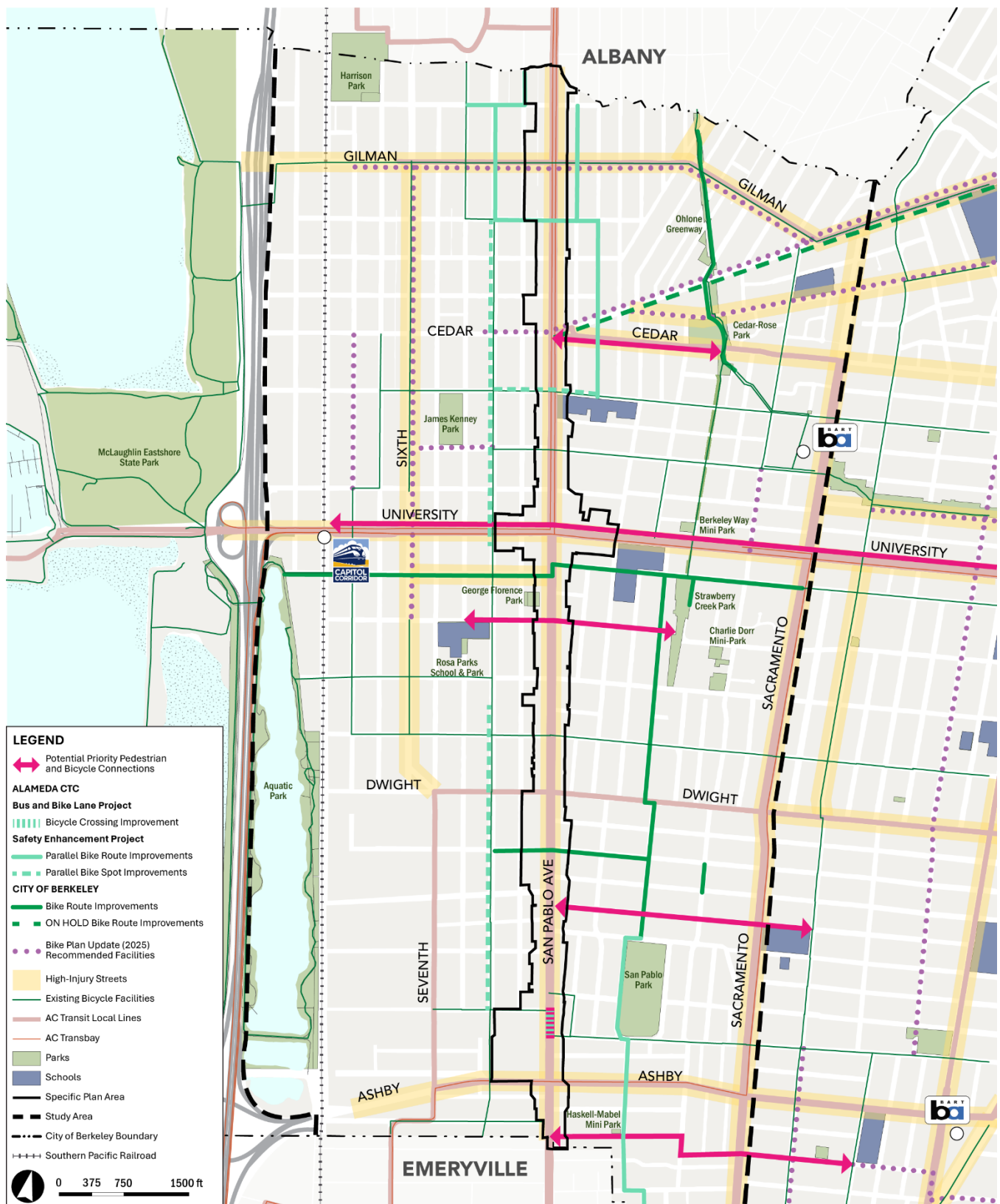
### Connections Network

Strengthening east-west connections across San Pablo Avenue is essential to linking adjacent neighborhoods with citywide destinations such as schools, parks and transit stations. Figure 5.9 illustrates the network of planned and completed projects aimed at enhancing these connections. The map identifies potential priority pedestrian and bicycle connections currently missing within the Specific Plan Area and consolidates information from several sources, including the Alameda CTC San Pablo Avenue Corridor Project, City of Berkeley and BART planned Bicycle Improvements, and the proposed facilities from the Bike Plan Update (2026). A subsequent gap analysis highlights areas where east-west connectivity remains limited and where additional infrastructure investments are needed to support safe and continuous bicycle and transit travel.

Figure 5.10 complements this analysis by providing an overview of existing road designations and emergency access and evacuation routes. Comparing the two maps reveals that many major roadways continue to lack complete multimodal facilities.

There are also some locations in the Specific Plan Area where the distance between side streets hinders connections, and *LU-S.4 Mid-Block Passage Incentive* improves accessibility between the Specific Plan Area and surrounding mixed-use industrial districts and neighborhoods adjacent to the Specific Plan Area.

<sup>26</sup> City of Berkeley. Berkeley Bicycle Plan update, Final Draft, January 2026. Accessed 24 April 2026. Page 114 and 115.



**Figure 5.9 Connections Map: Existing and Planned Projects**

Source: Alameda CTC, AC Transit, City of Berkeley. 2025.



**Figure 5.10 Existing Street Network Map**

Source: Alameda CTC, City of Berkeley. 2025.



## T-P.15 Transit Improvements

The following efforts will be undertaken by the City with partner agencies to improve reliability and efficiency of transit service connecting the Specific Plan Area to BART, UC Berkeley, Downtown Berkeley, and other major destinations:

- In alignment with Transit-First Policy 18<sup>27</sup>, explore further study of additional improvements along University Avenue and the Southside area to enhance transit service on Line 51B, strengthening connections between San Pablo Avenue, the Berkeley Amtrak Capitol Corridor Station, Downtown Berkeley, and UC Berkeley.
- Coordinate with AC Transit, BART, and Capitol Corridor to improve connections, reduce transfer wait times, and support future frequency enhancements for east-west bus service that crosses San Pablo Avenue.

For other transit improvement policies, see section *Multimodal Mobility and Access*.

## T-P.16 Bicycle Improvements

In alignment with the Berkeley Bicycle Plan (2017), Bicycle Plan Policy D-1, and consistent with the City's 2026 Bicycle Plan Update, the City will continue to expand and improve a connected, low-stress bikeway network, with emphasis on comfort and safety:

- Improve infrastructure at the intersections at Gilman and Heinz Street, consistent with the City's 2026 Bicycle Plan Update. These intersections are critical for enhancing east-west connectivity and safety. Recommended improvements include studying an extension to the existing cycletrack on Gilman Street from 4<sup>th</sup> Street to San Pablo Avenue and establishing an offset cycletrack crossing at Heinz Street to connect with Russell or Oregon Street and the larger bicycle boulevard network.
- Improve bicycle access for elementary and middle school students traveling to schools located east and west of San Pablo Avenue. Prioritize infrastructure improvements that create continuous, low-stress routes between neighborhoods and school campuses.
- Enhance bicycle connectivity to regional transit, including a safer and direct link to the Amtrak Capitol Corridor rail station to support multimodal travel options for students, commuters, and residents.

As bicycle improvements are made, provide bicycle wayfinding and directional signage consistent with standards and guidance in the Berkeley Bike Plan (2020), Appendix F and the 2026 Bicycle Plan Update to help navigate bicycle riders through intersections, and guide them to local and regional destinations. If bike lanes are not established on San Pablo Avenue, bicycle signage on the street must direct cyclists to the nearest bicycle boulevards and parallel routes to provide safe alternatives.

To help cyclists take advantage of these improvements and to access destinations bicycle parking in the Specific Plan Area will be prioritized. At a minimum, provide at least one bike rack near intersections where a bicycle facility crosses San Pablo Avenue. See *T-P.6 Implement Mobility Hub features in the University Avenue Node* and *PR-S.9 Bicycle Racks*.

<sup>27</sup> City of Berkeley [Transit-First Implementation Plan](#), 2023. Pp. 49-50. Accessed 20 May 2026

## T-P.17 Pedestrian Improvements

In alignment with the Pedestrian Plan (2020), additional improvements in the Specific Plan Area prioritize comfort, safety, and accessibility for pedestrians; the following priorities will be reflected and refined in the pending update to the Pedestrian Plan:

- Provide crosswalk improvements, traffic calming, and sidewalk upgrades along key walking corridors for elementary and middle school students, such as Cedar Street, Virginia Street, and Allston Way.
- Coordinate with any Alameda County Transportation Commission Safe Routes to School Safety Assessment plans along key walking routes that are within proximity to transit stops and commercial destinations.
- Provide safe, direct, and accessible pedestrian connections to major employers in West Berkeley, North Berkeley and Ashby BART stations, and the Capitol Corridor rail station.

For sidewalk standards, see *PR-S.1 Sidewalk Zone Standards* and other policies and standards in the Sidewalk Space section.

For pedestrian crossing safety and improvements, see policies and standards in the *Continue to Improve Intersections* section.

For streetscape improvements to provide lighting, shading, and other amenities for pedestrians, see the Public Realm policies and standards in the *Streetscape* section.

### Example Implementation

Pedestrian improvements resulting from analysis of an intersection that is already signalized, such as Allston Way, could include extending the San Pablo Avenue median noses toward crosswalks, hardening centerlines on side-streets, and/or installing pedestrian lighting at corners. These changes would encourage safe turning movements to and from San Pablo Avenue and improve visibility of pedestrians at night. Other intersections along Allston Way between San Pablo Avenue, Rosa Parks Elementary School and Strawberry Creek Park could also be assessed and improved to enhance connections between these destinations and the Specific Plan Area.

## T-P.18 Prioritize Connections with Surrounding Neighborhoods and Districts

As development occurs in the Specific Plan Area, new residents will need safe and comfortable multimodal connections to parks, schools, grocery stores, and other uses in the surrounding community. These connections will be designed to accommodate users of all ages and abilities. The following priorities are based on public comment received during the Specific Plan planning process and expected needs of future residents. Future updates to the citywide Pedestrian Plan and Bicycle Plan can verify future residents' needs:

- Prioritize pedestrian and bicycle improvements on streets that provide access to schools and parks, as well as other routes that typically serve students in the Specific Plan Area and adjacent neighborhoods to the east and west of San Pablo Avenue, including Longfellow Middle School at its temporary location just east of San Pablo Avenue, between Virginia Street and Francisco Street (The School is currently scheduled to return to original location to the east of Sacramento Street between Derby and Ward Streets in Summer 2027)
- Consider improvements that can serve the Berkeley Adult School and Berkeley Unified School District housing in the longer term.
- Bike boulevards that cross San Pablo Avenue and provide parallel access in adjacent neighborhoods.
- Streets within ¼ or ½ mile of housing for elderly people.
- Prioritize efforts in alignment with San Pablo Avenue improvement priorities discussed in *T-P.14 Prioritizing Multimodal Safety Improvements*.



### Public Input

During a public open house, parents with a young child said that they appreciated the proximity of San Pablo Park to their home, a mixed-use apartment on San Pablo Avenue near Ashby Avenue. However, they had decided to move because of the poor quality of the pedestrian connection from their apartment to the park.

## T-P.19 Monitor Changing Multimodal Needs and Conditions

As multimodal activity and development increase within the Specific Plan Area and surrounding Study Area, the City will coordinate with local, county, regional, and state transportation agency partners to monitor travel patterns and evaluate the need for additional improvements to the connection network, including as needed:

- **Coordinate with Citywide priorities** – The planned updates to the Vision Zero Action Plan and the Pedestrian Plan in 2026-2027 provide the opportunity to further assess and prioritize multimodal and pedestrian-focused improvements in the Specific Plan Area at a citywide policy level. The prioritization must reflect the Specific Plan Area being planned to accommodate a significant portion (about 20 percent) of new residential development in the city over the next eight or more years.
- **Regional traffic** – Coordinate with Caltrans to monitor regional traffic, trips that pass-through Berkeley on Specific Plan Area streets and intersections with streets that have interchanges on I-80 to understand its impacts on multimodal safety and mobility.
- **Transit service and use** – Work with AC Transit to monitor travel time and reliability of bus service on streets and routes within the Specific Plan Area that provide connections from the Specific Plan Area to the surrounding communities and region. Periodically survey existing and potential transit riders as the population in the Specific Plan Area grows, to identify their travel needs. Use the results to modify bus service as appropriate to better align with changing demand.
- **Vulnerable user needs** – Monitor changes in land use, demographics, and traffic safety with a focus on vulnerable users, including children, seniors, and people with disabilities. For example, if new senior housing or services are developed, evaluate the surrounding streets for needed improvements and consider reprioritizing planned improvements so they are implemented sooner.

This monitoring and assessment will be coordinated with updates to the City's modal plans and will also address multimodal intersections and priority improvement lists that relate to *T-P.10 Intersection Improvements*, *T-P.11 Pedestrian Crossing Design*, *T-P.12 Minor Side-Street Intersection Improvements* and *T-P.14 Prioritizing Multimodal Safety Improvements*.

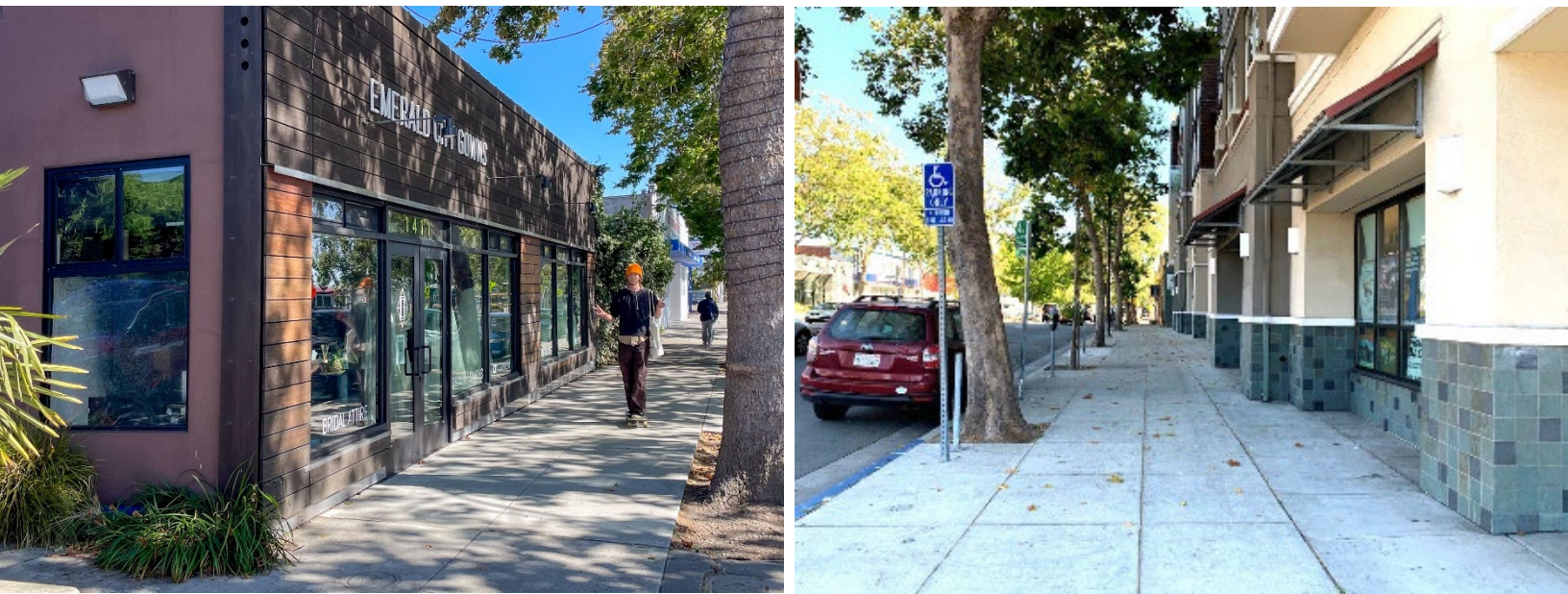
# Public Realm Policies, Standards, and Projects

The public realm in the Specific Plan Area must satisfy a broad range of transportation, social, and economic needs. The policies, standards, and projects identified in this section are intended to create an inviting, safe, comfortable, and functional environment along San Pablo Avenue and throughout the Specific Plan Area. The public realm should enable people to move easily and safely along the street, whether accessing businesses, transit, homes, parked vehicles or bicycles, and also provide welcoming spaces to meet a friend, exercise, and socialize.

## Sidewalk Space

The sidewalk along San Pablo Avenue is typically 13 feet wide with variations in the use and condition of the sidewalk space, see Figures 5.11. In many areas, private landscaping and other encroachments reduce usable space, especially where pavement is damaged around tree wells. These constraints, combined with fast-moving traffic, were frequently raised by community members as safety and comfort concerns. Several mixed-use developments constructed after 2010 include setbacks that expand the sidewalk with additional landscaping or pavement. Encouraging similar setbacks in future development presents one of the few opportunities to increase public space along San Pablo Avenue.

A well-designed sidewalk needs to provide enough space for safe, comfortable, and active use by all. The following policies and standards are intended to ensure that new development supports accessibility, safety, and vibrant pedestrian activity. The following policies and standards apply specifically to San Pablo Avenue and immediate side-streets, where noted. For guidance on other streets, refer to the City of Berkeley Pedestrian Plan (2020), Appendix B Engineering & Design Guidance.



**Figure 5.11 Sidewalks on San Pablo Avenue, Berkeley**

*Left: Typical 13 foot sidewalk in front of 1411 San Pablo Avenue. Right: Sidewalk with additional setback in front of 1808 San Pablo Avenue*



## PR-P.1 Sidewalk Zones

To serve the range of uses and infrastructure located within sidewalks, design standards define three zones across the sidewalk width: the Pedestrian Zone, the Amenity Zone, and the Frontage Zone (see Figure 5.12). As San Pablo Avenue is a state highway, Caltrans has jurisdiction over the right-of-way, including sidewalks. The City is responsible for sidewalk maintenance and implements improvements to them in coordination with Caltrans.

The Berkeley Pedestrian Plan (2020)<sup>28</sup> defines preferred widths for these zones for a Mixed-Use Residential Boulevard like San Pablo Avenue as follows:

**Frontage Zone:** 2 feet

**Pedestrian Zone:** 8 to 12 feet

**Amenity Zone:** 6 to 10 feet

**Total Sidewalk: 16 to 24 feet**

The existing sidewalks along San Pablo Avenue are typically 13 feet wide. This width is 3 feet narrower than the desired minimum as defined in the Pedestrian Plan. The sidewalk area cannot be widened within the existing public right of way.

To address this constraint, the Specific Plan standards define an approach that varies based on available sidewalk width to best meet the intentions of the Pedestrian Plan guidance (See Figures 5.13 and 5.14). While typical sidewalk width on San Pablo Avenue is 13 feet, there are some places where the sidewalk is 12 feet wide at the narrowest. The Specific Plan establishes a minimum required sidewalk width of 16 feet along San Pablo Avenue, University Avenue, Gilman Street, Cedar Avenue/Hopkins Street, Dwight Way and Ashby Avenue, which is achieved by widening the sidewalks where new development occurs. In the *Zoning Ordinance*, the required minimum Ground Floor Frontage Setbacks work in tandem with this requirement.

*PR-S.1 Sidewalk Zone Standards* provides minimum widths for sidewalk zones along San Pablo Avenue. New development is incentivized to provide additional sidewalk space beyond the minimum 16 feet through *PR-P.2 Sidewalk Incentive* and standard *LU-S.1 Sidewalk Expansion Incentive*. See Table 5.1 for minimum zone width requirements.



**Figure 5.12 Example of the Sidewalk Zones**  
Photo by CD+A

## PR-S.1 Sidewalk Zone Standards

**Pedestrian Zone:** This is the unobstructed portion of the sidewalk designated for pedestrian movement. The minimum required width for this zone varies and is based on the level of activity. Due to the existing right-of-way constraints within the Specific Plan Area, the Pedestrian Zone can be offset along the street to accommodate different sidewalk space needs in the Amenity and Frontage Zones.

**Amenity Zone:** This is the zone between the street and the Pedestrian Zone. It provides streetscape elements and buffers pedestrians from vehicle traffic. This zone includes the 6-inch curb at the edge of the sidewalk. The width varies as needed while ensuring the adjacent Pedestrian Zone meets minimum pedestrian clearance requirements. See Figures 5.13 and 5.14 for examples. The Amenity Zone can accommodate:

- Street tree wells (minimum 4 feet; see this chapter, *Street Trees*);
- Public seating (5 to 6 feet where provided);

<sup>28</sup> City of Berkeley. [2020 Pedestrian Plan – Appendix B](#), Adopted January 2021. Pp. 7-8.

- Other street furniture, such as bicycle racks (see *PR-S.9 Bicycle Racks*);
- Bus stop amenities (see *PR-P.10 Continue to Improve Bus Stops*);
- Street and pedestrian light poles, signal poles, utility boxes and panels, and other elements as needed (for more about lighting see *PR-P.3 Improve Street Lighting for the Safety and Comfort of All Users*)

**Frontage Zone:**

This is the zone between the Pedestrian Zone and adjacent property and provides a buffer between people walking in the Pedestrian Zone and adjacent buildings. This zone can accommodate features such as outdoor seating, additional landscaping, or expanded general sidewalk space, see Figure 5.14 for examples. Improvements within the Frontage Zone must be installed and maintained by the property owner or adjacent business.

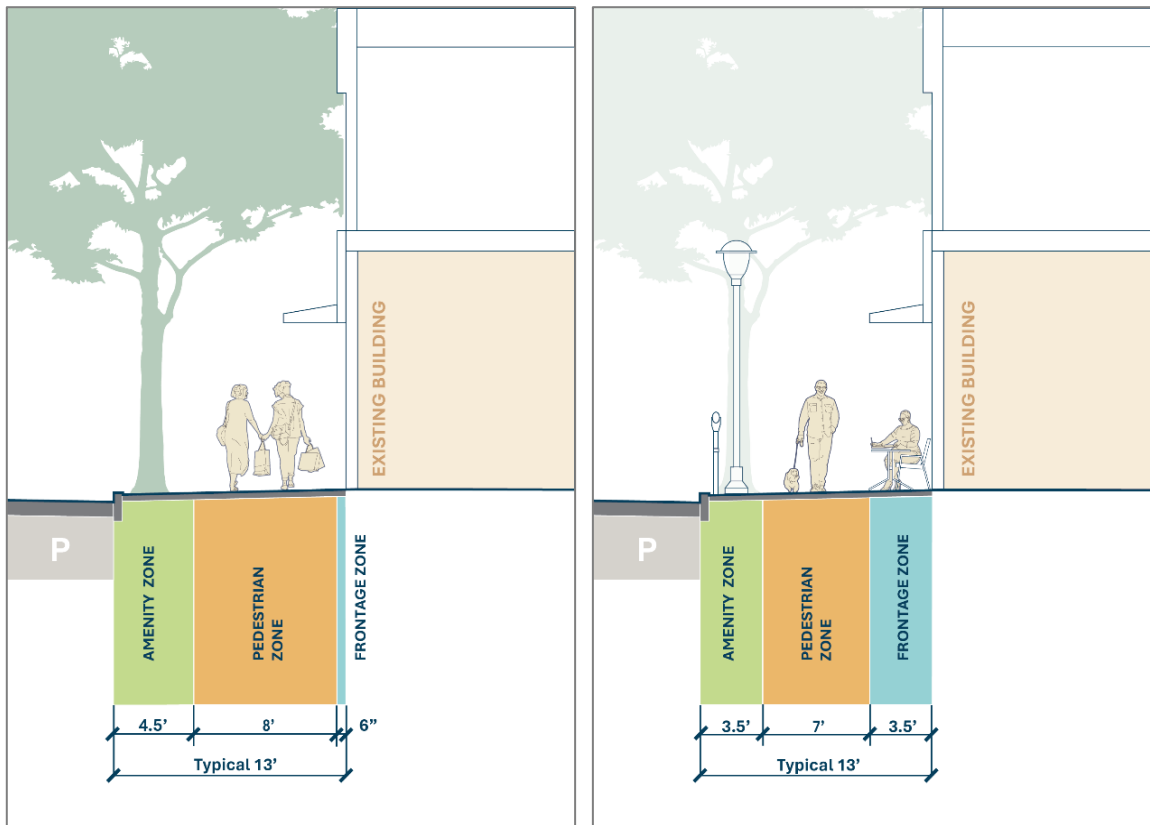
- A maximum of 20 percent of the the Frontage Zone area may be permanent in the ground or raised landscaped areas. Pots and other above-ground planters that can be easily removed from the sidewalk are preferred for flexibility of use over time, and may cover a maximum of 30 percent of the Frontage Zone area.

**Table 5.1 Sidewalk Zone Width Requirements**

| ZONE                   | EXISTING           | NEW DEVELOPMENT  |
|------------------------|--------------------|------------------|
| <b>Pedestrian Zone</b> | Minimum 7 feet     | Minimum 8 feet   |
| <b>Amenity Zone</b>    | No minimum         | Minimum 3.5 feet |
| <b>Frontage Zone</b>   | Minimum 6-inch [1] | Minimum 4 feet   |

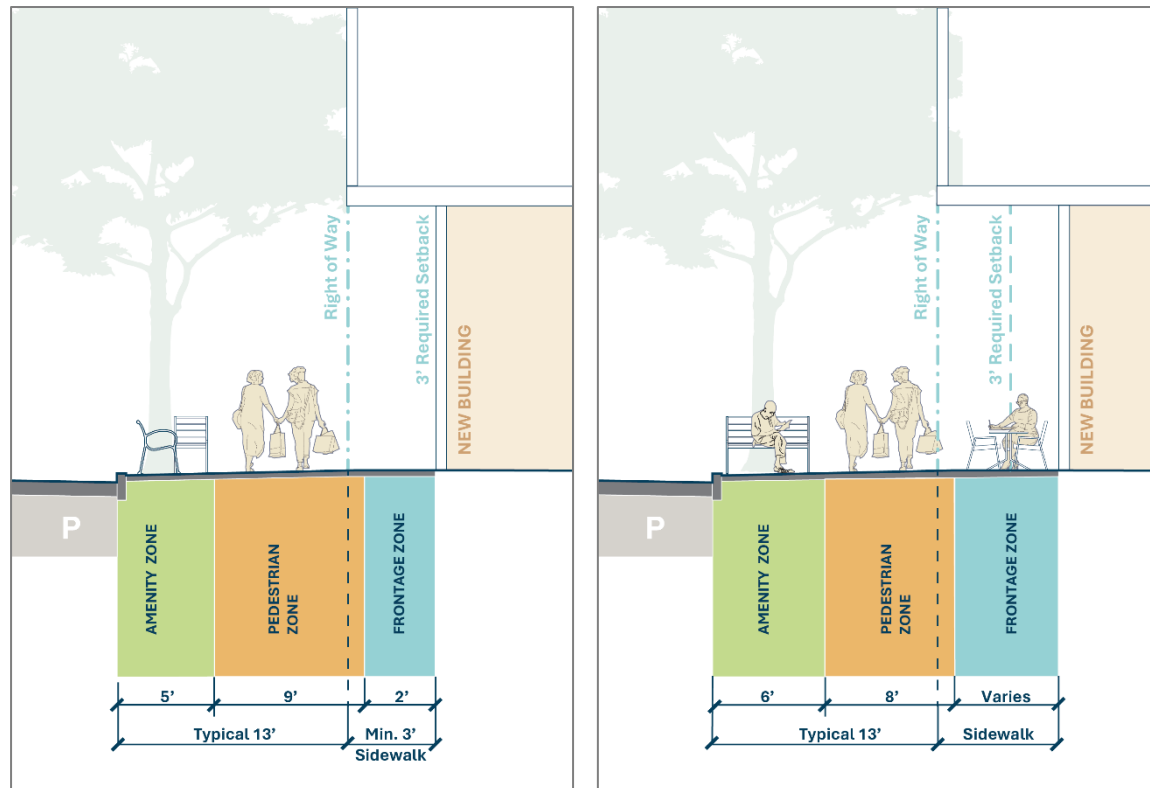
Notes:

[1] If an adjacent business applies for and receives an encroachment permit, the zone may extend up to 3.5 feet into the sidewalk, provided this does not conflict with the required Pedestrian Zone width (see Figure 5.13).



**Figure 5.13 Sidewalk Zones Condition at Existing Buildings**

Left: Sidewalk Zones at tree well. Right: Sidewalk Zones with outdoor seating in the right way.



**Figure 5.14 Sidewalk Zones Condition at New Developments**

Left: Outdoor seating in setback. Right: Sidewalk expansion.

## PR-P.2 Sidewalk Incentive

Widening the sidewalk improves pedestrian comfort, increases the distance between the Pedestrian Zone and roadway, and allows more space in the Amenity and Frontage Zones, resulting in more space for social and economic activity within the public realm. Some recent mixed-use residential developments incorporate front setbacks that effectively widen the sidewalk to enhance the pedestrian experience and contribute to a more attractive streetscape (see Figure 5.15). Widening the sidewalk beyond the minimum requirement is encouraged and supported by *LU-S.1 Sidewalk Expansion Incentive*.

Where developments provide an additional setback to widen the sidewalk, the additional space can be allocated to any of the sidewalk zones. For example, the Amenity Zone could be widened to allow for additional landscaping and seating, or amenities for an adjacent bus stop or the Frontage Zone could be widened to accommodate public seating, outdoor dining, or additional landscape area.



**Figure 5.15 Examples of Existing Mixed-Use Residential Developments with Sidewalk Setbacks**  
Left: “Bloom Berkeley” 2747 San Pablo Avenue. Right: “The Jones” 2748 San Pablo Avenue.

## PR-S.2 Reestablish Sidewalk Width

In several locations along San Pablo Avenue, sidewalks are less than 13 feet wide between the face of curb and landscape along adjacent property frontages. There are a limited number of locations where older buildings are less than 13 feet from face of curb, and these conditions will likely remain. If these locations lack an approved encroachment permit, the full sidewalk width should be reestablished over time as public improvements are made or building permit applications are filed. When adjacent properties are redeveloped the total minimum sidewalk width shall be 16 feet as required in PR-P.1 Sidewalk Zones - the combined width of the sidewalk within the public right of way (13 feet) and a ground floor frontage setback (3 feet).

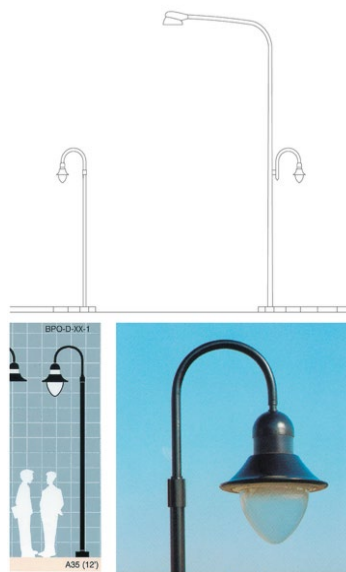


## Streetscape

The Plan updates streetscape standards to improve San Pablo Avenue’s quality and identity of the public realm, and to support the economic and social vitality of the Specific Plan Area. These streetscape standards build upon and update the San Pablo Avenue Public Improvement Plan (2003) and include revised standards on pedestrian-scale lighting, street furnishing, bus stop improvements, medians, trees, and landscaping. Elements of the streetscape standards apply to side-streets within the Specific Plan Area, particularly to University Avenue.

## Lighting

Improving pedestrian lighting along San Pablo Avenue was the most consistent need expressed by community members during the Specific Plan process. Existing streetlights are mostly designed to light the roadway and intersections, leaving sidewalks dimly lit, unless there is light spilling from storefronts, nearby buildings, or the occasional pedestrian fixture at a bus stop. This issue was raised in the 2004 San Pablo Avenue Public Improvements Plan, which proposed new lighting standards. While some private developments have added pedestrian-scale lighting, no comprehensive public investment has yet been made. There are similar existing lighting conditions on other streets within the Specific Plan Area. The City has been preparing a citywide streetlighting standards document but it has not been fully drafted to date. The following recommendations should be considered as the citywide standards are finalized; some may be included as San Pablo Specific Plan Area requirements within the final citywide standards document.



**Figure 5.16 Pedestrian Light**  
Source: San Pablo Avenue Public Improvement Plan, 2004



**Figure 5.17 Example of Pedestrian Scale Lighting**  
“Aquatic at Ashby” 3000 San Pablo Avenue. Photo by CD+A

### PR-P.3 Improve Street Lighting for the Safety and Comfort of All Users

The following policies and design recommendations build upon those of the 2004 San Pablo Avenue Public Improvement Plan.

#### Roadway and Pedestrian-Realm Lighting

To cost-effectively improve lighting within the Specific Plan Area, the City should implement the design approach defined in the San Pablo Public Improvement Plan, which calls for the maintenance and incremental improvement of existing roadway lighting. This approach includes attaching pedestrian pendant lights to the existing roadway poles and painting the roadway poles and fixtures the color defined below (see Figure 5.16). Depending on roadway pole spacing, one or two 12-foot poles with pedestrian pendant lights should be added between roadway poles. The

pendant lights should extend over the sidewalk, positioned below the mature tree canopy to maximize the illumination of the public realm.

**Pedestrian-scale Light Fixture:** Selux, Beta Pendant LED with pole mount fitter or single arm as appropriate (see Figure 5.16).

**Color:** RAL 5008 dark slate blue

**Lighting Analysis:** Scoping, funding, and implementation of street improvement projects should include a lighting analysis of existing lighting conditions within the project area so that lighting improvements can be implemented as part of the project where feasible.

**Lighting Levels:** The recommended light levels in Table 5.2 below are informed by lighting standards from other Bay Area cities and can be revised through technical analysis and future development of citywide standards.

**Table 5.2 Recommended Light Levels**

| LOCATION                                                                | MINIMUM                      |                                       | OPTIMUM <sup>1</sup>         |                                       |
|-------------------------------------------------------------------------|------------------------------|---------------------------------------|------------------------------|---------------------------------------|
|                                                                         | Illuminance<br>(footcandles) | Uniformity<br>Ratio<br>(avg. to min.) | Illuminance<br>(footcandles) | Uniformity<br>Ratio<br>(avg. to min.) |
| San Pablo Avenue, Gilman Street,<br>University Avenue, and Ashby Avenue | 1.5                          | 3:1                                   | 2.5                          | 2:1                                   |
| Hopkins Street, Cedar Street, and<br>Dwight Way with C-SP frontage      | 1.1                          | 4:1                                   | 1.8                          | 3:1                                   |
| Other streets in Specific Plan Area                                     | 0.8                          | 6:1                                   | 1.2                          | 4:1                                   |
| Transit Areas <sup>2</sup>                                              | 2.0                          | 3:1                                   | 3.0                          | 2:1                                   |

Notes:

1. When installed or until end of maximum lighting with smart lighting systems.
2. On both sides of the street within one block of bus stops on San Pablo Avenue, Gilman Street, University Avenue, and Ashby Avenue, and within one-half block on both sides of the street for bus stops on other Specific Plan Area streets.

### Smart Lighting Systems

The City should pursue grants and other funding to implement a smart lighting system on San Pablo Avenue and throughout the Specific Plan Area to maximize the utility and efficiency of the street and public realm lighting. Smart lighting systems allow for centralized control and management of lighting. Lighting levels can be programmed and automatically adjusted based on time of day, season, ambient light level sensors, motion detectors, and other relevant factors. These systems also monitor the condition and performance of lighting equipment, improving lighting management, energy efficiency, and maintenance.

## Landscaping

The mature street tree canopy and landscaped medians of San Pablo and University Avenues are defining features of these streets' visual identity. The community views these as valued assets giving the streets their unique character (see Figure 5.17). However, the tree canopy is inconsistent, with noticeable gaps and maintenance issues affecting both trees and tree wells. Beyond the median landscaping, public landscaping is limited. In some locations, adjacent property owners and tenants maintain landscape along their frontages, which sometimes narrows the available sidewalk width.

Many of the existing gaps and maintenance issues were identified previously in the 2004 San Pablo Avenue Public Improvement Plan. Since then, some improvements have been made through private initiative or targeted City investments, but funding constraints have limited the extent of implementation. The Plan builds on these earlier recommendations to shape future public realm improvements.

Since 2004, landscape standards and requirements have evolved to reflect new priorities. These include new irrigation standards, and requirements for landscaping that captures and treats stormwater runoff from development and street projects. Current best practices emphasize water-efficient plant selection and species that can thrive under global climate change impacts, such as changes to local rainfall, higher average temperatures, and other factors. The Plan updates those outlined in the 2004 Improvement Plan to reflect these practices.

Additional policies, standards, and implementation strategies address the issues of capital, maintenance cost and responsibilities for landscaping within the Specific Plan Area.



**Figure 5.18 Examples of Tree Canopy along San Pablo Avenue**

*Left: Mature street trees grew to the same height as this four-story mixed-use building. Right: Median trees contribute to the canopy cover. Photos by CD+A*

### PR-P.4 Enhance Street Tree Health and Expand Tree Canopy

Existing street trees should be well maintained, and their positive impact on the public realm should be enhanced by planting additional trees and other landscaping. Establishing a consistent and continuous tree canopy along sidewalks and medians will strengthen the Specific Plan Area's character, improve pedestrian comfort, help to reduce urban heat island effect, and address the community's desire for a greener environment.

**Tree Canopy:** The tree canopy should be as continuous as possible with mature tree canopies touching those of adjacent trees. Breaks will occur at roadway street light locations. Pedestrian-scale lighting is to be installed below the mature tree canopy to minimize conflicts.



Street tree planting will follow the City of Berkeley standards, including tree well modifications described below.

#### Tree wells:

Tree wells should be as large as feasible and meet the minimum size standards for San Pablo Avenue (PR-S.3), University Avenue (PR-S.4), and other side-street trees (PR-S.5) below. These tree well standards supplement the citywide Tree Planting Location Standards as applied within the Specific Plan Area. Maximizing tree well size supports the long-term tree health and allows for additional plantings. The following is a summary of tree well surface treatments:

- **Flexible porous pavement** should be used along San Pablo Avenue, University Avenue within C-SP, at Designated Nodes, and within proximity to bus stops and other high pedestrian activity areas. This material allows water and oxygen to reach the soil and roots to provide for better tree health, while the pavement surface provides a level, walkable and ADA compliant surface (see Figure 5.19).
- **Gravel mulch** should be used in all other tree wells along with other plantings to enhance visual interest. See PR-S.6 *Landscaping in Tree Wells and Planters*, below for further discussion.



**Figure 5.19 Flexible Porous Pavement**  
Downtown Berkeley Tree Well.  
Photo by CD+A

### PR-S.3 San Pablo Avenue Tree Standards

Some of the most comfortable and engaging blocks along San Pablo Avenue feature large mature trees in the sidewalks and medians that form a full tree canopy across the street. This canopy creates a human scaled streetscape (see Figure 5.18). As taller mixed-use buildings are built along San Pablo Avenue, expanding the street tree canopy will soften the perceived scale of these structures, enhance the character of the public realm and provide meaningful urban greening.

#### Tree species:

The predominant tree species along San Pablo Avenue are London Plane (*Platanus x acerifolia*, see Figure 5.20), Western Sycamore (*Platanus racemosa*), American Sweet Gum (*Liquidambar styraciflua*), and Red Sunset Red Maple (*Acer rubrum* ‘Franksred’). Other trees and smaller tree species are also present. However, several trees, particularly the American Sweet Gums, are in decline or poor condition. While Ginkgo biloba trees have also been planted, they tend to grow slowly and do not achieve the desired large and rounded form.

- London Plane trees should be prioritized for new plantings and when existing trees are replaced.
- To avoid a monoculture of tree species, different cultivars such as ‘Exclamation’ and ‘Columbia’, which can grow wide and up to 50 feet tall can be planted. Western Sycamore is another alternative to support more diversity of tree species.
- In locations where these species are not suitable, as determined by the City forestry staff, a deciduous tree similar to the London Plane in height and canopy width should be selected. Red Maple trees are one example with appropriate cultivars and some Red Sunset Maples are already planted along San Pablo Avenue.
- If tree size is the limiting factor, a tree that will reach the largest possible size given the specific location conditions should be selected, and tree spacing should be adjusted to maintain a more continuous tree canopy.



**Figure 5.20 Trees along Sidewalk**  
Sidewalk on San Pablo Avenue  
South of University Avenue.  
Photo by CD+A



**Trees in Medians:** The size and placement of trees in San Pablo Avenue’s medians are governed by the Caltrans Highway Design Manual and other Caltrans Standards. The full-width medians along San Pablo Avenue are typically 13 feet wide. Caltrans Standards require a minimum clearance of five feet from median curb face to the tree trunk of a mature tree. The trees recommended above satisfy this requirement.

**Tree Wells:** The predominant size of existing tree wells along San Pablo Avenue is 3 x 3 feet and undersized for large canopy trees (see Figure 5.21).

- A minimum size of 4 x 6 feet is required for new wells, with the longer dimension oriented parallel to the curb. (See *PR-S.1 Sidewalk Zone Standards* for minimum Amenity Zone width requirements.)
- Where possible, a 4 x 8 feet tree well is desirable.
- The 4-foot minimum can be increased where the Amenity Zone width allows, consistent with Policy *PR-S.1 Sidewalk Zone Standards*.
- See Policy *PR-P.4 Enhance Tree Health and Expand Tree Canopy* for tree well surface treatments and *PR-S.6 Landscaping in Tree Wells and Planters* for landscaping.



**Figure 5.21 Tree on San Pablo Avenue**

Overgrowing a 3-Foot by 3-Foot Tree Well. Photo by CD+A

## PR-S.4 University Avenue Tree Standards

On University Avenue within the Specific Plan Area, sidewalks are ten feet wide, narrower than those along San Pablo Avenue. The median between 10<sup>th</sup> Street and San Pablo Avenue contains an extended left-turn lane and only one tree.

**Tree Species and Spacing:** Existing trees along this section of University Avenue are of various species. Chinese Elm trees (*Ulmus parvifolia*, *Ulmus* ‘Frontier’ and other varieties) are most common, accompanied by Tulip trees (*Liriodendron tulipifera*) and Honey Locusts (*Gleditsia triacanthos*). Many trees are in poor health. Elm trees with a large mature vase-shaped form, such as Allee Elm (*Ulmus parvifolia* ‘Emer ll’), should be prioritized for replacement and new plantings. As tree health is evaluated, new trees should be added to create a continuous tree canopy with a spacing that allows mature tree canopies to touch those of adjacent trees.

**Trees in Medians:** The medians are planted with various California natives. Coast Live Oaks (*Quercus agrifolia*) have performed the best, while California Buckeye (*Aesculus californica*) and Blue Blossom Ceanothus (*Ceanothus thyrsiflorus*) are in poorer condition. Narrow, medium-sized, drought-tolerant deciduous oaks, such as Chisos Red Oak (*Quercus gravesii*) or Spanish Oak (*Quercus cerrioides*) should be used as replacement species.

**Tree Wells:** The predominant size of existing tree wells along this part of University Avenue is three x three feet and undersized for large canopy trees.

- The minimum size of 4 x 6 feet is required for new wells, with the longer dimension oriented parallel to the curb.
- Where possible, a 4 x 8 feet tree well is desirable.
- Given the narrower typically 10-foot sidewalk width along University Avenue the tree wells should use flexible porous pavement in order to provide the desired 6-foot minimum width for the sidewalk’s Pedestrian Zone that meets universal access design considerations.
- See Policy *PR-P.4 Enhance Tree Health and Expand Tree Canopy* for more details about tree well surface treatments and *PR-S.6 Landscaping in tree wells and planters* for landscaping.

## PR-S.5 Other Side-Street Trees

A wide variety of tree species are planted on streets intersecting San Pablo Avenue. The following design standards apply to those portions of the intersecting streets, except for University Avenue, within the Specific Plan Area. For

University Avenue, see *PR-S.4 University Avenue Tree Standards* above.

### Tree Species

Should match the following type and spacing, except where deemed infeasible under the citywide Tree Planting Location Standards:

- Outside of Designated Nodes, side-street trees adjacent to properties that front or side onto San Pablo Avenue should match the species planted on the adjoining block face of San Pablo Avenue.
- In Designated Nodes, street trees should match the adjacent San Pablo Avenue species for the length of the sidewalk that is within the Specific Plan Area.
- If San Pablo Avenue tree species are infeasible, trees should match the predominant species already established along the side-street.

### Tree Wells:

Sidewalk widths vary alongside-streets, resulting in different tree well sizes.

- A minimum tree well size of 4 x 6 feet, as defined for San Pablo Avenue, is preferred.
- Where sidewalks widths are too narrow to provide both a 6-foot-wide Pedestrian Zone with a 4-foot-wide tree well, the tree wells width is reduced in size or surfaced with flexible porous pavement in compliance with the citywide Tree Planting Location Standards. This pavement allows the Pedestrian Zone to overlap the tree well.
- *PR-P.4 Enhance Tree Health and Expand Tree Canopy* for more details about tree well materials and *PR-S.6 Landscaping in tree wells and planters* for landscaping.

## PR-P.5 Enhance and Expand Other Landscaping

Beyond street trees, the landscape character of the Specific Plan Area is defined by other plantings in the medians and some street tree wells (see Figure 5.22), and other small areas of plantings along the sidewalk. As the Plan is implemented, additional opportunities for landscaping arise in new curb extensions, partial and full side-street plazas (see *PR-P.15 Create Side-Street Plazas*), planters in the sidewalk Amenities and Frontage Zones, and in privately-owned public open spaces (see *PR-P.19 Privately Owned Public Open Spaces*).

In the future, should a community benefit or business improvement district form within a portion of the Specific Plan Area, the organization should negotiate an agreement with the City to improve and maintain landscaping within the sidewalk, median, and other landscaped areas within the public right-of-way. See *ED-P.5 Study Feasibility of Forming a Business Improvement District (BID) or Community Benefit District (CBD)*.



**Figure 5.22 Additional Landscape in Large Tree Well On San Pablo Avenue.** Photo: By CD+A

## PR-S.6 Landscaping in Tree Wells and Planters

Where tree wells do not need to be filled with flexible porous pavement, tree wells can be planted to create a distinct identity for locations along San Pablo Avenue (see Figure 5.22).

Plantings in tree wells, except for the tree itself, will not be maintained by the City. Tree wells with landscape planting need to be maintained by adjacent property owners, residents, businesses, tenants, or a future community benefit or business improvement district.

Planting of a tree well must comply with the Specific Plan standards and the requirements of the Berkeley Municipal Code Chapter 12.44 *Trees and Shrubs*.

Plantings cannot impede public use of other sidewalk areas, such as adjacent Pedestrian and Amenity Zones.

## Landscaping in medians

Full-width and narrow width landscaped medians are generally planted with grass and not irrigated along San Pablo Avenue. Narrow medians next to left turn lanes vary in conditions with some narrow medians having hedges, which were once a dominant treatment, but these have not been consistently replaced as they die or become damaged. Where narrow medians next to left-turn lanes have been modified, they have typically been paved with concrete.

Although the grass and tree treatment in the medians positively impact the character of San Pablo Avenue, during dryer times of the year the appearance of the grass deteriorates (see Figure 5.23). Maintaining green grass requires regular irrigation which is not environmentally appropriate, and existing irrigation systems are not currently in use. In addition, the grass requires regular mowing and other maintenance. A more sustainable and climate-resilient approach involves replacing grass over time with a low- water drought-tolerant landscape treatment that can adapt to climate change and not require irrigation after the plants are established.



**Figure 5.23 Median Planting**  
On San Pablo Avenue. Photo  
by CD+A

## PR-P.6 Long-term Landscaped Median Design

In the long-term, landscape medians along San Pablo Avenue should be aesthetically pleasing, low-maintenance, and free of irrigation. The design should include a ground cover of crushed rock or wood mulch, with trees and low-water, drought-tolerant, low growing shrubs, grasses, succulents, and other plantings. Suitable species include mat rush (*Lomandra species*), California yarrow (*Achillea millefolium*), aloe (*Aloe species*), finger aloe (*Cotyledon orbiculata* var. *oblonga* 'Flavida'), and Majorcan germander (*teucrium cosonii*). Berkeley's Parks, Recreation and Waterfront Department will take a lead role in determining which plant species are most appropriate for long-term landscaping in medians.

## PR-P.7 Near-term Opportunities for Re-landscaping Medians

When opportunities arise through transportation improvement projects, the City should replant sections of medians using landscape design treatments that reflect the long-term landscaped median design vision. These demonstration segments can help build support and establish precedent for larger future improvement projects.

## Green Infrastructure

Transportation improvements and other construction within the Specific Plan Area that meet specific criteria must include green infrastructure consistent with the Caltrans NPDES Order 2022-0033-DWQ Stormwater Permit when within the Caltrans right of way of San Pablo Avenue and the Municipal Regional Stormwater NPDES Permit Order No. R2-2022-0018 (MRP 3.0) when in City right of way or private property. Green infrastructure is a sustainable landscape and civil engineering improvement that captures, slows, and treats stormwater runoff with a primary goal of reducing pollutants entering the San Francisco Bay.<sup>29</sup> Green infrastructure systems support Berkeley's climate change and sustainability goals. The City's [Green Infrastructure Plan \(2019\)](#) includes guidelines for implementation of green infrastructure in Berkeley and should be referred to during the planning and design phases of both streetscape improvement and private development projects in the Specific Plan Area.

### PR-P.8 Green Infrastructure in Public Projects

All publicly funded projects must meet the requirements of the current MRP and/or the Caltrans NPDES permit as applicable. In addition to fulfilling the Specific Plan's public realm policies and standards, green infrastructure should contribute positively to pedestrian comfort and safety.

#### Design:

- Approaches include permeable or porous pavement materials to maintain required sidewalk widths, and use of tree wells, and can be integrated into side-street curb extensions and side-street plazas if Caltrans and the City reach a maintenance agreement for specific improvements.
- See *T-P. 12 Minor Side-Street Intersection Improvements*, and *PR-P. 14 Create Side-Street Plazas* for design related policies and standards.

### PR-P.9 Green Infrastructure in Private Development

Private development projects are required to meet the requirements of the current MRP. The Specific Plan supports and provides flexibility for private development to fund and integrate public spaces that serve dual purposes for stormwater management and the community.

Green infrastructure that serves to treat private property stormwater can be integrated into the public realm and can be included in side-street curb extensions, see *T-P. 12 Minor Side-Street Intersection Improvements*, or within *PR-P. 2 Sidewalk Easements*, *PR-P. 18 Privately Owned Public Open Spaces*, *PR-P. 15 Create Side-Street Plazas* for design related policies and standards

When a development constructs green infrastructure in the public right-of-way the property owner must enter into a maintenance agreement with the City. Then the improvement may be used towards the project's stormwater compliance requirements with the concurrence of the Regional Water Quality Control Board.

<sup>29</sup> San Francisco Bay Regional Water Quality Control Board, [Stormwater webpage](#), accessed June 30, 2025.



# Street Furniture

## PR-S.7 Public Seating

Public seating will be installed within the Amenity Zone of the sidewalk or integrated into curb extensions, see *T-P.12 Minor Side-Street Intersection Improvements* and *PR-P.14 Create Side-Street Plazas*. Seating must not encroach into the Pedestrian Zone, which will remain clear as required in *PR-S.1 Sidewalk Zone Standards*. Public seating must provide wheelchair-accessible space per the requirements of current Public Rights-of-Way Accessibility Guidelines (PROWAG). These standards are in addition to, not a replacement of, Berkeley Municipal Code 14.48.150 *Sidewalk Seating, Benches and Planters*.

**Placement:** Benches in the Furniture Zone should face away from the street. Alternatively, there may be pairs of short benches placed perpendicular to the street that face each other to allow for a small group gatherings.

**Style:**

- Benches provided and maintained by the City will be “[Landscape Forms Scarborough](#)” bench in black. This bench model is available in four standard lengths in both back or backless versions. These benches have been used in the Shattuck Avenue reconstruction project in Downtown Berkeley and other improvements in Berkeley. Using the same model on San Pablo Avenue will streamline City maintenance.
- Benches or other public seating installed and maintained by adjacent property owner or businesses may be a custom design or an alternative style. All seating and street furniture must be approved by the City through their sidewalk seating application process.<sup>30</sup> The applicant is responsible for installation and ongoing maintenance. Privately installed public seating must satisfy the requirements and guidance of PROWAG and other ADA requirements.
- Seating in curb extensions and side-street plazas can be integrated into planter walls that are part of green infrastructure systems, or consist of movable tables and chairs or other context-sensitive design.

### Seating Types

Developments along San Pablo Avenue have introduced public-facing elements such as benches or seating areas within the ground floor setbacks. While located on private property, these spaces are accessible to the public.



**Figure 5.24 Seating Options**

Top: Seating Wall at 3000 San Pablo Avenue, Berkeley. Bottom: Bench variations of Landscape Forms Scarborough bench in Downtown Berkeley. Photos by CD+A

<sup>30</sup> City of Berkeley. [Outdoor Commerce, Sidewalk Seating, and Parklets](#).

## PR-S.8 Trash and Recycling Receptacles

City-standard trash and recycling receptacles will be placed in the sidewalk Amenity Zone or integrated into curb extensions on side-streets and side-street plazas.

### Style:

The color and design of public trash and recycling receptacles must follow the citywide standard and be Forms + Surfaces “Modified Urban Renaissance” (Figure 5.25) model with upper integrated recycler module in dark green color or approved equal.

- *PR-P.10 Privately Owned Public Open Spaces* will have adequate receptacles and can be of a different manufacture and model as they will be maintained by the property owner.

### Placement:

- In Designated Nodes, where foot traffic and stores are more frequent, two (2) city-standard receptacles should be installed per intersection, on opposite sides of the street.
- Between Designated Nodes, one city-standard receptacle should be installed per block face. Consider placement at bus stops or locations where trash otherwise accumulates.
- Businesses, property owners, and future community benefit or business improvement districts may place and maintain trash and recycling receptacles in the public right of way if they have a maintenance agreement with the City.



**Figure 5.25 Trash Receptacle**

Photo by CD+A

## PR-S.9 Bicycle Racks

Bicycle racks along streets in the Specific Plan Area will be placed in the Amenity Zone and meet the clearance and space standards outlined in the Berkeley Bicycle Plan, Appendix F.<sup>31</sup>

### Style:

All racks in the right-of-way must be a city-approved design, such as Figure 5.26. The color is black or galvanized as in other parts of the City.

### Placement:

- The City offers a bike rack installation program to improve bicycle access to local businesses and destinations. Through this program, the City installs bike racks on sidewalks in commercial areas at no cost to property or business owners. Business owners and community members can request new bike racks in areas where demand exists, or existing bicycle parking is insufficient. The application procedures are [available on the City's website](#), under the section Bike Parking.
- Install bike racks at San Pablo Avenue intersections with bicycle facilities. Where a bicycle facility crosses a Major Street or a Collector Street in a Designated Node, City staff will evaluate expected use of the facility and implement a bicycle parking corral when appropriate. See *T-P.16 Bicycle Improvements*.
- Identify funding for installing bicycle parking corrals in 20-foot daylighting setback area of parking lanes, prioritizing locations in Designated Nodes and locations where streets with bicycle facilities intersect with San Pablo Avenue; corrals would be placed on San Pablo Avenue or the crossing street. See also *T-P.6 Implement Mobility Hub features in the University Avenue Node* regarding priority to install a bike corrals proximate to Addison Street Bike Boulevard.



**Figure 5.26 Bicycle Rack**

Photo by CD+A

<sup>31</sup> City of Berkeley. Berkeley Bicycle Plan, [Appendix F Facility Design Toolbox](#). Adopted 2017, p. F-106



- Private development projects may install bike racks in the public right of way adjacent to their developments with approval of the Public Works Department.

## PR-S.10 Raised Planters

Raised planters can enhance the streetscape by adding greenery and visual interest, providing a buffer from the roadway, and expressing community care for public space.

### Placement:

- Raised planters as shown in Figure 5.27 may be used in the Frontage Zone, (see *PR-S.1 Sidewalk Zone Standards*). They cannot be used in the Amenity Zone, with exception to curb extensions, plazas, side-street plazas, and privately owned public open spaces, with planters edges offering opportunities for informal seating.
- Freestanding planter pots allow for flexible placement as single installations or groupings.
- All planters must be stable and secure to prevent tipping or shifting.
- Planters cannot encroach into the Pedestrian Zone and must maintain the sidewalk clearances specified in *PR-S.1 Sidewalk Zone Standards*.
- Planters have to maintain required clearances from the face of the curb.

### Design:

- Planters and low walls cannot exceed 30 inches in height from sidewalk grade, and the combined height of planter and landscaping cannot exceed 36 inches above the sidewalk when within 20 feet of an intersection or 10 feet of a driveway to provide line of sight between pedestrians and vehicle drivers.



**Figure 5.27 Planter Pots**  
in Front of 1443 San Pablo Avenue. Picture by CD+A, 2023

## PR-P.10 Continue to Improve Bus Stops

To support use of bus transit along San Pablo Avenue, Berkeley and its agency partners, AC Transit and Alameda CTC, have been planning and building bus stop improvements. Improvements include new shelters, benches, lighting, and other improvements to adjacent intersections and crosswalks. Within the Specific Plan Area, bus stop improvements will be made as part of the San Pablo Avenue Safety Enhancement project. The improvements are focused on stops that are used by limited-stop bus routes. These efforts are achieving the goals of Berkeley's Transit-First Policy Implementation Plan (2022) and AC Transit's Bus Stop Furniture Guidelines (September 2022). In addition, improvements made in the Specific Plan Area have to treat ADA requirements as the minimum standards for accessibility and strive to achieve universal design for users with a broad range of abilities. (see *PR-P.13 Design for People of All Ages and Abilities*).

Berkeley and its agency partners should continue to identify improvements beyond those provided through the San Pablo Avenue Safety Enhancement project. This should include seeking funding to make improvements to bus stops from Heinz Street to the south along San Pablo Avenue that are compatible with potential



**Figure 5.28 Bus Stop at the San Pablo Avenue and Dwight Way Intersection**  
Photo by CD+A, 2025

improvement that could be made by the Alameda CTC San Pablo Avenue Bus Lanes and Bike Lanes Project, rather than waiting for the Alameda CTC project to improve these bus stops. Other bus stops in the Specific Plan Area along San Pablo Avenue and those serving bus routes on crossing streets should also be assessed and improved as funding is identified.

Prioritization of bus stops to receive improvements should consider existing ridership and potential ridership growth based on nearby destinations and development that brings new residents to the area, as well as the current condition or absence of bus stop improvements.

#### Improvements:

- Benches and other seating should be prioritized when improving bus stops as part of the universal design approach to Specific Plan Area improvements.
- Other potential improvements include installation of shelters, pedestrian lighting, maps, signage, emergency call systems, and street tree plantings for additional shade.
- Other features and fixtures identified in Berkeley’s *Transit-First Policy Implementation Plan* (2022) and AC Transit’s *Bus Stop Furniture Guidelines* (September 2022) should also be considered.

Berkeley and AC Transit should collaborate to identify and determine bus shelter models that provide weather protection and a safe and comfortable environment for waiting transit riders at bus stops while being practical to maintain.

## PR-P.11 Other Street Furnishings

Additional public street furnishings, such as public restrooms or information kiosks, will be installed in the right-of-way where an identified need exists. These furnishings must be designed and located in accordance with the *PR-P.1 Sidewalk Zones* and all other applicable standards and policies in this document.



# Wayfinding, Placemaking and Public Art

## PR-P.12 Facilitate Wayfinding and Placemaking Programs

As development occurs in the Specific Plan Area and pedestrian and business activity grows implementing coordinated signage, banners, and public art can support navigating the area, reinforce local identities and highlight distinct places in the Specific Plan Area.

- The City's Office of Economic Development should work with existing business organizations or clusters, such as the Berkeley International Marketplace to facilitate installation of signs, banners, public art, and similar elements to support placemaking efforts, see Policy *ED-P.4 Support and Expand Existing Business Clusters*.
- Developers and businesses are encouraged to collaborate with artists, museums, and galleries to provide storefront display areas for art and craft installations. This strategy can provide privacy for businesses, and create visual interest even when a storefront is vacant. (See **San Pablo Avenue Design Standards Document: Ground-Floor Design**, for requirements).
- Wayfinding opportunities that reflect distinct character areas for business clusters or Designated Nodes should be identified, and coordinated branded approaches across San Pablo Avenue in Berkeley should be explored. In the near-term, these could be funded by a combination of the City and local business groups.
- Public art should be incorporated into wayfinding design to reflect local character, history, and destinations.
- Once community benefit and/or business improvement district(s) form in the Specific Plan Area, these organizations should take on a larger role in managing and expanding wayfinding efforts. See Policy *ED-P.5 Study the Feasibility of Forming a Business Improvement District (BID) or Community Benefit District (CBD)*.

### Examples of Art in the Public Realm

Wall art and window displays are two approaches to activating building facades. The façade of Ashkenaz at 1317 San Pablo Avenue features a business-funded mural, demonstrating how individual businesses can contribute to the visual character of the street. The Milvia Window Display at 2100 Milvia Street offers a different model, hosting rotating exhibitions funded through the Kala Art Institute, while the space behind the display functions as a private office, which illustrates how activation can be achieved without compromising the interior use of a space.



**Figure 5.29 Examples of Visible Art in the Public Realm**

Left: Ashkenaz at 1317 San Pablo Avenue, Berkeley. Photo by CD+A, 2023. Right: 2100 Milvia Street, Berkeley. Photo from Kala Institute, [kala.org](https://kala.org). Accessed April 2026

## PR-P.13 Facilitate Installation of Public Art that Benefits the Public Realm

San Pablo Avenue currently features a range of informal and formal public art that create or reflect historic, demographic or commercial identities for Specific Plan Area segments. Community input expressed support for more public art to enrich the public realm and strengthen the Specific Plan Area's sense of place. For design standards that apply within the Specific Plan Area, see the **San Pablo Avenue Design Standards Document**, Public Art.

Public art should be integrated into public spaces throughout the Specific Plan Area to enhance the pedestrian experience and reflect the community's character and culture.

The process for incorporating art in public spaces is governed by [Berkeley Municipal Code Chapter 6.13 Visual Art in Public Places](#), and is administered by the Civic Art Commission and Civic Arts Coordinator.

Opportunities for public installations include public infrastructure projects (as funding allows), existing medians and sidewalks (with specific public art funding), and within the public right of way through partnerships with adjacent property owners, businesses, and community development or business improvement districts (see *ED-P.5 Study Feasibility and Scope of Forming a Business Improvement District (BID) or Community Benefit District (CBD)*).

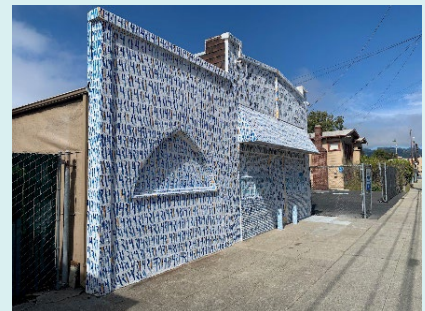
Public art proposed within San Pablo Avenue's right-of-way, which includes medians, street murals, or sidewalks, requires review and approval by Caltrans. This includes obtaining an encroachment permit, and a maintenance agreement between the City and Caltrans. This process adds time and cost.

Future community benefit or business improvement district(s) are also encouraged to integrate art into their marketing and identity programs. This could include art installations in the public realm with maintenance agreements with the City.

Cultural programming and community art events should be promoted along the street by supporting flexible gathering and event spaces that can host a wide range of activities. Such events should complement existing programming, expand the diversity of event types, and attract both local residents and visitors. Cultural events can help activate the public realm, strengthen its identity, and foster a more vibrant and inclusive public realm.

### Examples of public art installations in Berkeley

Temporary and permanent art installations demonstrate the potential for integrating public art into the Specific Plan Area's streetscape. A temporary installation produced through the Berkeley Art Project on Heinz Street creates visual interest on the sidewalk. At the intersection of Martin Luther King Jr. Way and Addison Street, the permanent sculpture shows how commissioned public art can serve as a landmark.



**Figure 5.30 Public Art Installations**  
 Top: Temporary art installation by Amrita Singhal. Photo by CD+A, 2023.  
 Bottom: Sculpture *Delivered, Mable's Promissory Note*; 2024 by Milred Howard. Photo by Ethan Kaplan

# Universal Design

## PR-P.14 Design for People of All Ages and Abilities

The Specific Plan Area's public realm has to be designed, implemented, maintained, and operated to serve people of all ages, sizes, and abilities. Universal design approaches apply to promote inclusive access to streets, sidewalks, open spaces, and transit.

At a minimum, all improvements must comply with the Federal Public Right-of-Way Accessibility Guidelines (PROWAG) and Americans with Disabilities Act (ADA) regulations.

The Specific Plan prioritizes accessibility improvements that are proximate to senior housing and other uses frequently visited by individuals with a range of abilities.

When public realm improvements are being programmed and designed, the City, developer, and/or other project sponsors should consult with accessibility advocates and organizations serving people with access and functional needs to guide priorities and ensure inclusive design.

### Elements

Universal design strategies beyond minimum requirements include:

- Accessible Pedestrian Signals (APS)<sup>32</sup>, Leading Pedestrian Interval (LPIs)<sup>33</sup> and extended pedestrian signal phases to maximize crossing time.
- Use of tactile detectable warning surfaces, in addition to typical truncated dome panels at crosswalks. These additional warning surfaces should be used when blind/low-vision people may experience unusual circulation conditions in the public right-of-way. Use of these materials should be discussed in consultation with accessibility stakeholders during the design of public realm improvements in the public realm.
- Use of tactile detectable surfaces to guide circulation is an evolving practice in the United States and designers of improvements in Berkeley and City staff who review them need to stay informed about current best practices and design guidance from the state, MTC, transit agencies, and adjacent jurisdictions.
- Passenger loading zones and accessible parking near senior and mixed-use housing meet and, where possible, exceed PROWAG and ADA regulations.

<sup>32</sup> City of Berkeley. [Pedestrian Plan Appendix B: Toolbox of Pedestrian Improvements](#). Adopted 2020, p. 16

<sup>33</sup> City of Berkeley. [Pedestrian Plan Appendix B: Toolbox of Pedestrian Improvements](#). Adopted 2020, p. 17



## Public Realm Expansion and Improvements

As noted in **Appendix A: Key Existing Conditions**, the Specific Plan Area lacks public parks or plazas<sup>34</sup>, and the streets and sidewalks are the only public spaces at the time of Specific Plan adoption. As new homes are built in the Specific Plan Area, demand on the public realm will grow, since it functions as the primary social space for the people living, working and shopping in the area. During community outreach, residents and business owners expressed a strong desire for shared spaces that bring people together, support street-level business and community activity. In addition to opportunities for sidewalk widening (see *PR-P.2 Sidewalk Easements*), **the Specific Plan encourages a variety of new public spaces**, including:

- Corner plazas at University Avenue to highlight the intersection as a major entry point into Berkeley from the highway.
- Plazas in Designated Nodes and near (rapid) transit stops.
- Adaptive reuse of parking lots as outdoor spaces that allow for community interaction.
- Mini-plazas in the public right-of-way created through full or partial side-street closures.
- Flexible spaces between sidewalks and adjacent buildings that can be used for seating, planting, and gathering.
- Side-street parklets and curb extensions used for public space and/or outdoor dining.

The following policies and standards offer strategies to expand the public realm and support the development of new public spaces. In the near term, improvements can be made through pavement-to-park initiatives like adaptive reuse of parking lots, parklets and side-street entry closures. Over the long term, opportunities include curb extensions and side-street plazas, public open space and privately owned public open spaces (POPOS) mini-parks, and mid-block pedestrian passages can provide lasting enhancements to the public realm.

San Pablo Avenue's designation as a state highway limits opportunities for its closure for street festivals. For special events or any activity within the State highway right-of-way an Encroachment Permit<sup>35</sup> with an extensive approval process is required. However, events and neighborhood gatherings have taken place on side-streets, see sidebar.

### Festival Street Closure

Until the end of 2024, the non-profit cultural organization Brasarte, which is dedicated to preserving Brazilian arts and culture in the Bay Area, was located on San Pablo Avenue at the Casa de la Cultura. Each year, for their celebration of SF Bay Brazilian Day & Lavagem Festival, they organized a street closure adjacent to their building, closing a block of Hearst Street and activating an adjacent parking lot for festivities.



**Figure 5.31 SF Bay Brazilian Day & Lavagem Festival in 2023**

Photos by CD+A, Sept. 2023

<sup>34</sup> Codornices Creek Park is a small property at the northern end of the Specific Plan Area that has not been fully developed as of the adoption of the Plan and it is not directly accessible from San Pablo Avenue.

<sup>35</sup> California Department of Transportation. [Local Development Review and Encroachment Permit Process](#). 2025

### Adaptive Reuse of Parking Lots

Along 4<sup>th</sup> St in Long Beach, CA, a placemaking study created a framework for opportunities to activate the pedestrian realm. An idea of “bulb-ins” created pilot plaza spaces at the edge of parking lots that fronted the sidewalk. There is one plaza at the corner of a parking lot that is permanent; see Figure 5.32. The bulb-in concept provides an idea of the types of spaces and activation that are possible with underutilized parcels and parking lots along a commercial corridor.

For a number of years, the Bixby Knolls Business Improvement Association has hosted ‘Concerts in the Park(in Lot)’ which is a free series of early evening concerts/dances that take place in a portion of a commercial shopping center’s parking lot people can get food from surrounding restaurants and enjoy the concerts. These events are similar to performances in the Berkeley Downtown Plaza on Shattuck Avenue



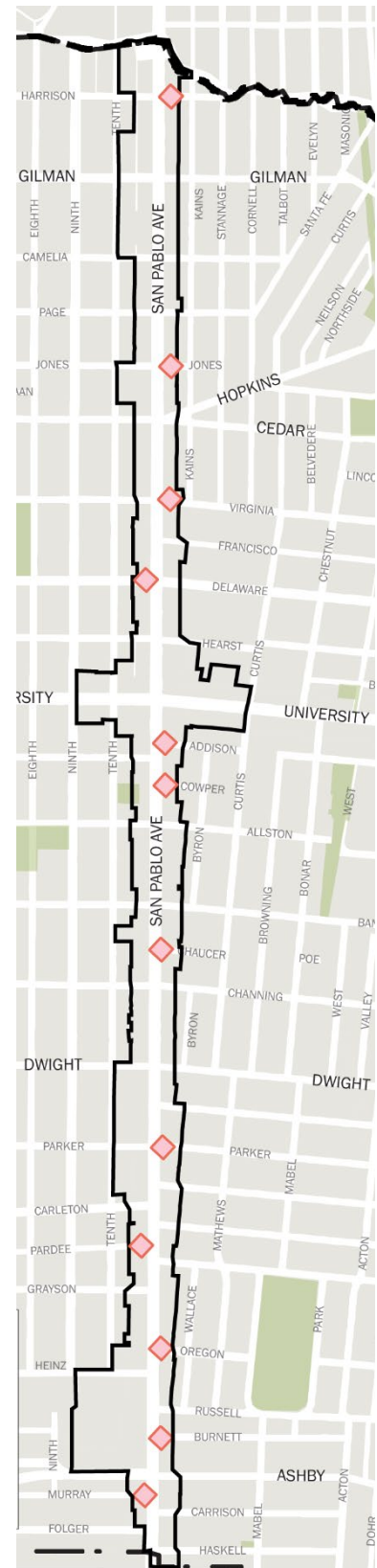
**Figure 5.32 Examples of Adaptive Reuse of Parking Lots**

Left: Parking Lot “bulb-in” open space, 4<sup>th</sup> Street, Long Beach. Right: Bixby Knolls Business Improvement Association, 2023. Photo by [bixbyknollsinfo.com](http://bixbyknollsinfo.com).

## PR-P.15 Create Side-Street Plazas

The City will explore opportunities to convert minor streets into small side-street plazas by limiting or removing vehicle access between San Pablo Avenue and these streets. These closures create room for public gathering spaces, urban greening and green infrastructure improvements. Potential locations include side-streets that extend only a few blocks east or west from San Pablo Avenue, or streets that intersect where San Pablo Avenue does not have a vehicular median break. See Figure 5.33.

- Goal:** Side-street plazas create true public space that is accessible, welcoming, and usable by all members of the public.
- Access:** The plazas can be designed to close vehicle access entirely or only allow one-way entry or exit. To ensure adequate emergency access, the Fire Department shall be included as a principal and early partner on location selection and design, and final design will be subject to approval by the Fire Department, Public Works, and Caltrans as appropriate. Access requirements must be determined in coordination with the City departments and must allow emergency vehicle and refuse vehicle access, provide maneuvering space for private vehicles on the side-street to turn around, and maintain pedestrian and bicycle access to ensure neighborhood connectivity. Limited access for large vehicles such as moving vans can be accommodated as needed. Site and use specific conditions will be assessed during the scoping and design of each plaza, such as side-street commercial loading, and ability of parallel streets to provide for vehicle access to the uses on the side-street. The design also must provide necessary property access along the side-streets.
- Design:** Side-street plaza design responds to the needs and character of the surrounding neighborhood and community. Plazas should incorporate lighting, furnishings, play elements, landscaping, surface treatments, and public art or community-generated art to create an active, comfortable, and visually engaging space.
- Edge treatments shall be placed along the perimeter of the plaza to clearly define the public space from vehicular and bicycle access and to provide a protective buffer for plaza users. These elements should be tall enough to be visible to motorists, yet not so large that pedestrians are obscured or otherwise unable to see motorists.
  - The space must be designed to comply with *PR-P.14 Design for People of All Ages and Abilities*.
- In the near-term, the City can partner with non-profits, businesses and neighborhood advocacy groups, and other community organizations to identify pilot locations for quick-build plaza projects. These should be prioritized where local community partners will use, program, or activate the plaza space.
- Quick-build treatments can include barriers (e.g., jersey barriers, stone blocks or planters), pavement markings identifying the plaza space with striping and paint, and tables with seating of different types. Also, boulders, logs, or small structures can be installed to engage children in informal play.



**Figure 5.33 Map of Potential Side-Street Plaza Locations**

Source: City of Berkeley, CD+A



In the long-term, when funding is available and where community support in activating a side-street plaza is strong, permanent plaza improvements should be pursued. A reconstruction of the street space provides additional opportunities for improving and activating the plaza.

Permanent designs must incorporate durable, high-quality materials, and include any of the following amenities:

- paving that smoothly transitions with sidewalk grade;
- permanent seating and tables, or moveable seating and tables if managed by a future business improvement district or adjacent business or property manager;
- landscaped areas including trees;
- edge definition with seat walls, planters, and/or safety features, such as bollards;
- pedestrian scale lighting;
- elements that engage people in activities, such as play and exercise elements for children and adults; and
- other elements suggested by community members during the design process.

#### Implementation:

There are several ways that a side-street plaza could be created, operated, and maintained.

- **City-Community Partnership:** Local groups of residents, businesses, and/or property owners may reach out to the City and work with the Office of Economic Development (OED) and the Public Works Department to identify funding for design, approval, and construction. The community can take an active role in ongoing maintenance and programming of the plaza.
- **Future community benefit or business improvement district:** They will take a leadership role and partner with the City and adjacent community, to manage and maintain the plaza, under a



**Figure 5.34 Sunset Triangle Quick-Build Plaza**

Photo by LADOT



**Figure 5.35 Street Closed to Vehicles and Converted into a Plaza**

With Bicycle and Emergency Vehicle Pass-Through, Vancouver Street/ McClure Street, Victoria, BC. Image from Google maps, Nov. 2022.

formal agreement with the City, similar to how the Downtown BART Plaza or the plaza space in Strawberry Creek Park is managed (see ED-4. *Study Feasibility of Forming a Business Improvement District or Community Benefit District (CBD)*).

- **Adjacent Development:** A property owner or property manager of a new residential or mixed-use building adjacent to the plaza may design and build a side-street plaza to receive development credits (see LU-S.3 *Side-Street Plaza Incentive*).
- **Infrastructure Improvement Projects:** Future infrastructure improvement projects should include side-street plazas as a strategy for traffic calming,

## Parklets and Curb Extension Common Spaces

Though smaller in scale than side-street plazas, parklets and curb extensions offer opportunities to create community gathering areas, outdoor commerce areas and streetscape landscaping within the public right-of-way. Opportunities for these types of spaces include smaller parklets along the commercial frontages on the southside of Dwight Way on either side of San Pablo Avenue, as well as a larger potential gathering space on the east side of San Pablo Avenue at the Hopkins Street and Cedar Street merge, where intersection reconfiguration could create a more usable and inviting public area.

### PR-P.16 Support Use and Creation of Parklets

Parklets are allowed on San Pablo Avenue but must follow strict design criteria set by the Caltrans Encroachment Permits Manual. They must also be publicly accessible, be applied for and maintained by the City, and cannot serve as semi-private spaces, such as exclusive outdoor seating for restaurants or cafés. Permits for parklets are limited to one year, and extensions are not guaranteed, adding to the uncertainty of long-term use.<sup>36</sup>

Side-streets, including Gilman Street, Cedar/Hopkins Street, University Avenue, Dwight Way, and Ashby Avenue, however, provide opportunities for parklets to support outdoor seating and dining for nearby businesses. This approach can enhance corner locations, making them more appealing for restaurants and cafés, thereby boosting business activity and economic vitality while providing the public with valued common space. Preferred locations include Designated Nodes and areas prioritized for pedestrian safety improvements (see Figure 5.7). Parklets could also be used to pilot a side-street plaza (see PR-P. 15).

The City administers a parklet program<sup>37</sup>, and reviews applications for compliance with standards such as location, design, and use, which are codified in Berkeley Municipal Code Sections 14.48.190 *Parklets* and 14.48.150 *Sidewalk seating, benches, and planters*.

**Incentive:** To support business activity within the Specific Plan Area, the yearly Outdoor Commerce Use Fee will be waived for businesses using free parking spaces and reduced by 75 percent for those using paid parking spaces upon application. Evaluate incentive after first three years of implementation and revise as appropriate.

### PR-P.17 Design and Use of Curb Extensions

Curb extensions (also called bulb-outs) extend the sidewalk into the parking lane to narrow the roadway, shorten pedestrian crossing distances, and slow turning vehicles.

**Placement:** New curb extensions will primarily be located on side-street corners along San Pablo or University Avenues and extend only into the side-street parking lane in order to preserve flexibility for potential multimodal improvements to these streets.

<sup>36</sup> California Department of Transportation. [Encroachment Permits Manual](#). Section 500.3I, "Parklets," July 2021, pp. 5-12

<sup>37</sup> City of Berkeley, Doing Business, Operating Berkeley, Outdoor Commerce Sidewalk Seating and Parklets. [Outdoor Commerce, Sidewalk Seating, and Parklets | City of Berkeley](#)



The Alameda CTC Safety Enhancements project designs bus curb extensions at select locations on San Pablo Avenue. For these locations and future bus stop curb extension projects, the City should assess whether added space can accommodate outdoor seating or other placemaking efforts when a curb extension primarily enhances transit service. This is similar to the “buslet” concept that has been implemented in two locations on Solano Avenue in Albany.

Potential curb extensions should be evaluated for feasibility in terms of private vehicle, truck, and emergency vehicle turn movements.

**Use:**

Curb extensions can be used in the public realm for a variety of associated improvements:

- Street Trees on San Pablo or University Avenues should be planted behind the original curb line to allow flexibility for future multimodal improvements (See *Street Trees*, this chapter);
- Landscaping opportunities such as Green Infrastructure can be implemented on side streets (See *Landscaping*, this chapter);
- Pedestrian-Realm Lighting on San Pablo or University Avenues should be located behind the original curb line to provide flexibility for future multimodal improvements (see *PR-P.3 Improve Street Lighting for the Safety and Comfort for all Users*);
- Outdoor seating (see Figure 5.36) or dining (see *PR-P.18 Commercial and Other Private Use of Sidewalks and the Public Realm*); and
- Public art in public spaces on San Pablo or University Avenues should be located behind the original curb line or be relocatable in order to provide flexibility for future multimodal improvements.



**Figure 5.36 Curb Extensions with Seating and Planters**  
At University Avenue and Kala Bagai Way. Photo by CD+A

**Standard:**

Similar to side-street plazas, see *PR-P.15 Create Side-Street Plazas*, a developer or property owner of a new building adjacent to a side-street identified in Figure 5.33 may propose to design, construct and activate a curb extension.

- The location and design of any curb extension must approved by the Public Works Department.
- Requirements of BMC Section 14.48.150 *Sidewalk seating, benches, and planters* apply to these curb extensions.
- This space shall be maintained through an agreement with the City.

**Incentive:**

To encourage construction of curb extensions and activation of the common space, Sidewalk Seating Permit fees that would otherwise result from commercial use of the curb extension space will be waived for up to 10 years for the first commercial seating use of the space.

## Sidewalk and Other Public Realm Activation

### PR-P.18 Commercial and Other Private Use of Sidewalks and the Public Realm

While side-street plazas, parklets, and curb extensions focus on enhancing side-streets adjacent to San Pablo Avenue, the sidewalk frontage, particularly along San Pablo Avenue, offers opportunities for activation through seating, landscaping and small gathering spaces.

The requirements of BMC Section 14.48.150 *Sidewalk seating, benches, and planters* apply to commercial and other private use of the sidewalk.

As discussed in *PR-P.2 Sidewalk Incentive*, new developments may expand the useable sidewalk space on San Pablo Avenue and other streets in the Specific Plan Area.

**Incentive:** In these cases, the Outdoor Commerce Fee for the commercial use of the sidewalk is waived for up to 10 years from the date of first commercial seating use.

## Pocket Parks and Plazas Along San Pablo Avenue

There are no publicly owned park, plazas, or other community spaces located along San Pablo Avenue. There is one park (George Florence Park) partially within the Specific Plan Area. Kains Avenue Park, located at the north end of the Specific Plan Area along Cordonices Creek is not yet open to the public. However, several parks, including George Florence Park, James Kenney Park, Strawberry Creek Park, and San Pablo Park are located within a few blocks (see Figure 5.10. *Street Network Map*).

Community feedback throughout the planning process emphasized a strong desire for accessible public open space along San Pablo Avenue. In the absence of dedicated public open space, a variety of semi-public spaces or “third places” have emerged organically. These include outdoor seating at restaurants and cafes, and the use of gas stations or paved areas by food trucks and trailers with temporary seating (See Figure 5.37).



**Figure 5.37 Example of a Food Truck Using a Parking Lot**  
Photo by CD+A

## PR-P.19 Purchase Underutilized Small Properties for Public Open Space

Several small and underutilized properties within the Specific Plan Area could, over time, have the potential for public acquisition and could be developed as public parks or plazas. The Parks, Recreation and Waterfront Department should seek funding to purchase property along San Pablo Avenue for the purpose of developing new public parks or plazas. A potential funding mechanism is a potential Nexus Study to Support Citywide Park and Open Space Funding (See **Chapter 6 Administration and Implementation**). This study could include an evaluation of public park space needs in the Specific Plan Area and identify opportunities to qualify for priority funding.



## PR-P.20 Privately Owned Public Open Spaces

An important strategy to create public open space within the Specific Plan Area is to encourage and incentivize the development of privately-owned public open spaces (POPOS). POPOS are publicly accessible open spaces that are built and maintained on private property. They can come in many forms, e.g., plazas, courtyards, recreational facilities, play areas, dog parks and usable green space; see Figure 5.38. Key benefit of POPOS is that the construction and maintenance costs are typically the responsibility of the private developer, rather than the City. These spaces are encouraged in new commercial, multi-family, and mixed-use developments, and they also present an opportunity to transform existing parking lots or underutilized properties into open areas for the public.

*LU-S.2 Privately Owned Public Open Space within the Designated Nodes Incentive*, further encourages POPOS as part of new mixed-use residential development projects in a Designated Node in the Specific Plan Area. This land use policy defines access and design standards, as well as a range of incentives and benefits when a development provides a POPOS.

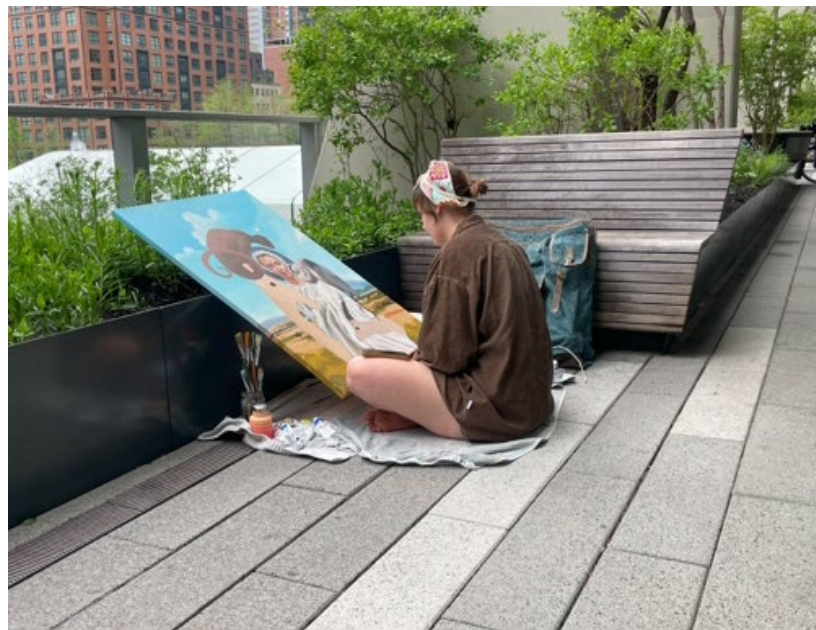
**Figure 5.38 People using Privately Owned Public Open Spaces**

*Right: Student practices painting in a POPOS provided by the adjacent development. Hudson Yard, New York City.*

*Bottom left: Quick-build POPOS plaza on former parking lot at Broadway and 21<sup>st</sup> Street in Oakland.*

*Bottom right: POPOS Plaza in front of mixed-use development, 2161 Allston Way, Berkeley.*

*All pictures by CD+A.*



## Utilities and Fire Services

Utility and fire services are required to support new development within the Specific Plan Area, including domestic water, wastewater, stormwater, telecommunications, electricity, natural gas, waste and recycling, and fire services. According to the City of Berkeley 2023-2031 Housing Element Update (HEU) EIR – SCH #2022010331 – (HEU Final EIR), including the San Pablo Avenue Specific Plan Addendum to the Housing Element Update Final EIR (SCH #2022010331) (HEU EIR Plan Addendum), existing utility systems and fire services have sufficient capacity to serve the planned housing developments.

## Domestic Water and Wastewater

### Domestic Water

The City of Berkeley and East Bay Municipal Utility District (EBMUD), the water supplier for the City of Berkeley, typically requires individual developments to make any necessary upgrades. EBMUD's water system is primarily sourced by the Mokelumne River Watershed west of the Sierra Nevada Mountain Range. There is currently sufficient water capacity for the city and the development anticipated by this Specific Plan. However, the long-term adequacy of the water supply has been susceptible to the effects of climate change. The development of water recycling and conservation programs have offset climate change concerns to date. California Green Building Standards Code (CalGreen) requirements include plumbing fixture maximum flow rates intended to reduce water consumption for all residential and commercial buildings. These standards will be implemented with new development in the Specific Plan Area.

### Wastewater

There are two components to ensure the City of Berkeley's wastewater is properly managed: (1) the treatment facility and (2) the collection and conveyance pipes. EBMUD operates the large diameter interceptor sewer and provides municipal wastewater treatment for Berkeley. The City owns and maintains its own sewage collection system. This system includes 254 miles of City-owned sanitary sewer pipe.

EBMUD is anticipated to have adequate dry weather capacity to accept wastewater flows from the planned buildout of this Plan<sup>38</sup>. Wet weather flows may also be accommodated with implementation of ongoing local and regional programs to reduce infiltration and inflow during wet weather events (City of Berkeley, Housing Element Update EIR, 2022).

Future development under the proposed HEU will require new connections for wastewater conveyance. As described in the HEU Final EIR (see page 4.16-4 of the Draft EIR), Chapter 17.05 of the BMC requires that new development pays its fair share of improvements to the sewer system that would be necessary to accommodate increased flows. This policy and BMC requirements ensure that new developments are not approved until it can be demonstrated that adequate wastewater collection capacity exists, or until a financial commitment to create such capacity has been made.

The City of Berkeley will be making improvements to the sanitary sewer on San Pablo Avenue and other Major and Collector Streets in the city through their Sanitary Sewer Rehabilitation and Replacement Project. Construction is scheduled for April through June of 2026 for the following segments of San Pablo Avenue:

- Carleton Street to Derby Street – 14" High Density Polyethylene Pipe (HDPE)
- Oregon Street to Grayson Street – 12" HDPE and 21" Cured in Place Pipe (CIPP) lining crossing San Pablo Avenue along Grayson Street
- Haskell Street to Folger Avenue – 24" HDPE

<sup>38</sup> The City's wastewater treatment capacity is 320 million gallons per day (mgd). The existing average daily flow is 63 mgd and the HEU would add 0.77 mgd. Based on the HEU wastewater generation assumption of 40 gallons per day (gdp) for a multifamily unit, the Plan buildout, which is 4,250 units above the HEU maximum buildout, would add 170,000 gdp, which is 0.17 mgd and well within the City's treatment capacity.

Noted improvements are for ongoing maintenance of the City’s sanitary sewer system rather than for increasing capacity.

## Stormwater

The Specific Plan Area is highly urbanized and the area is almost entirely covered with impervious surfaces, except for landscaped areas. Future development will have to comply with existing programs and permits, including the BMC and the Municipal Regional Stormwater (MRP 3.0) NPDES Permit (No. CAS612008). All new development or redevelopment projects that create or replace 5,000 square feet of impervious surfaces are “regulated projects” and are required to implement Low Impact Design (LID) Measures and hydromodifications management measures required under the C.3 provisions of the Municipal Regional Stormwater Permit (MRP). These features may include but not be limited to bioretention, permeable paving, detention basins, underground stormwater storage (see *PR-P.8 Green Infrastructure in Public Projects* and *PR-P.9 Green Infrastructure in Private Development* for Plan policies related to rainwater management). For example, on-site infiltration would improve the water quality of stormwater.

Implementation of rainwater measures can be especially challenging in a dense urban area. Measures such as rain barrels and cisterns, green roofs, and preserving undeveloped open space may also need to be considered. MRP 3.0 specifies methods to calculate the required size of treatment devices.

Improvements with Caltrans right-of-way are subject to requirements of Caltrans NPDES Permit Order No. 2-2022-0033-DWQ.

There is a minor possibility that underground creeks beneath San Pablo Avenue, due to deterioration, daylighting, or other creek crossings, could cause the need to reconstruct major storm drain infrastructure. However, the risk appears low given that the historic creek crossings have already been directed into a main storm drain within San Pablo Avenue through this area. The Specific Plan Area also falls outside of the Federal Emergency Management Agency (FEMA) Flood Zone.

## Electric, Gas, and Communications

Natural gas and electrical services for the City of Berkeley are provided by Pacific Gas and Electric Company (PG&E). There is also telecom (cable and internet) service throughout the Specific Plan Area, mainly provided by AT&T and Comcast. Electrical systems within the Specific Plan Area have mainly been undergrounded. Most overhead electrical lines are located within the cross streets.

Electricity, Natural Gas, and Communications upgrades will continue to be available from the providers. Typically, the utility companies will upgrade facilities as needed. It is expected that PG&E will accommodate the electrical and gas demands of the Plan. A service application submitted to PG&E will be required to trigger a review of added electrical and natural gas demand for each new individual development. Likewise existing telecom infrastructure and providers are expected to be able to accommodate development that may be generated by the Plan. In addition, East Bay Community Energy (EBCE) is a local public agency tasked with supplying clean electricity at low rates to customers in Alameda County. EBCE procures electricity and provides local renewable resources, while PG&E continues to administer natural gas service as well as energy transmission, distribution, repair, customer service, and billing for EBCE customers.

## Waste and Recycling

The City of Berkeley is one of the few cities in Northern California to operate its own refuse, dual stream recycling and green/food waste curbside collection system, as well as material recovery/drop-off and buyback facilities. The service provides curbside recycling, green/food waste, and refuse collection services. Some of the programs offered by the City’s Solid Waste Division include recycling collection programs for businesses as well as residential and commercial refuse and organic waste collection. Solid waste, recyclable, and compostable materials collected by the City and its contracted companies are transported from the Berkeley Transfer Station, located at 1201 Second Street, for sorting or disposal at off-site facilities.



One permitted landfill in Alameda County has the capacity to accommodate solid waste generated in Berkeley: the Altamont Landfill. The maximum permitted daily throughput at the Altamont Landfill is 11,150 cubic yards, and the maximum permitted capacity is 124.4 million cubic yards. The remaining capacity for solid waste at this landfill is approximately 52.3 million cubic yards (CalRecycle, Solid Waste Information System (SWIS), 2025). The City of Berkeley has achieved a solid waste diversion rate of 69 percent of its solid waste.

Development facilitated by the Plan will not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure. The Landfills that serve the City of Berkeley have adequate capacity to serve development under the Plan<sup>39</sup>. The solid waste reduction goals are in alignment with the development of projects within the Specific Plan Area and comply with federal, State, and local statutes and regulations related to solid waste (City of Berkeley, Housing Element Update EIR, 2022).

The City of Berkeley General Plan's Environmental Management Element includes the following goals and policies applicable to solid waste:

- Policy EM-7: Reduced Wastes. Continue to reduce solid and hazardous waste.
- Policy EM-8: Building Reuse and Construction Waste. Encourage rehabilitation and reuse of buildings whenever appropriate and feasible in order to reduce waste, conserve resources and energy, and reduce construction costs.
- Policy EM-9: Recycling and Waste Transfer Stations. Ensure convenient access for Berkeley citizens to transfer stations, recycling, composting, and collection of household hazardous waste products.
- Policy EM-10: Materials Recovery and Remanufacturing. Support and encourage serial materials recovery and remanufacturing industries.

Development facilitated by the Plan will follow the City of Berkeley policies for waste reduction and recycling.

## Fire Services

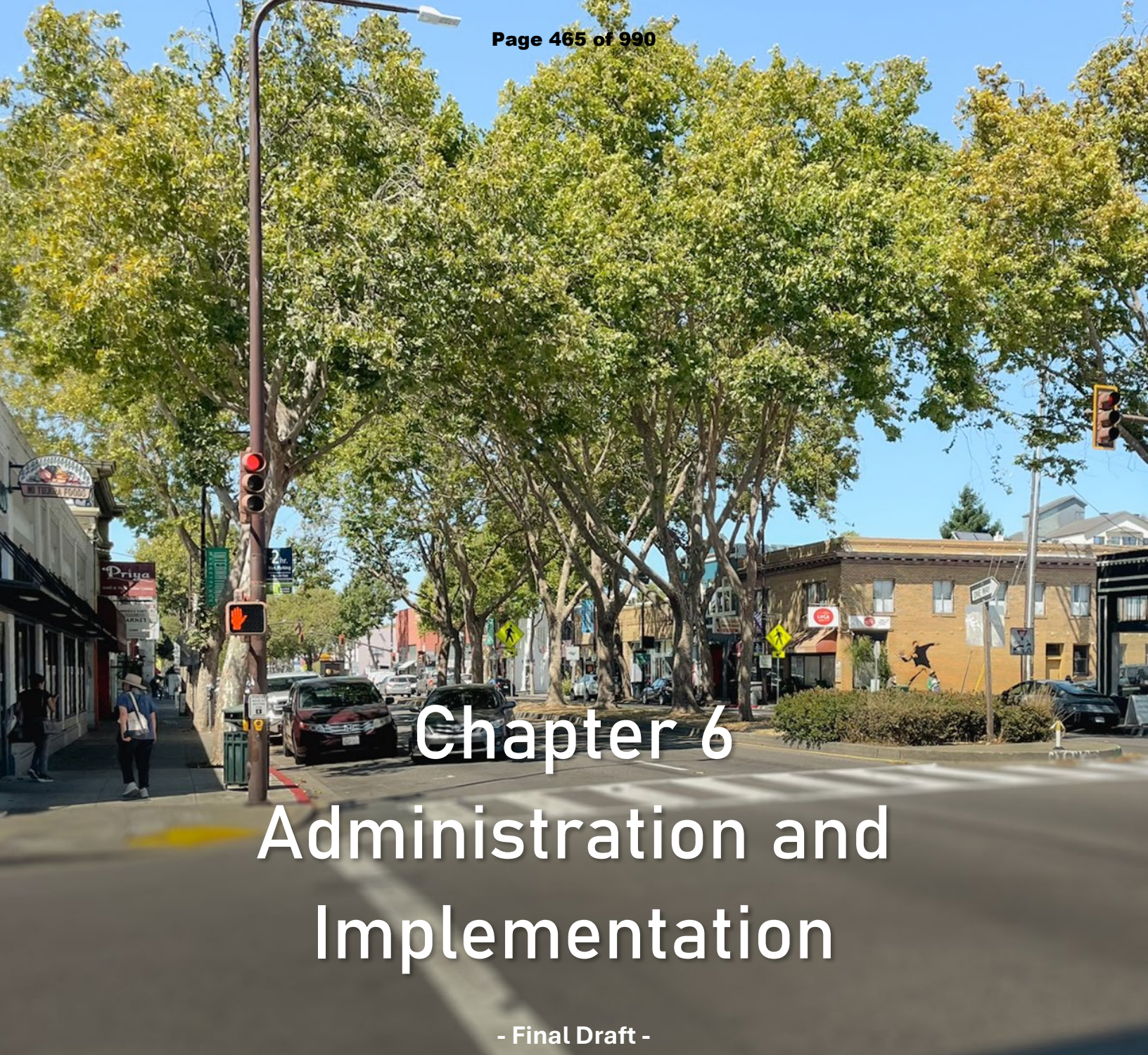
The San Pablo Specific Plan supports increases in development capacity and population in the Specific Plan Area. While the City of Berkeley 2023-2031 Housing Element Update (HEU) EIR, including the San Pablo Avenue Specific Plan Addendum, finds that there is sufficient fire service capacity to service the proposed new development, ongoing monitoring of building heights, densities, and population growth, and how those trends relate to calls for service and other service demands, is a municipal best practice.

Accordingly, implementation of the San Pablo Specific Plan will include periodic evaluation of fire service demands, including both calls for service related to fire suppression and paramedics services, as well as demand for fire inspections, plan check and other fire prevention-related services.

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<sup>39</sup> Based on the HEU solid waste generation rate of 4/lbs/unit/day, and conversion factor of 1,000 pounds per cubic yard, the plan buildout would generate 17 cubic yards of solid waste per day. With Berkeley's 69% diversion rate, the Plan buildout would generate an additional 5.27 cubic yards of solid waste per day, which equates to 1924 cubic yards per year. This represents 0.00368% of the current total remaining landfill capacity of 52.3 million cubic yards.



A photograph of a city street intersection. Large, leafy trees line the sidewalks, casting shadows on the road. Buildings with various storefronts are visible in the background. Traffic lights and street signs are present at the intersection. The scene is captured in bright daylight.

# Chapter 6 Administration and Implementation

- Final Draft -



## Specific Plan Administration

Recognizing the Specific Plan's long-term horizon and the potential for changing conditions, new opportunities, and evolving community and City priorities, this section outlines the Specific Plan's adoption, procedures for its administration, and subsequent amendments.

### Specific Plan Adoption

The Specific Plan Area is identified as a Priority Development Area (PDA) in Plan Bay Area 2050, a long-range regional plan, prepared by the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). PDAs are select areas with strong potential to support sustainable development patterns for housing and jobs in walkable, transit-oriented infill areas. To support preparation of this Specific Plan, the City received a PDA Planning Grant from MTC and ABAG.<sup>1</sup>

Additionally, the City's Housing Element Update (2023–2031) includes Program 27 calling for the preparation of the "San Pablo Avenue PDA Specific Plan," to evaluate opportunities to increase allowed densities and development capacity and to study design standards, public improvements, and mechanisms to incentivize affordable housing. Preparation of the Specific Plan began in 2023 and involved regular discussions with the Planning Commission and City Councilmembers, and coordination with staff from regional planning and transportation agencies.

The City of Berkeley initiated and prepared the Specific Plan pursuant to the provisions of California Government Code, Title 7, Division 1, Chapter 3, Article 8 (Sections 65450 through 65457). The law allows the preparation of specific plans as required for the implementation of the General Plan. Specific plans act as a bridge between the vision and ideas of a general plan and specific needs and appropriate standards for an area of the city. They provide standards and guidelines that are tailored for the Specific Plan Area. Jurisdictions may adopt specific plans by resolution or ordinance.

Upon adoption by resolution, the Specific Plan, together with the following accompanying actions, shall govern all properties within the Specific Plan Area: (1) a General Plan amendment, involving revisions to both text and the Land Use Diagram to achieve consistency with the Specific Plan; (2) a Berkeley Municipal Code (BMC) amendment, involving revisions to the *Zoning Ordinance* and the Zoning Map to achieve consistency with the Specific Plan; (3) the retirement of the West Berkeley Plan and the San Pablo Avenue Public Improvements Plan; and (4) the adoption of the *Design Standards Document*.

### Environmental (CEQA) Review

The Housing Element Update Environmental Impact Report ("2023 HEU EIR"), certified by the City of Berkeley in January 2023, analyzed citywide housing growth under the Housing Element Update, including 3,682 housing units anticipated within the San Pablo Avenue Plan Area. The Specific Plan would increase the development potential to a total of approximately 8,000 units, representing an additional 4,318 units, rounded to 4,500 for the purposes of the CEQA analysis.

The City prepared an Addendum to the 2023 HEU EIR. The Addendum, which includes a Checklist for each environmental topic, documents that the Specific Plan in addition to the HEU would not result in any new or substantially more severe significant environmental impacts than those previously identified in the 2023 HEU EIR, or require new or different mitigation measures.

The project analyzed in the Addendum includes amendments to the BMC and the General Plan, which include new development standards for the C-SP zoning district such as height and FAR, particularly at Designated Nodes, as well as retirement of the West Berkeley Plan and San Pablo Avenue Public Improvements Plan. Pursuant to CEQA Guidelines Section 15164, the Addendum concludes that the proposed changes do not meet the conditions outlined

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<sup>1</sup> [Priority Development Area \(PDA\) Grants | Metropolitan Transportation Commission](#). Last accessed 05/08/2026.

in CEQA Guidelines Section 15162 that would require preparation of a subsequent or supplemental EIR. The City's decision makers will review the Addendum and assess if they agree with the findings that no additional environmental review is needed pursuant to CEQA.

Based on recent housing and CEQA legislation as well as Section 15183 of the CEQA Guidelines it is anticipated that many of the future mixed-use or residential development projects proposed under the Specific Plan will be exempt from further CEQA review. However, the City will make a determination as individual development proposals are submitted to the City for review and approval based on CEQA and permit streamlining legislation in place at that time.

## Administering the Specific Plan

Upon City Council adoption of the Specific Plan, all new projects within the Specific Plan Area must demonstrate consistency with the Specific Plan along with the Berkeley Municipal Code (BMC), the *Design Standards Document*, the City's General Plan and other circulation and public realm standards and plans. See *Regulatory Context and Relationship to Other Planning Documents and Projects* in **Chapter 1 Introduction** for other plans and policies acting in the Specific Plan Area, such as the Transit-First Policy Implementation Plan.

**Conflict:** If any policy or standard in the Specific Plan conflicts with the BMC or the *Design Standards Document*, the BMC and/or the *Design Standards Document* shall prevail.

**Severability:** If any chapter, subsection, sentence, clause, or phrase of this Plan, or future amendments or additions hereto, is for any reason held to be invalid or unconstitutional by the decision of any court, such decision shall not affect the validity of the remaining portions of the Specific Plan.

**Minor Amendments:** Non-substantive changes to the Specific Plan such as corrections or technical changes to ensure consistency or clarify uncertainties or ambiguity may be executed by Staff through an administrative process.

**Major Amendments:** Changes to the Specific Plan that are not minor are considered major amendments, such as substantive changes to policies, land use designations, or development standards, must follow procedures outlined in BMC 22.04.020.

## Development Review and Project Approvals

The Specific Plan aims to make development approvals more streamlined. See Berkeley Municipal Code (BMC) 23.204.020, Allowed Land Uses, for permit thresholds by use. BMC Chapter 23.402 (Administrative Responsibility) describes City roles and responsibilities when administering the *Zoning Ordinance*. There are 4 permit application review and decision-making authorities that have responsibilities and duties associated with processing permit applications and other requested development project-related approvals:

**Zoning Officer:** A project that requires approval of a Zoning Certificate can be approved ministerially through a Zoning Certificate issued by a Zoning Administrator. See BMC Section 23.402.040 for details about the Zoning Officer responsibilities and duties.

**Zoning Adjustments Board:** A project that requires approval of a discretionary permit, such as a Use Permit, Variance, or Administrative Use Permit is reviewed and approved by the Zoning Adjustments Board. See BMC Section 23.402.070 for details about the Zoning Adjustments Board responsibilities and duties.

**Design Review:** A request for an exemption to a design standard in the *Design Standards Document* would be reviewed and approved by the Design Review Committee and/or Design Review staff. See the *Design Standards Document* for details about the design review process in the Specific Plan Area. See BMC Section 23.402.060 for details about the Design Review Committee responsibilities and duties and BMC Section 23.406.070 for details about the City's design review process.

**Landmark, Structures of Merit, and buildings within a Historic District Review:** A project that would affect a designated landmark, structure of merit or a building within a historic district requires approval of a Structural Alteration Permit. The Landmark Preservation Commission reviews and acts on such permits. See BMC Section 23.402.050 for details about the Landmark Preservation Commission responsibilities and duties.<sup>2</sup>

In addition to the City's local development review procedures, State law may influence how projects in the Specific Plan Area are reviewed and approved. Depending on the nature of the proposed project, State laws can require ministerial approval, limit the City's ability to impose certain standards or conditions, or otherwise alter the applicable review process. As State housing and land use laws continue to change, the development review framework affecting the Specific Plan Area will continue to evolve.

## Implementation

The Specific Plan will be implemented through the adoption of policies and standards in the **Land Use, Economic Development and Streets -Transportation and Public Realm Chapters**, and the *Design Standards Document*, which are designed to align public and private investments with the Specific Plan's vision and goals. These policies and standards are reflected in amendments to the text and maps of the Berkeley Municipal Code (BMC) and the General Plan, as well as through the retirement of the West Berkeley Plan and the San Pablo Avenue Public Improvements Plan.

The City maintains a [dedicated webpage](#) for the adopted Specific Plan, implementation updates, and resources for property owners, developers, businesses, and community members.

## Monitoring and Funding

To ensure that the public and City Council remain informed about Specific Plan implementation, the City will continue to prepare annual progress reports and adjust programs and actions, as needed, to advance the objectives outlined in **Chapter 2 Vision and Guiding Principles**.

This Specific Plan is limited in its ability to establish new funding mechanisms; rather, it can only identify potential tools and strategies that may be used to support implementation. To realize the vision of this Specific Plan, the City and community must be creative and proactive in leveraging existing resources and pursuing new funding opportunities that respond to the needs of the Specific Plan Area. The following section, summarized in Table 6.1, identifies potential funding and financing strategies. While not comprehensive, it provides a starting point for identifying tools to support future improvements and investments. In addition, potential funding sources are identified for each policy in the *Implementation Actions* section of this chapter.

**Local Revenue and Fees:** The City may fund implementation projects in the Specific Plan Area through a range of local revenue sources. These include allocations from the General Fund through the City's budgeting process, or Measure FF Sidewalk and Street Repairs Parcel Tax funds could be made available for the design and construction of street and sidewalk improvement projects in the Specific Plan Area.

**Property-Based Financing Tools:** Property-based financing tools allow local governments to fund infrastructure and public improvements through revenues generated within a defined area. Mechanisms such as business improvement districts or community benefit districts (BIDs or CBDs) enable property and business owners to collectively fund services and improvements that benefit the district, such as streetscape enhancements, maintenance, and economic development programs. *ED-P.5 Study Feasibility of Forming a BID or CBD*, calls for studying the potential formation of a BID or CBD in the Specific Plan Area and assessing possible boundary options ranging from the entire Specific Plan Area to targeted areas around Designated Nodes. Enhanced infrastructure financing districts (EIFDs),

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<sup>2</sup> [Landmark Alterations | City of Berkeley](#). Last accessed 05/08/2026.

assessment districts, and community facilities districts (CFDs) can generate funding by capturing increased property tax revenues or levying special assessments or taxes on properties that benefit from the improvements.

**Development Mechanisms:** Development-based funding mechanisms help implement public improvements by leveraging private development activity. Development agreements allow cities and developers to establish negotiated terms for projects, though the level of public benefits provided must be determined on a case-by-case basis. Public-private partnerships allow the City to collaborate with private entities to finance, construct, or maintain infrastructure and other improvements that benefit both new development and the surrounding community. Partnerships with large institutions can result in significant infrastructure investment, while collaborations with local organizations or nonprofits, particularly those connected to the history and character of San Pablo Avenue, may lead to more responsive and place-specific outcomes.

**Grant Programs:** San Pablo Avenue is a major regional road with frequent transit service and strong potential for multimodal improvements, making it well positioned to compete for federal, State, or regional transportation and transit-oriented community funding. Projects that enhance pedestrian, bicycle, and transit infrastructure within the Specific Plan Area align with regional and State priorities to improve safety, support transit use, and reduce greenhouse gas emissions. Potential funding sources include the following:

- Caltrans' Active Transportation Program grants program (ATP)
- Alameda County Transportation Commission (ACTC) grant programs
- One Bay Area Grant (OBAG) Program administered by the Metropolitan Transportation Commission (MTC)
- Affordable Housing and Sustainable Communities (AHSC) Program administered by the California Department of Housing and Community Development (HCD)
- Alameda County (AC) Transit capital funding for transit infrastructure improvements
- Various federal grant programs

**Other Tools:** Revolving loan funds provide low-interest financing for housing and economic development projects, with loan repayments returned to the fund to support future projects. This structure allows the same pool of funding to be reused over time to support activities such as affordable housing development, building rehabilitation, and small business improvements.

Table 6.1 Potential Funding Strategies and Sources

| Funding Source Category        | Funding Source                                                        | Improvement Category     |         |         |                      |
|--------------------------------|-----------------------------------------------------------------------|--------------------------|---------|---------|----------------------|
|                                |                                                                       | Streets and Public Realm | Transit | Housing | Economic Development |
| Local Revenue & Fees           | Local Revenue                                                         | X                        | X       | X       | X                    |
| Property-Based Financing Tools | Business Improvement District or Community Benefit District (BID/CBD) | X                        | X       |         | X                    |
|                                | Enhanced Infrastructure Financing Tool (EIFD)                         | X                        | X       | X       | X                    |
|                                | Assessment District                                                   | X                        | X       |         |                      |
|                                | Community Facilities District                                         | X                        | X       | X       |                      |
| Development Mechanisms         | Development Agreement                                                 | X                        | X       | X       | X                    |
|                                | Public-Private Partnership                                            | X                        | X       | X       |                      |
| Grant Programs                 | Active Transportation Programs (ATP)                                  | X                        | X       |         |                      |
|                                | Alameda County Transportation Commission (ACTC) Grants                | X                        | X       |         | X                    |
|                                | Metropolitan Transportation Commission (OBAG)                         | X                        | X       | X       |                      |
|                                | Affordable Housing & Sustainable Communities (AFSC)                   | X                        | X       | X       |                      |
|                                | AC Transit Capital Funding                                            |                          | X       |         | X                    |
|                                | Federal Grant Programs                                                | X                        | X       | X       | X                    |
| Other Tools                    | Revolving Loan Fund                                                   |                          |         | X       | X                    |

# Implementation Actions

The following tables (6.2 - 6.4) describe a range of implementation measures, actions, responsibilities, and timeframes, as well as potential funding sources for these measures. These actions should be considered in tandem with the corresponding policies and standards outlined in **Chapters 3 through 5**.

## Abbreviations

### City of Berkeley

BFD – Berkeley Fire Department

CMO – City Manager’s Office

CAO – City Attorney Office

HHCS – Health, Housing and Community Services

OED – Office of Economic Development

PLNG – Planning and Development Department

PRW – Parks, Recreation and Waterfront Department

PW – Public Works

- Transportation Division (“PW Trans”)
- Engineering Division (“PW Eng”)

RSB – Rent Stabilization Board and Staff

BHA – Berkeley Housing Authority

### Other:

Alameda CTC – Alameda County Transportation Commission

AC Transit – Alameda-Contra Costa Transit District

Alameda County SBDC – Alameda County Small Business Development Center

BART – San Francisco Bay Area Rapid Transit District

BBDN – Berkeley Business District Network

Caltrans – California Department of Transportation

## Timeline

Each table includes the timing of each implementation action. Many implementing actions depend on the availability of funding, and once initial funding is secured, it can be used to identify and pursue additional resources to carry out the program or improvement. Therefore, the timeline will need periodic refinement and updating.

- **On-going** – actions that are already occurring and may be affected by Specific Plan policies and standards.
- **Immediate** – actions that will start with adoption of the Specific Plan.
- **Following other actions** – actions that depend on implementation of projects or other actions. In this case, the dependent project or action is listed.
- Specific time periods are listed for some implementation actions; time periods are in response to:
  - Priorities for the action;
  - Estimate of time needed to undertake action; and
  - Dependency on other actions.

Table 6.2 Plan Administration Implementation Actions

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Lead Responsibility | Partners                                               | Timeline | Potential Funding Source |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------|----------|--------------------------|
| <b>Provide annual updates on Plan implementation through the General Plan Annual Progress Report (APR)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | PLNG                | Input from other City Departments and Partner Agencies | On-going | General Fund             |
| <b>Provide periodic updates to City Council on the following metrics:</b> <ul style="list-style-type: none"> <li>• Number of new housing units entitled, permitted, or completed.</li> <li>• Summary description of transportation, streetscape, and open space improvements under design, construction and completed.</li> <li>• Summary report of collisions that have occurred within the Specific Plan Area.</li> <li>• Number of active businesses, including new business licenses within the Specific Plan Area.</li> <li>• Funding secured and partnerships established with community groups, agencies, and developers.</li> <li>• Status of implementation actions outlined in this chapter.</li> </ul> | PLNG                | Input from other City Departments and Partner Agencies | On-going | General Fund             |
| <b>Identify and pursue funding opportunities</b><br>Coordinate and monitor grant and other funding opportunities to implement Specific Plan policies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | PLNG, OED, PW       |                                                        | On-going | General Fund             |
| <b>Monitor opportunities to pursue Affordable Housing and Sustainable Communities (AHSC) grants</b><br>AHSC is an annual State grant program that funds construction of affordable housing and improvements related to reducing GHG                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | HHCS, PW            | PLNG, Affordable housing developers,                   | On-going | General Fund             |



| Action Description                                                                                                                                                                                                                                                                                                                                                | Lead Responsibility | Partners                   | Timeline | Potential Funding Source |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------|----------|--------------------------|
| <p>emissions. Certain multimodal and other transportation improvements are fundable.</p> <p>Work with affordable housing developers and partner agencies to prepare and submit proposals for AHSC grants for housing within the Specific Plan Area and transportation infrastructure improvements that are prioritized in this Specific Plan, as appropriate.</p> |                     | AC Transit, Caltrans, etc. |          |                          |

Table 6.3 Land Use Implementation Actions

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                            | Lead Responsibility | Partners | Timeline             | Potential Funding Source  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------|----------------------|---------------------------|
| <p><b>LU-P.1 Establish the Commercial San Pablo (C-SP) District</b></p> <ul style="list-style-type: none"> <li>Amend Title 23 of the Berkeley Municipal Code to establish the C-SP zoning district and the following standards as described in <b>Chapter 3 Land Use</b>: <ul style="list-style-type: none"> <li><i>LU-S.5 Development Standards</i></li> <li><i>LU-S.7 Streetscape Standards</i></li> </ul> </li> </ul>                      | PLNG                |          | Immediate            | General Fund (staff time) |
| <p><b>LU-P.2 Focus Commercial Uses within Designated Nodes</b></p> <ul style="list-style-type: none"> <li>Amend the Berkeley Municipal Code to include Designated Nodes, as described in <b>Chapter 3 Land Use</b>, and adopt Designated Node-specific ground-floor frontage requirements and allowed use requirements.</li> <li>Periodically evaluate Designated Node performance and adjust standards and regulations as needed.</li> </ul> | PLNG                |          | Immediate + On-going | General Fund (staff time) |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Lead Responsibility | Partners | Timeline  | Potential Funding Source  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------|-----------|---------------------------|
| <b>LU-P.3 Boundary Adjustments and Re-zonings</b> <ul style="list-style-type: none"> <li>Rezoning parcels in the C-W and C-U zoning districts within the Specific Plan Area to C-SP.</li> <li>Rezoning split-zoned parcels fronting San Pablo Avenue and University Avenue to C-SP.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                   | PLNG                |          | Immediate | General Fund (staff time) |
| <b>LU-P.4 Amend the General Plan and Map</b> <ul style="list-style-type: none"> <li>Amend the General Plan text and map as described in <b>Chapter 3 Land Use</b>.</li> <li>Amend Title 23 of the Berkeley Municipal Code text and map as shown in Figure 3.5 in <b>Chapter 3 Land Use</b>, including: <ul style="list-style-type: none"> <li>Specific Plan Area Boundary</li> <li>Designated Nodes</li> <li>Rezoning all C-W and C-U parcels within the Specific Plan Area to C-SP</li> <li>Include MU-LI Affordable and Family Friendly Housing Areas</li> <li>Remove split-zoning inconsistencies and other minor rezoning corrections</li> </ul> </li> </ul> | PLNG                |          | Immediate | General Fund (staff time) |
| <b>LU-P.5 Facilitate Housing on MU-LI Parcels</b> <ul style="list-style-type: none"> <li>Amend Title 23 of the Berkeley Municipal Code text to designate parcels as Affordable and Family-Friendly Housing Areas on MU-LI parcels within the Specific Plan Area, consistent with the Policy description in <b>Chapter 3 Land Use</b>.</li> <li>Require qualifying projects to comply with C-SP development standards.</li> </ul>                                                                                                                                                                                                                                 | PLNG                |          | Immediate | General Fund (staff time) |
| <b>LU-P.6 Planning and Commercial Use Permit Streamlining</b> <p>Review permitting processes after 5 years. Determine if further monitoring is needed.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PLNG                | OED, PW  | 5 years   | General Fund (staff time) |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Lead Responsibility | Partners | Timeline     | Potential Funding Source  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------|--------------|---------------------------|
| <b>LU-P.7 Public Open Space Enhancements</b><br><br>Amend the Berkeley Municipal Code to implement the following standards consistent with their descriptions in <b>Chapter 3 Land Use</b> : <ul style="list-style-type: none"> <li>• <i>LU-S.1 Sidewalk Expansion Incentive</i></li> <li>• <i>LU-S.2 Privately-Owned Publicly Accessible Open Space within Designated Nodes</i></li> <li>• <i>LU-S.3 Side-Street Plaza Incentive</i></li> <li>• <i>LU-S.4 Mid-Block Passage Incentive</i></li> </ul> | PLNG                |          | Immediate    | General Fund (staff time) |
| <b>LU-P.8 Expand Allowed Primary and Temporary Uses</b><br><br>Add the C-SP zoning district to the Allowed Uses Table in Title 23 of the Berkeley Municipal Code. Compared to the existing C-W zoning district, expand by-right uses (e.g. galleries, light-industrial) and allow additional uses that align with the Specific Plan's goals.                                                                                                                                                          | PLNG                | OED      | Immediate    | General Fund (staff time) |
| Develop outreach program for small businesses (coordinate <i>with ED-P.1,2,3</i> )                                                                                                                                                                                                                                                                                                                                                                                                                    | OED                 | PLNG     | 0 to 3 years | General Fund (staff time) |
| <b>LU-P.9 Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors</b><br><br><ul style="list-style-type: none"> <li>• Amend the Berkeley Municipal Code to establish ground floor frontage types and location requirements as described in the policy.</li> </ul>                                                                                                                                                                                                   | PLNG                |          | Immediate    | General Fund (staff time) |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Lead Responsibility | Partners             | Timeline                                                  | Potential Funding Source  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------|-----------------------------------------------------------|---------------------------|
| <b>LU-P.10 Establish a Pilot San Pablo Avenue Density Bonus Program</b><br>Research and consider adopting a pilot local density bonus program for the Specific Plan Area consistent with the policy described in <b>Chapter 3 Land Use</b> , including: <ul style="list-style-type: none"> <li>• Requiring in-lieu contributions to the City's Affordable Housing Trust Fund.</li> <li>• Prohibiting waivers of critical development and design standards.</li> <li>• Requiring applicants opt-out of State Density Bonus.</li> </ul> | PLNG                | HHCS                 | Within 1 year                                             | General Fund (staff time) |
| <ul style="list-style-type: none"> <li>• Develop and provide developer and administrative guidance documents for the program.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                              | PLNG                | HHCS                 | Within 6 months after pilot program initiation            | General Fund (staff time) |
| <b>LU-P.11 Artists Housing and Cultural Districts</b><br>If the City creates a cultural district within one-half mile of the Specific Plan Area, coordinate with the Civic Arts Commission and the Housing Advisory Commission to consider creation of an affordable artist housing overlay in portions of the Specific Plan Area.                                                                                                                                                                                                    | PLNG                | OED/Civic Arts, HHCS | Timing dependent on City establishing a cultural district | General Fund (staff time) |
| <b>Supportive Action</b> - During the Plan Bay Area update, MTC allows cities to request PDA adjustments. The City will request that the PDA boundary be updated to match the Specific Plan Boundary.                                                                                                                                                                                                                                                                                                                                 | PLNG                | MTC                  | Up to 3 years for Plan Bay Area update coordination       | General Fund (staff time) |

Table 6.4 Economic Development Implementation Actions

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Lead Responsibility | Partners                                       | Timeline             | Potential Funding Source                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------|----------------------|--------------------------------------------------|
| <b>ED-P.1 Outdoor Business Activation Toolkit</b><br><br>See implementation action of the following policies and standards: <ul style="list-style-type: none"> <li>• <i>LU-P.8 Expand Allowed Primary and Temporary Uses</i></li> <li>• <i>PR-S.1 Sidewalk Zone Standards</i></li> <li>• <i>PR-P.16 Support Use and Creation of Parklets</i></li> </ul>                                                                                                                                                                                                                                                                                                                             | PLNG                | OED                                            | Immediate + On-going | General Fund (staff time)                        |
| <b>EP-P.2 Support Flexible Commercial Spaces</b><br><br>See implementation action of <i>LU-P.8 Expand Allowed Primary and Temporary Uses</i> , which establishes new uses per policy description.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | PLNG                | OED                                            | Immediate            | General Fund (staff time)                        |
| <b>ED-P.3 Establish Public-Private Partnerships to Activate the Specific Plan Area</b><br><br>Build partnerships with community organizations, local institutions, merchant groups, property owners, and other stakeholders to activate community spaces and organize events consistent with the policy description in <b>Chapter 4 Economic Development</b> . The goals of this are two-fold. First, building partnerships will help city staff better understand and track the changing needs of the local community, and supporting initial activation by the local community will encourage the local community to take a continuing role in activating the Specific Plan Area. | OED                 | PLNG, CBOs and business organizations          | On-going             | General Fund (staff time); partner contributions |
| <b>Outreach by OED</b> in alignment with <i>ED-P.6 Economic Development Technical Assistance</i> to potential community organization, business, and other private and institutional partners. Outreach should consist of mailing to the existing community and to new businesses and organizations that locate in the Specific Plan Area regarding available assistance and the ability to meet with groups to discuss available assistance. This can include technical assistance for navigating                                                                                                                                                                                   | OED                 | PLNG, PW, Neighborhood Services/Special Events | Up to 3 years        |                                                  |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Lead Responsibility | Partners                             | Timeline                                                        | Potential Funding Source            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------|-----------------------------------------------------------------|-------------------------------------|
| permit requirements such as encroachment permits, temporary use, temporary street closures, and vendor permits.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     |                                      |                                                                 |                                     |
| <b>Leverage Berkeley Business District Network (BBDN) and CBOs</b> to coordinate events and Specific Plan Area-wide promotions through on-going OED staff interactions with BBDN and related organizations and providing information about potential relationship between Specific Plan Area businesses and organizations and BBDN member events and promotions.                                                                                                                                                                                                                                                                                                                                                                                                         | OED                 | BBDN, CBOs                           | On-going                                                        |                                     |
| <b>ED-P.4 Support and Expand Existing Business Clusters</b><br><br><b>City Support and Technical Assistance</b> <ul style="list-style-type: none"> <li>OED to offer technical assistance to emerging clusters as defined in the policy description in <b>Chapter 4 Economic Development</b>.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | OED                 | BBDN                                 | On-going + up to 5 years                                        | General Fund (staff time)           |
| <b>Coordination with related policies:</b> <ul style="list-style-type: none"> <li>Coordinate with implementation of <i>ED-P.7 Establish a Process to Prioritize Public Investment in Designated Nodes</i> to ensure improvements are aligned with cluster organization initiatives. See discussion of existing cluster organizations in <b>Chapter 4 Economic Development</b>. OED can add to the list of cluster organizations, as they form, through contacts with the Specific Plan Area community as part of other efforts.</li> <li>Coordinate with implementation of Policy <i>ED-P.5 Study Feasibility of Forming a Business Improvement District (BID) or Community Benefit District (CBD)</i> to ensure business clusters are included in the study.</li> </ul> | OED, PLNG           | PW Trans, PR&W                       | On-going + up to 5 years                                        | General Fund (staff time)           |
| <b>ED-P.5 Study Feasibility of Forming a Business Improvement District (BID) or Community Benefit District (CBD)</b><br><br>Fund and initiate a study evaluating the feasibility of creating 1 or more business improvement districts (BIDs) or community benefit districts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | OED                 | Local businesses and property owners | 3 years (potentially earlier if strong interest is expressed by | General Fund (staff time)<br>Grants |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Lead Responsibility | Partners                  | Timeline                                                  | Potential Funding Source                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------|
| <p>(CBDs) within the Specific Plan Area, consistent with the policy description in <b>Chapter 4 Economic Development</b>.</p> <ul style="list-style-type: none"> <li>Gauge Specific Plan Area stakeholder interest in moving forward with a feasibility study through initial outreach.</li> <li>Consider multiple geographies (full Specific Plan Area vs. Designated Nodes), hybrid models, and cultural district components.</li> <li>Consider the potential for other organizations similar to BIDs and CBDs.</li> <li>Conduct equity-centered outreach with businesses, CBOs, and nonprofits.</li> </ul> |                     |                           | Specific Plan Area stakeholders and funding is available) |                                                                                     |
| <p><b>ED-P.6 Economic Development Technical Assistance</b></p> <p>OED will provide technical assistance consistent with Policy description in <b>Chapter 4 Economic Development</b>.</p> <ul style="list-style-type: none"> <li>Establish approach for outreach, assistance, and Plan Area economic performance.</li> <li>Review effectiveness after 24 months and decide future viability.</li> </ul>                                                                                                                                                                                                        | OED                 |                           | <p>Within 1 year</p> <p>Review: 24 month after start</p>  | General Fund                                                                        |
| <p><b>ED-P.7 Establish a Process to Prioritize Public Investment in Designated Nodes</b></p> <p>Pursue funding for improvements in the Designated Nodes, such as grants for streetscape improvements, Alameda CTC improvement funding, other state and federal grants and funding.</p> <p>As citywide multimodal transportation plans are updated, take this Specific Plan's prioritization of future improvements into account. See also <i>T-P.14 Prioritizing Multimodal Safety Improvements</i> and <i>T-P.18 Prioritize Connection with Surrounding Neighborhoods and Districts</i>.</p>                 | PW Trans, PRW, PLNG | OED, MTC, and Alameda CTC | On-going                                                  | Identify funding for public improvements (potential General Fund and grant funding) |



Table 6.5 Street Implementation Actions

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Lead Responsibility | Partners                                                | Timeline                                                                                         | Potential Funding Source                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Transportation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                     |                                                         |                                                                                                  |                                                                                                                                                                                                              |
| <b>Retire San Pablo Avenue Public Improvements Plan (2004)</b><br>The San Pablo Avenue Public Improvements Plan (2004) was adopted by Resolution No. 62,741-N.S. December 7, 2004. The Specific Plan replaces the street design policies and standards of the San Pablo Avenue Public Improvements Plan and the retirement of the San Pablo Avenue Public Improvements Plan is an action taken with the adoption of the Specific Plan.                                                                                                            | PLNG                |                                                         | Immediate                                                                                        | General Fund (staff time)                                                                                                                                                                                    |
| <b>T-P.1 Improve Mobility, Access, and Safety for All People</b><br>Implement the goals for the City's Complete Streets Policy and Vision Zero Action Plan by designing all street and transportation improvements within the Specific Plan Area to enhance mobility, access and, safety for all people of all abilities who are walking, biking, taking transit, and driving while providing for deliveries, freight, emergency response, evacuation and maintenance access.                                                                     | PW Trans            | Alameda CTC<br>Caltrans<br>AC Transit                   | On-going                                                                                         | General Fund (staff time)                                                                                                                                                                                    |
| <b>T-P.2 Future Transportation Study Needs for San Pablo Avenue</b><br>Coordinate with Alameda CTC, AC Transit, Caltrans, and potentially the City of Albany to initiate and complete Multimodal Complete Streets Study of San Pablo Avenue in Berkeley to determine a preferred design concept for redesign of the street and work together towards construction of the preferred concept. This study will address the feasibility of dedicated bus lanes and separated bikeways on San Pablo Avenue from Heinz Street to the south city limits. | PW Trans            | Alameda CTC<br>Caltrans<br>AC Transit<br>City of Albany | Partner agency coordination and discussions, 1 to 2 years<br><br>Study, timing to be determined. | General Fund (staff time) for partner agency coordination and discussions<br><br>General Fund for grant matching funds<br><br>County, Regional, State, and Federal Grants to fund studies and implementation |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Lead Responsibility | Partners                                | Timeline                                                                                                                          | Potential Funding Source                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                                         |                                                                                                                                   | Alameda CTC CIP potential to support implementation |
| <b>Supportive Implementation Action:</b><br><b>Vision Zero Action Plan</b> and <b>Pedestrian Plan</b> updates should assess transportation needs and performance of multimodal improvements to decide if a San Pablo Avenue Multimodal Complete Streets Study is a City priority.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PW Trans            | Alameda CTC, AC Transit, Caltrans, PLNG | 1 to 2 years for Plan updates                                                                                                     | General Fund Grants                                 |
| <b>Supportive Implementation Action:</b><br>A <b>San Pablo Avenue Safety Assessment</b> should be coordinated with Alameda CTC to conduct a follow-up safety assessment after completion of the Alameda CTC San Pablo Avenue Corridor Safety Enhancements and Parallel Bike Routes Projects to evaluate the effectiveness of improvements for pedestrians and cyclists. Construction is expected to be completed in 2027 to 2028.<br><br>Also see implementation steps for <i>T-P.2 Future Transportation Study Needs for San Pablo Avenue</i> . <ul style="list-style-type: none"> <li>• <b>Review and update list of intersection improvements.</b> As part of the follow-up safety study, review, update, and implement improvements identified in Figure 5.7 in <b>Chapter 5 Streets-Transportation and Public Realm</b> and <b>Appendix D</b>. Use this updated list to guide future implementation, reflecting current conditions, safety need and community input.</li> <li>• <b>Assess Bulb-Out Extensions for Public Use.</b> After completion of the ACTC San Pablo Avenue Corridor Safety Enhancements assess opportunities to enhance constructed bus bulb-out extensions on San Pablo Avenue for general public and transit rider benefit, such as seating, additional trees and landscaping, bicycle racks, pedestrian-scale lighting, or public amenities.</li> </ul> | PW Trans            | Alameda CTC                             | 1 to 3 years after completion of the Alameda CTC San Pablo Avenue Corridors Safety Enhancements and Parallel Bike Routes Projects | General Fund (staff time)<br>Alameda CTC            |
| <b>Supportive Implementation Action:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | PW Trans            | Alameda CTC                             | 1 to 3 years                                                                                                                      | General Fund (staff time)                           |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Lead Responsibility | Partners                                                        | Timeline     | Potential Funding Source           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------|--------------|------------------------------------|
| <b>Advocate for Alameda CTC Bus Lanes and Bike Lanes Project implementation</b> including finalizing design, identifying full funding, and constructing project.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                     |                                                                 |              |                                    |
| <b>T-P.3 Maintain and Improve Bus Service in Collaboration with Alameda CTC and AC Transit</b><br><br>Coordinate with partners to align service levels to meet demand and implement infrastructure upgrades in alignment with the Transit First Policy Implementation Plan. Monitor progress, needs, and implementation through the AC Transit/City of Berkeley Interagency Liaison Committee.<br><br>Also see implementation steps for <i>T-P.2 Future Transportation Study Needs for San Pablo Avenue</i> .                                                                                                                                | PW Trans            | AC Transit,<br>Alameda CTC,<br>Caltrans, PLNG                   | On-going     | General Fund (staff time)          |
| <b>T-P.4 Implement Signal Timing and Transit Signal Priority (TSP)</b><br><br>Coordinate with partner agencies to assess bus transit reliability resulting from existing TSP improvements and Safety Enhancement project bus stop improvements. It is assumed that Safety Enhancement improvements will be complete by end of 2028. <sup>3</sup> Following assessment, identify funding for design and construction of any recommended additional improvements.<br><br>BFD shall participate in the design, testing and performance monitoring of TSP systems. City-supported TSP efforts shall include emergency vehicle signal preemption. | PW Trans            | Alameda CTC,<br>Caltrans<br>AC Transit<br>City of Albany<br>BFD | 3 to 5 years | County, Regional, and State grants |
| <b>T-P.5 Create an Active Parking and Loading Management Program for the Specific Plan Area</b><br><br>Reach out to businesses and property owners within the Specific Plan Area to identify a location to pilot an active parking and loading management program. Likely locations include the University Avenue, Cedar Street, and Dwight Way Designated Nodes. The pilot includes discussion with businesses and surrounding neighborhoods regarding                                                                                                                                                                                      | PW Trans            | OED                                                             | 3 years      | General Fund                       |

<sup>3</sup> [San Pablo Avenue Corridor Safety Enhancements fact sheet](#), August 2025.

| Action Description                                                                                                                                                                                                                                                                                                                                                                                 | Lead Responsibility | Partners                        | Timeline                                                                      | Potential Funding Source                 |
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| their interest in opting into the Residential Preferential Parking (RPP) program. Council approval would be needed to make these areas eligible for the RPP program.                                                                                                                                                                                                                               |                     |                                 |                                                                               |                                          |
| <b>T-P.6 Implement Mobility Hub Features in the University Avenue Node</b><br><br>Gauge level of interest and support from partner agencies and organizations (MTC, AC Transit, and Bay Wheels) to study feasibility and implementation of Mobility Hub features.                                                                                                                                  | PW Trans            | MTC, AC Transit, and Bay Wheels | 3 to 5 years                                                                  | General Fund                             |
| <b>Install a bike corral near the Addison Street bike boulevard crossing</b> improvement at as a first step toward creating a mobility hub in the University Avenue Designated Node. Crossing is being constructed by the Alameda CTC Safety Enhancement project; coordinate with project and possibility of locating the corral outside of the construction area to allow for early installation. | PW Trans            | AC Transit                      | 1 to 3 years                                                                  | General Fund                             |
| <b>Identify funding for study and design of Mobility Hub and undertake study</b> , including business, transit rider, and general community outreach to identify types of improvements, their locations and cost to implement. Also identify funding sources and timeline.                                                                                                                         | PW Trans            | MTC, AC Transit, and Bay Wheels | 1 to 2 years following installation of bike corral given funding availability | General Fund and potential grant funding |
| <b>Implement Mobility Hub features in the University Avenue Node</b> through coordination with partner agencies and organizations, City work crews, and possibly work by construction contractors to install Mobility Hub features and make associated improvements.                                                                                                                               | PW Trans            | MTC, AC Transit, and Bay Wheels | 1 to 2 years completion of Mobility Hub Study given funding availability      | General Fund and potential grant funding |
| <b>T-P.7 Evaluate Other Locations for Some Mobility Hub Features</b>                                                                                                                                                                                                                                                                                                                               | PW Trans            | MTC, AC Transit, and Bay Wheels | 6 to 8 years                                                                  | General Fund                             |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Lead Responsibility | Partners                              | Timeline                                                                                             | Potential Funding Source                                                        |
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| As development occurs in the Specific Plan Area and mobility needs change, evaluate needs for potential improvements in other Designated Nodes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                     |                                       |                                                                                                      |                                                                                 |
| <b>T-P.8 Lower Speed Limit on San Pablo Avenue</b><br><b>Evaluate Potential to Lower Speed Limit:</b> <ul style="list-style-type: none"> <li>Conduct an Engineering and Traffic Survey (E&amp;TS) to evaluate the feasibility of reducing speed limits along San Pablo Avenue. The study should identify the need and potential for traffic calming improvements including signal timing and physical improvements. E&amp;TS will not be done until Alameda CTC Safety Enhancement Project has been constructed and operated for at least 1 year.</li> <li>If the E&amp;TS supports lower speed limit, request Caltrans approval and prepare plans to implement improvements, such as signal timing changes and replace speed limit signs.</li> <li>If Caltrans approves, implement improvements.</li> <li>If Caltrans does not approve, advocate for State legislation to support the ability to lower the speed limit on urban state highways in a mixed-use environment with high transit service.</li> </ul> | PW Trans            | Caltrans, AC Transit, and Alameda CTC | Approximately 3 years (at least 12 months after Safety Enhancement project construction is complete) | General Fund and potential grant funding                                        |
| <b>T-P.9 Pedestrian Crossing Frequency</b><br>Monitor safety at the 5 long San Pablo Avenue blocks within the Specific Plan Area as part of collision data and other transportation safety studies that are performed. If safety monitoring indicates the need for mid-block crossings of San Pablo Avenue along any of these long blocks, prioritize improvements, design, and implementation based on safety and available funding.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PW Trans            | Caltrans, PLNG                        | On-going                                                                                             | General Fund, State Affordable Housing Sustainability Grants, Developer Funding |
| <b>T-P.10 Intersection Improvements</b> Monitor multimodal safety at intersections within the Specific Plan Area and identify improvements as needed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PW Trans            | Caltrans, PLNG                        | On-Going                                                                                             | General Fund, State Affordable Housing Sustainability Grants, Developer Funding |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Lead Responsibility | Partners                 | Timeline                                           | Potential Funding Source                                                          |
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| <p><b>T-P.11 Pedestrian Crossing Design</b> Monitor safety at the pedestrian crossings that have been identified for additional improvements.</p> <p><b>T-P.12 Minor Side-Street Intersection Improvements</b> Same actions as for <i>T-P.10 Intersection Improvements</i>, above.</p> <p>Prioritize, design, and implement improvements based on safety and available funding. Monitoring safety, updating prioritization, and types of improvements are addressed in <i>T-P.19 Monitor Changing Multimodal Needs and Conditions</i>.</p>                                                                                                             |                     |                          |                                                    | Include in other planned public improvement project                               |
| <p><b>Supportive Implementation Action:</b></p> <p>Verify that the Pedestrian Plan update reviews and prioritizes intersection improvements in the Specific Plan Area.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | PW Trans            |                          | 1 to 2 years for Pedestrian Plan update            | General Fund                                                                      |
| <p><b>T-P.13 Make Safety Improvements at Driveways</b></p> <p>Monitor development and other improvement projects with driveways on major roads and require that safety improvements are made as needed as part of proposed projects.</p>                                                                                                                                                                                                                                                                                                                                                                                                               | PW Trans and PLNG   | Caltrans                 | On-Going                                           | Funded by owner/developer                                                         |
| <p><b>T-P.14 Prioritizing Multimodal Safety Improvements</b></p> <ul style="list-style-type: none"> <li>As multimodal safety, access, and comfort issues are identified through on-going review of collision data and transportation safety studies are performed in the Specific Plan Area, continue to identify and prioritize multimodal safety improvements at these locations. For those with particular modal priorities, implement <i>T-P.15 Transit Improvements</i>, <i>T-P.16 Bicycle Improvements</i>, and <i>T-P.17 Pedestrian Improvements</i> below.</li> <li>Prioritize safety improvements identified in <b>Appendix D</b>.</li> </ul> | PW Trans            | Caltrans and Alameda CTC | On-going, address other improvements as identified | General fund (staff time)<br>State, Regional, or Alameda CTC CIP or grant funding |
| <p><b>Supportive Implementation Action:</b></p> <ul style="list-style-type: none"> <li>As part of the Vision Zero Action Plan update, maintain the designation of the full length of San Pablo Avenue as a high-injury street. The Pedestrian Plan update reflects this by</li> </ul>                                                                                                                                                                                                                                                                                                                                                                  | PW Trans            |                          | 1 to 2 years                                       | General Fund                                                                      |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Lead Responsibility | Partners                               | Timeline                                                                                                               | Potential Funding Source                                                                                                           |
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| designating the full length of San Pablo Avenue as a Prioritized High-Injury Street.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                     |                                        |                                                                                                                        |                                                                                                                                    |
| <b>T-P.15 Transit Improvements</b> <ul style="list-style-type: none"> <li>Continue to coordinate AC Transit service through on-going staff communication and the AC Transit/City of Berkeley Interagency Liaison Committee to best serve the needs of Specific Plan Area residents, businesses, workers, and visitors.</li> <li>Coordinate with partner agencies to set a timeline for achieving Transit First Policy 18, to complete the University Avenue transit corridor plan by 2029; or as possible given funding constraints. This could be done as part of a University Avenue Specific Plan process to update the 1996 University Avenue Area Plan.</li> <li>Verify citywide priorities between University Avenue and San Pablo Avenue through an update of Vision Zero Action Plan, as studying transit improvements is part of comprehensive multimodal access and safety planning efforts for both streets.</li> </ul> | PW Trans and PLNG   | AC Transit, BART, and Capitol Corridor | Service Coordination: on-going<br><br>University Avenue Transit Study: establish timing for study in next 1 to 3 years | General Funds from City and partner agencies<br><br>Coordinate with partner agencies for County, Regional, and State grant funding |



| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Lead Responsibility | Partners                 | Timeline                                                                                                         | Potential Funding Source                                                                                                                         |
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| <b>T-P.16 Bicycle Improvements</b> <ul style="list-style-type: none"> <li><b>Russell/Oregon Street and Heinz Street intersection improvements</b> – These intersections and the sections of San Pablo Avenue between them are being planned for bicycle and pedestrian improvements as part of the Alameda CTC Bus Land and Bike Lane Project. Given the current estimate of 2035 for completion of this project and the Bike Plan Updates identification of this project as a priority, the City will begin working with Caltrans and Alameda CTC to complete these improvements as an independent project.</li> <li>Prioritize bicycle improvements to best serve the needs of Specific Plan Area residents, businesses, workers, and visitors. Work to design and construct priority improvements.</li> <li>Also see, <i>T-P.6 Implement Mobility Hub Features in the University Avenue Node</i> implementation action for implementing bike corral at Addison Street bike boulevard intersection.</li> </ul> | PW Trans            | Caltrans and Alameda CTC | Russell and Heinz Street improvement to be determined<br><br>On-going, address other improvement-s as identified | Prioritization – General Fund<br><br>Planning, Design, and Construction – Measure FF<br><br>State, Regional, or Alameda CTC CIP or grant funding |
| <b>T-P.17 Pedestrian Improvements</b> <ul style="list-style-type: none"> <li>Prioritize pedestrian improvements to best serve the needs of Specific Plan Area residents, businesses, workers, and visitors. Work to design and construct priority improvements.</li> <li>As part of the Pedestrian Plan update, evaluate the streets in the Specific Plan Area for potential designation as Prioritized High-Injury Network, and evaluate prioritization of pedestrian improvements in the Specific Plan Area as well as those providing access to the Specific Plan Area.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                            | PW Trans            | Caltrans and Alameda CTC | On-going, address other improvement-s as identified<br><br>1 to 2 years for Pedestrian Plan Update               | Prioritization – General Fund<br><br>Planning, Design, and Construction – Measure FF<br><br>State, Regional, or Alameda CTC CIP or grant funding |
| <b>T-P.18 Prioritize Connection with Surrounding Neighborhoods and Districts</b> <p>Review and update priorities for future residents’ needs for multimodal connections with the surrounding community and take these priorities into consideration in future updates to the Berkeley Pedestrian Plan, the Bicycle Plan, and the Transit First Policy Implementation Plan.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | PW Trans            | Partner agencies         | Per timing of updates to other modal plans                                                                       | General fund<br><br>Grants                                                                                                                       |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Lead Responsibility | Partners                                                      | Timeline                                                                                                              | Potential Funding Source                                                            |
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| <b>T-P.19 Monitor Changing Multimodal Needs and Conditions</b> <ul style="list-style-type: none"> <li>Coordinate with citywide priorities by assessing and prioritizing multimodal and pedestrian-focused improvements in the Specific Plan Area at a citywide policy level through the updates to the Vision Zero Plan and Pedestrian Plan.</li> <li>Work with partner agencies to <b>undertake periodic safety assessments and assess multimodal needs within the Specific Plan Area</b> and the safety record of streets in the Specific Plan Area. This could include a review and update of priorities and needed improvements. Use this updated list to guide future implementation, reflecting current conditions, safety need and community input.</li> </ul>                          | PW Trans            | Partner agencies                                              | 1 to 2 years for Plan Update coordination<br><br>Periodically as needed<br><br>Coordinate with updates to modal plans | General Fund (staff time)                                                           |
| <b>Public Realm</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                     |                                                               |                                                                                                                       |                                                                                     |
| <b>PR-P.1 Sidewalk Zones</b> <p>Implement the Specific Plan's sidewalk zone standards through public improvement projects and private improvements including sidewalk widening and private improvements in the public right of way associated with development projects.</p> <p>Overtime, as public improvements are made to San Pablo Avenue and new development occurs, projects and planning approvals will reestablish the public right of way where adjacent landscape or other elements have reduced it.</p> <p>Related standards to be used in implementation of this policy include:</p> <ul style="list-style-type: none"> <li><i>LU-S.1 Sidewalk Expansion Incentive</i></li> <li><i>PR-S.1 Sidewalk Zone Standards</i></li> <li><i>PR-S.2 Reestablish Sidewalk Width</i></li> </ul> | PW                  | PLNG<br>Partner agencies, private development, and businesses | On-going                                                                                                              | Funding through other public and private projects<br><br>Permit Service Center fund |
| <b>PR-P.2 Sidewalk Incentive</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | PW                  | PLNG<br>Developers                                            | On-going                                                                                                              | Funding through other public and private projects                                   |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Lead Responsibility                              | Partners                                  | Timeline     | Potential Funding Source                                                                                                                                                      |
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| <p>Review development projects to ensure that the required public sidewalk widening are provided and verify proper use of incentive credit for reduction of required Private Usable Open Space.</p> <p>Related standards include:</p> <ul style="list-style-type: none"> <li>• <i>LU-S.1 Sidewalk Expansion Incentive</i></li> <li>• <i>PR-S.1 Sidewalk Zone Standards</i></li> <li>• <i>PR-S.2 Reestablish Sidewalk Width</i></li> </ul>                                                                                                                                                                                                                                                                                               |                                                  |                                           |              |                                                                                                                                                                               |
| <p><b>PR-P.3 Improve Street Lighting for the Safety and Comfort of All Users</b></p> <p>Integrate the design recommendations in this policy into the City's draft Streetlight Comprehensive Plan and in the interim use the design recommendations to guide street lighting improvements that are made within the Specific Plan Area.</p>                                                                                                                                                                                                                                                                                                                                                                                               | PW                                               | Partner agencies                          | 1 to 2 years | General Fund (staff time)<br>Permit Service Center fund                                                                                                                       |
| <p><b>PR-P.4 Enhance Street Tree Health and Expand Tree Canopy</b></p> <p>The City and developers/property owners will plant new trees and/or improve conditions for existing trees as part of public improvements made to streets and sidewalks through public projects and as required for new development and major remodeling projects. New tree plantings and improvements will be made in compliance with the following Specific Plan standards:</p> <ul style="list-style-type: none"> <li>• <i>PR-S.3 San Pablo Avenue Tree Standards</i></li> <li>• <i>PR-S.4 University Avenue Tree Standards</i></li> <li>• <i>PR-S.5 Other Side-Street Trees</i></li> <li>• <i>PR-S.6 Landscaping in Tree Wells and Planters</i></li> </ul> | PW<br>Developers or property owners              | PRW and PLNG, review planned improvements | On-going     | General Fund (staff time)<br>Potential new Parks and Recreation Fees<br>Grants or General Fund for City improvements<br>Developer or property owners for private improvements |
| <p><b>PR-P.5 Enhance and Expand Other Landscaping</b></p> <p>The City and developers/property owners will plant other landscaping as part of public improvements made to streets and sidewalks through public projects, as required for new development and major remodeling projects, and in tandem with other improvements that property owners, businesses and residents may make along sidewalks adjacent to their</p>                                                                                                                                                                                                                                                                                                              | PW<br>Developers, property owners, or businesses | PRW, review planned improvements          | On-going     | General Fund (staff time)<br>Potential new Parks and Recreation Fees<br>Grants or General Fund for City improvements                                                          |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Lead Responsibility     | Partners                                  | Timeline                                                                                              | Potential Funding Source                                                            |
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| <p>properties. New landscape plantings and improvements will be made in compliance with the following Specific Plan policies and standards:</p> <ul style="list-style-type: none"> <li>PR-S.6 Landscaping in Tree Wells and Planters</li> <li>PR-P.6 Long-term Landscaped Median Design</li> <li>PR-P.7 Near-term Opportunities for Re-landscaping Medians</li> <li>PR-P.8 Green Infrastructure in Public Projects</li> <li>PR-P.9 Green Infrastructure in Private Development</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |                                           |                                                                                                       | Developers, property owners, businesses, or residents for private improvements      |
| <p><b>Street Furniture</b></p> <p>The City and developers/property owners will install street furniture as part of public improvements made to streets and sidewalks through public projects, as required for new development and major remodeling projects, and in tandem with other improvements that property owners, businesses and residents may make along sidewalks adjacent to their properties. New street furniture installations will be made in compliance with the following Specific Plan policies and standards:</p> <ul style="list-style-type: none"> <li>PR-S.7 Public Seating</li> <li>PR-S.8 Trash and Recycling Receptacles</li> <li>PR-S.9 Bicycle Racks</li> <li>PR-S.10 Raised Planters</li> <li>PR-P.11 Other Street Furnishings</li> </ul> <p>Also see, T-P.6 Implement Mobility Hub Features in the University Avenue Node implementation action for implementing bike corral at Addison Street bike boulevard intersection.</p> | PW and PRW              | Developers, property owners or businesses | On-going                                                                                              | <p>General Fund</p> <p>Grants</p> <p>Developers, property owners, or businesses</p> |
| <p><b>Bus Stop Improvements</b></p> <p>The City and AC Transit will work together to evaluate and improve bus stops in the Specific Plan Area in support of the following Specific Plan policies:</p> <ul style="list-style-type: none"> <li>PR-P.10 Continue to Improve Bus Stops</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | PW Trans and AC Transit | Caltrans                                  | Following completion of Alameda CTC Safety Enhancement Project and on a 5-year evaluation cycle after | Grants and Measure FF                                                               |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Lead Responsibility                        | Partners                                                | Timeline | Potential Funding Source                                                                                     |
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| <b>PR-P.6 Long-term Landscaped Median Design</b><br><br>The City will provide long-term guidance for median landscape design and planting based on the recommendations in this policy and related Specific Plan standards and policies, including: <ul style="list-style-type: none"> <li>• <i>PR-S.3 San Pablo Avenue Tree Standards</i></li> <li>• <i>PR-S.4 University Avenue Tree Standards</i></li> </ul>                                                                                    | PW and PRW                                 |                                                         | On-going | General Fund (staff time)<br>Grants                                                                          |
| <b>PR-P.7 Near-term Opportunities for Re-landscaping Medians</b><br><br>As intersection and other improvements are made to San Pablo Avenue associated median improvements the design of the improvements will implement Specific Plan policies and standards, including: <ul style="list-style-type: none"> <li>• <i>PR-S.3 San Pablo Avenue Tree Standards</i></li> <li>• <i>PR-S.4 University Avenue Tree Standards</i></li> <li>• <i>PR-P.6 Long-term Landscaped Median Design</i></li> </ul> | PW                                         | PRW, review planned improvements                        | On-going | General Fund (staff time)<br>Grants or General Fund for City improvements                                    |
| <b>PR-P.8 Green Infrastructure in Public Projects</b><br><br>Implement green infrastructure improvements as required by the current MRP and/or the Caltrans NPDES permit as applicable to the public improvement project and in consideration of the guidance in this policy.                                                                                                                                                                                                                     | PW and Caltrans                            | PRW and PW, review planned improvements                 | On-going | General Fund (staff time)                                                                                    |
| <b>PR-P.9 Green Infrastructure in Private Development</b><br><br>The City and developers/property owners will coordinate implementation of green infrastructure in the public realm as part of private project investments.                                                                                                                                                                                                                                                                       | Developers, property owners, or businesses | PRW, PW, and PLNG review planned improvements           | On-going | Developers, property owners, businesses, or residents for private improvements<br>Permit Service Center fund |
| <b>PR-P.10 Continue to Improve Bus Stops</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                      | PW Trans                                   | Alameda CTC<br>Caltrans<br>AC Transit<br>City of Albany | On-going | General Fund (staff time) for partner agency coordination and discussions                                    |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                            | Lead Responsibility                      | Partners                                     | Timeline                   | Potential Funding Source                                                                                                                         |
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| The City will coordinate with Alameda CTC, AC Transit, and Caltrans to identify funding for bus stop improvements independent from the Alameda CTC San Pablo Avenue Projects.                                                                                                                                                                                                                                                                                 |                                          |                                              |                            | Grants                                                                                                                                           |
| <b>PR-P.11 Other Street Furnishings</b><br>Additional public street furnishings, such as public restrooms or information kiosks, will be installed in the right of way where an identified need exists. As these needs are determined, it may be appropriate to identify Specific Plan Area standards that are coordinated with the street furnishing standards in the Specific Plan.                                                                         | PW and PRW                               | Caltrans<br>AC Transit                       | As needed                  | General Fund (staff time)<br><br>Budgets of specific projects implementing other street furnishings                                              |
| <b>PR-P.12 Facilitate Wayfinding and Placemaking Programs</b><br>Identify opportunities to implement wayfinding and placemaking as part of the implementation of the following Economic Development policies: <ul style="list-style-type: none"> <li>• <i>ED-P.4 Support and Expand Existing Business Clusters</i></li> <li>• <i>ED-P.5 Study Feasibility of Forming a Business Improvement District (BID) or Community Benefit District (CBD)</i></li> </ul> | OED                                      | PW and Caltrans<br><br>Potential future BID  | On-going and up to 5 years | General Fund (staff time)<br><br>Support from local businesses<br><br>Grants                                                                     |
| <b>PR-P.13 Facilitate Installation of Public Art that Benefits the Public Realm</b><br>OED/Civic Arts, Public Works, and Parks, Recreation and Waterfront staff are to review feasibility of integrating public art into public improvement projects within the Specific Plan Area as those projects receive funding for conceptual design, environmental documentation, and final design.                                                                    | OED/Civic Arts and Civic Arts Commission | PW and PRW                                   | On-going                   | General Fund (staff time)<br><br>Grants<br><br>Donations for design and installation of art                                                      |
| <b>PR-P.14 Design for People of All Ages and Abilities</b><br>Public improvements in the Specific Plan Area will be design, implemented, maintained, and operated through the use of a universal design approach that meets and exceeds compliancy with the Federal Public Right-of-Way Accessibility Guidelines (PROWAG) and Americans                                                                                                                       | PW and PRW                               | Partner agencies<br><br>Potential future BID | On-going                   | Planning, Design, and Construction – General Fund, Measure FF, and other local, regional, and state funding; and private funding as appropriate. |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Lead Responsibility   | Partners                               | Timeline                                        | Potential Funding Source                                                       |
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| with Disabilities Act (ADA) regulations by following the guidance of this policy and other best practices of universal design.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |                                        |                                                 | Maintenance and operations – General Fund and private funding as appropriate.  |
| <b>PR-P.15 Create Side-Street Plazas</b><br><br>Implementation of this policy will utilize a phased process:<br><br><b>In the near-term</b> , City staff will reach out to non-profits, businesses, neighborhood groups, and other community organizations to identify opportunities for quick-build plazas. If community partners are identified and commit to supporting implementation, funding can be pursued, improvements can be designed and implemented, along with an assessment to verify viability of full or partial street access.<br><br>If community partners are not identified, the City may choose to pursue near-term quick-build plazas as a public project if funding is available.<br><br>The City will also coordinate with other City efforts (see implementation actions of <i>T-P.2 Future Transportation Study Needs for San Pablo Avenue</i> ) and other agency transportation improvement projects to include them as priority improvement projects. | PW, OED, BFD, and PRW | Community partners and Caltrans        | Up to 3 years                                   | General Fund (staff time)<br>Community partner's funds<br>Grants               |
| <b>Long-term</b> , City staff and community partners, including potential future BID(s) can pursue design, fundraising, and implementation of permanent side-street plazas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Community partners    | PW, OED, PRW, Alameda CTC and Caltrans | 3 to 6 years and after near-term implementation | Community partner's funds<br>Potential new Parks and Recreation Fees<br>Grants |
| <b>In the near-term and long-term</b> , the City will pursue opportunities to implement side-street plazas by funding and undertaking the design and construction of permanent side-street plazas as standalone projects or in conjunction with adjacent public improvement projects. The Berkeley Fire Department will be included as principal and equal partner in the selection and design of locations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | BFD, PW and PRW       | Alameda CTC and Caltrans               | On-going                                        | General Fund (staff time)<br>Grants                                            |



| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Lead Responsibility        | Partners                    | Timeline                                                              | Potential Funding Source                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| New development projects may design, build, and provide activation for side-street plazas adjacent to their projects.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Developer                  | PLNG, PW, PRW, and Caltrans | As proposed                                                           | Developers                                                                                                             |
| <b>PR-P.16 Support Use and Creation of Parklets</b><br><br>For the first 3 years of Specific Plan implementation, waive annual Outdoor Commerce Use Fee for parklets using free parking spaces and reduce paid parking fee by 75% for parklets using paid parking spaces.<br><br>After 3 years of implementation, review effectiveness of fee reductions and revise as needed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | PW                         | OED<br>PLNG                 | Up to 3 years; afterwards, review and revise fee reductions as needed | Businesses, property owners, Parking Meter Fund                                                                        |
| <b>PR-P.17 Design and Use of Curb Extensions</b><br><br>When a developer or property owner receives approval for construction and use of a curb extension, waive annual Sidewalk Seating Permit fees for up to 10 years from the first commercial use of the increased sidewalk space.<br><br>After 3 years of implementation, review effectiveness of fee reductions and revise as needed.                                                                                                                                                                                                                                                                                                                                                                                                                                                         | PW                         | OED                         | Up to 3 years; afterwards, review and revise fee reductions as needed | Businesses, Permit Service Center Fund                                                                                 |
| <b>PR-P.18 Commercial and Other Private Use of Sidewalks and the Public Realm</b><br><br><b>Short Term Use and Activation</b> – In the near-term, OED staff should facilitate community, business, and property owner-supported activation of the public realm by informing potential partners about possibilities and supporting them in getting permit approvals for activation and use of public space.<br><br>When a developer or property owner receives approval to expand the sidewalk and applies for commercial use of the sidewalk, waive annual Outdoor Commerce fee for up to 10 years from the first commercial use of the increased sidewalk space.<br><br>After 3 years of implementation, review effectiveness of fee reductions encouraging active commercial use of the sidewalk in the Specific Plan Area, and revise as needed. | OED and Community partners | PW, PRW, Caltrans           | Up to 5 years                                                         | OED (initial staff time)<br><br>Potential new Parks and Recreation Fees<br><br>Community partner's funds<br><br>Grants |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Lead Responsibility                  | Partners           | Timeline                          | Potential Funding Source                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------|-----------------------------------|------------------------------------------------|
| <b>Short Term or On-going Use and Activation</b> – Potential BIDs or property owners/managers who have implemented side-street plazas, POPOs, or provided sidewalk widening can propose and implement activations that receive permit approval.                                                                                                                                                                                                                                                                                                                                                                                                                                      | BIDs or property owners and managers | PW, PR&W, Caltrans | As proposed                       | BID or property owner/manager funds            |
| <b>PR-P.19 Purchase Underutilized Small Properties for Public Open Space</b><br><br>Assess potential for funding the cost of property acquisition.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | PRW                                  | PLNG               | Up to 3 years                     | General Fund (staff time)                      |
| Following assessment, if funding can be identified, move forward to purchase, improve, and maintain new public open space.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | PRW                                  | —                  | 3 years after assessment complete | Potential new Parks and Recreation Fees Grants |
| <b>Supportive Action – Nexus Study to Support Citywide Park and Open Space Funding</b><br>Parks, Recreation and Waterfront Department staff should undertake a citywide nexus study that assesses the need for new parks and public open spaces within the Specific Plan Area and evaluates the legal and financial basis for establishing a development impact fee and/or adjusting the local property tax rate to support property acquisition, development and maintenance of public park space within the Specific Plan Area and maintenance of parks elsewhere in the city.<br><br>Related Policy: <i>PR-P.18 Purchase Underutilized Small Properties for Public Open Space</i> | PRW                                  | PW<br>PLNG         | Up to 3 years                     | General Fund                                   |

| Action Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Lead Responsibility | Partners                                               | Timeline                                              | Potential Funding Source                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>PR-P.20 Privately Owned Public Open Spaces</b><br>Implement supportive land use policies and standards. <ul style="list-style-type: none"> <li><i>LU-S.2 Privately-Owned Public Open Space within Designated Nodes Incentive</i></li> </ul>                                                                                                                                                                                                                                                                              | PLNG and PRW        | Developers                                             | On-going                                              | Permit fees for review and approval<br>General Fund for ongoing review of operations and maintenance |
| <b>Utilities and Fire Services</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                     |                                                        |                                                       |                                                                                                      |
| Implementation of infrastructure services and improvements will be achieved through current and on-going policies, programs, and actions.                                                                                                                                                                                                                                                                                                                                                                                   | PW                  | PLNG (Development Review)<br>Utility provider partners | On-going                                              | Utility and City Development Fees                                                                    |
| Conduct periodic analysis of how increased population, density, and building heights change the community's risk profile, Fire Department deployment, staffing, facilities, and equipment. The review would include analysis of Standards of Coverage and Community Risk Assessment, updated San Pablo Fire/EMS Deployment Impact Analyses, and increased demand for Fire Life Safety Plans Examiners and Fire Prevention Inspectors, for review of proposed plans new construction, and on-going routine fire inspections. | BFD                 | PLNG                                                   | 3 years after adoption, and every 5 years thereafter. | General Fund                                                                                         |

# Appendix A:

# Key Existing Conditions

## San Pablo Avenue Specific Plan

- Final Draft -

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## Project Team

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## Introduction

This report describes the location of the Specific Plan Area and surrounding Study Area, and the key existing conditions in the area that will inform the public planning process and development of the Specific Plan's policies, standards, and implementation actions.

The desired outcomes of the San Pablo Avenue Specific Plan are to:

- Identify the community's vision for the future of the area.
- Provide a framework for that offers opportunities for living, working, and taking part in community life.
- Defines policies, standards, and implementation actions for achieving the community's vision.
- Prioritizes equity, promotes inclusivity, and strives to eliminate disparities

This document includes the following sections:

1. **San Pablo Specific Plan Area and Study Area** defines the Specific Plan Area, and the Study Area surrounding the Plan Area, and the methodology used in defining these planning areas.
2. **Community Demographics and Housing Characteristics** presents assessments of recent population change and shifts in racial and ethnic diversity. It includes an overview of historic and current policies related to equity, and an assessment of household incomes, tenancy, and housing cost with the Study Area.
3. **Infrastructure Assessment** provides information on the relationship between expected growth in the Specific Plan Area and the capacity of utilities and other infrastructure to serve these expanded needs.
4. **Mobility Conditions, Projects, and Planning** describes existing traffic conditions, transit services, recent transportation safety conditions, and related plans and policies, including transportation improvement projects planned between 2025 and 2028.
5. **Land Use Planning Policies and Policy Gaps** provides an overview of existing land use, policies and standards, along San Pablo Avenue, State legislation and regional policies that will influence the development of the Specific Plan, an estimate of the housing capacity of existing policies, and a discussion of the policy gaps that the Specific Plan can address.
6. **Affordable Housing Policies and Potential Production** describes recent and the potential production of affordable housing in the Specific Plan Area given existing State and local policies, including Berkeley's affordable housing preference policy.
7. **Commercial Displacement Risk** provides an assessment of existing commercial conditions along San Pablo Avenue focusing on locally owned businesses. The assessment highlights the types of businesses that have a risk of displacement and the factors that influence the risk of displacement.
8. **Public Realm Assessment** describes the conditions that shape the public realm along San Pablo Avenue including streetscape, sidewalk conditions, and building and site frontages along the street. Safety conditions and people's perception of safety are discussed. An assessment of existing community life and the factors that shape the potential for community life along San Pablo Avenue is also included.
9. **Resilience and Climate Adaption Conditions and Plans** describes the elements and policies of the Local Hazard Mitigation Plan and the Climate Action Plan that are related to the Specific Plan Area. Relevant General Plan Open Space and Recreation policies, a discussion of San Pablo Avenue's urban tree canopy, and potential for the Specific Plan Area to be a designated Transit-Oriented Community are also provided.

## San Pablo Specific Plan Area and Study Area

**The San Pablo Specific Plan Area** is informed by the existing Priority Development Area (PDA) boundary and is comprised of individual parcels for which the Plan's policies, standards, and implementation actions will apply. The City of Berkeley identified and nominated the PDA boundary along San Pablo Avenue during the formation of Plan Bay Area 2050 (2021) and in response to regional land use and transportation planning, and associated planning and funding opportunities.<sup>1</sup> These parcels primarily front onto San Pablo Avenue and are zoned **West Berkeley Commercial (C-W)**. In addition, adjacent parcels with the C-W zoning that are on side streets to San Pablo Avenue or in designated nodes are also included (see further discussion of nodes in the Land Use section). Along University Avenue, the majority of properties are zoned C-W and **University Commercial District (C-U)**, and these properties are included as well. Some parcels are “split zoned” between C-W and another zoning designation See **Figure 1**.

**The Study Area** includes the neighborhoods and employment areas that are proximate to and have a strong relationship with the uses along San Pablo Avenue. The Study Area extends from the I-80 freeway in the west to Sacramento Street in the east and from Albany in the north to Emeryville and Oakland in the south. See **Figure 1**. The Study Area is included in select existing conditions assessments to gain an understanding of the social and economic relationships between San Pablo Avenue and West Berkeley, to identify historic and culturally significant<sup>2</sup> locations in proximity to San Pablo Avenue, and to identify parks, open spaces, and other community assets that are used by people living and working in the Specific Plan Area.

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<sup>1</sup> Information regarding Priority Development Areas (PDAs) can be found on the Metropolitan Transportation Commission's <https://mtc.ca.gov/planning/land-use/priority-development-areas-pdas>

<sup>2</sup> For this analysis, Cultural Significance means that the business advances art and culture; meets a specific need for a particular group; or may hold a special meaning for a cultural group.



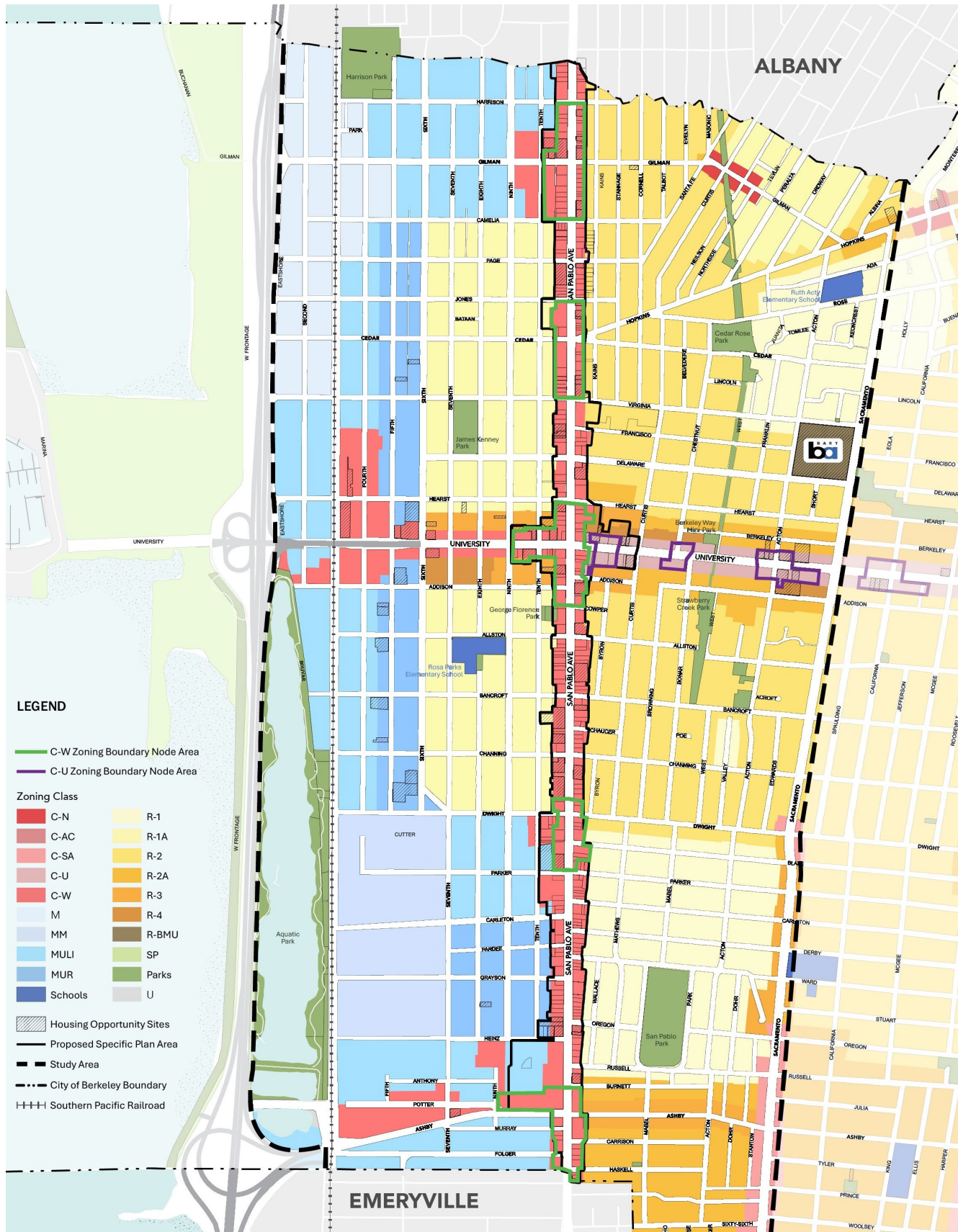


Figure 1. Proposed Specific Plan Area and Study Area. Source: City of Berkeley, 2023. Metropolitan Transportation Commission (MTC), 2023.

# Community Demographic and Housing Characteristics

## Population Change

Berkeley's population grew by 9% from 2010 to 2020, to 122,580 people. In contrast, the Study Area grew by 16% in that time, to a population of 26,360 people, 22% of Berkeley's total population.<sup>3</sup>

The extent of population growth or decline varied in different parts of the city during this time. The western-most census tract in the city, portions of Downtown, and Southside experienced the largest population growth, increasing by 2,404, 1,019, and 2,877 people, respectively. The population of the western-most census tract in Berkeley, and in the Study Area, increased by 137%. See **Figure 2**. Other census tracts in the Study Area experienced population growth that was similar to other parts of the city.

Between 2010-2020, the number of housing units in Berkeley increased by 6% (2,877 units). New housing was primarily developed along major corridors, like San Pablo, University, Shattuck, Telegraph and Dwight Way. See **Figure 3**. The increased number of units in West Berkeley correlates with the population growth. The number of units in West Berkeley nearly doubled in the last decade, accounting for about one-fifth of the total housing growth in Berkeley.<sup>4</sup>

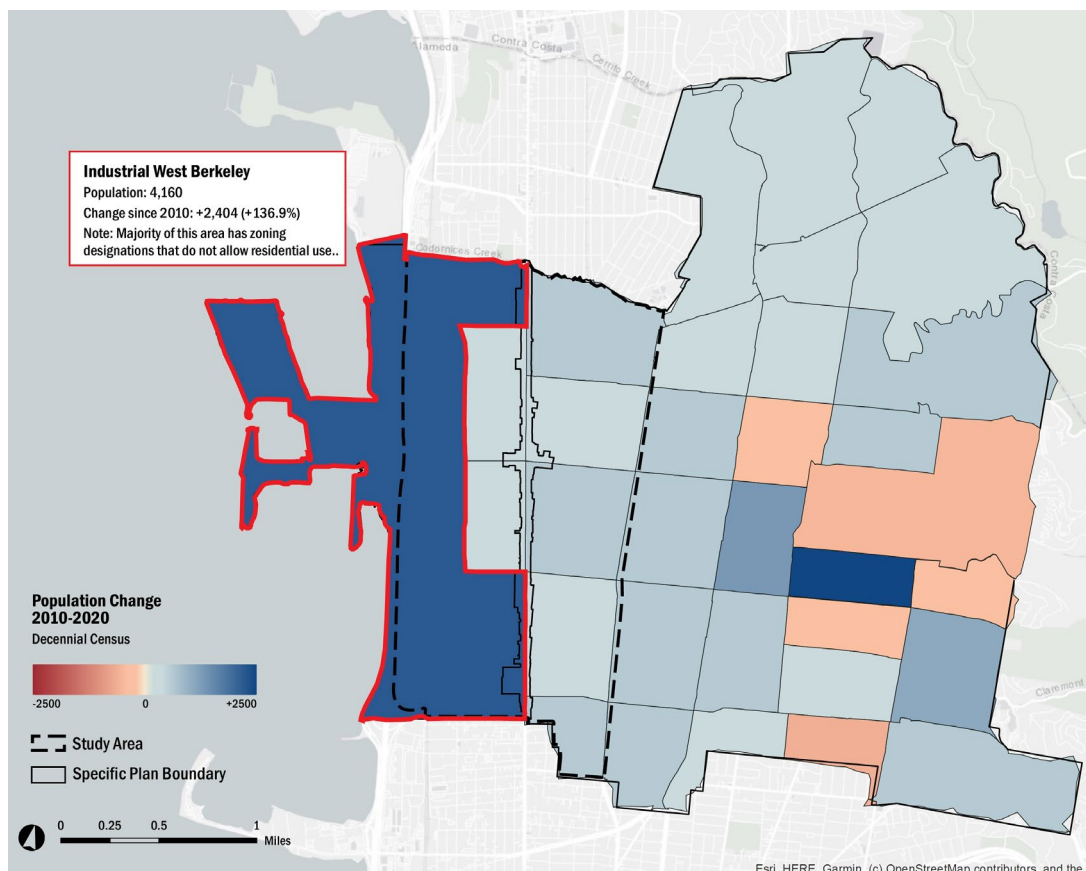


Figure 2. Population Change from 2010 to 2020. Source: United States Census Bureau. Decennial Census. 2010, 2020, Table P1.

<sup>3</sup> United States Census Bureau. Decennial Census. 2010-2020, Table P1. [Online] <https://data.census.gov/>.

<sup>4</sup> Markovich, Ally. "A Changing Berkeley: 6 Maps Show How the Past Decade Has Remade the City." *Berkeleyside*, 18 Oct. 2022. <http://www.berkeleyside.org/2022/07/17/berkeley-population-demographics-housing-census-2020-maps>

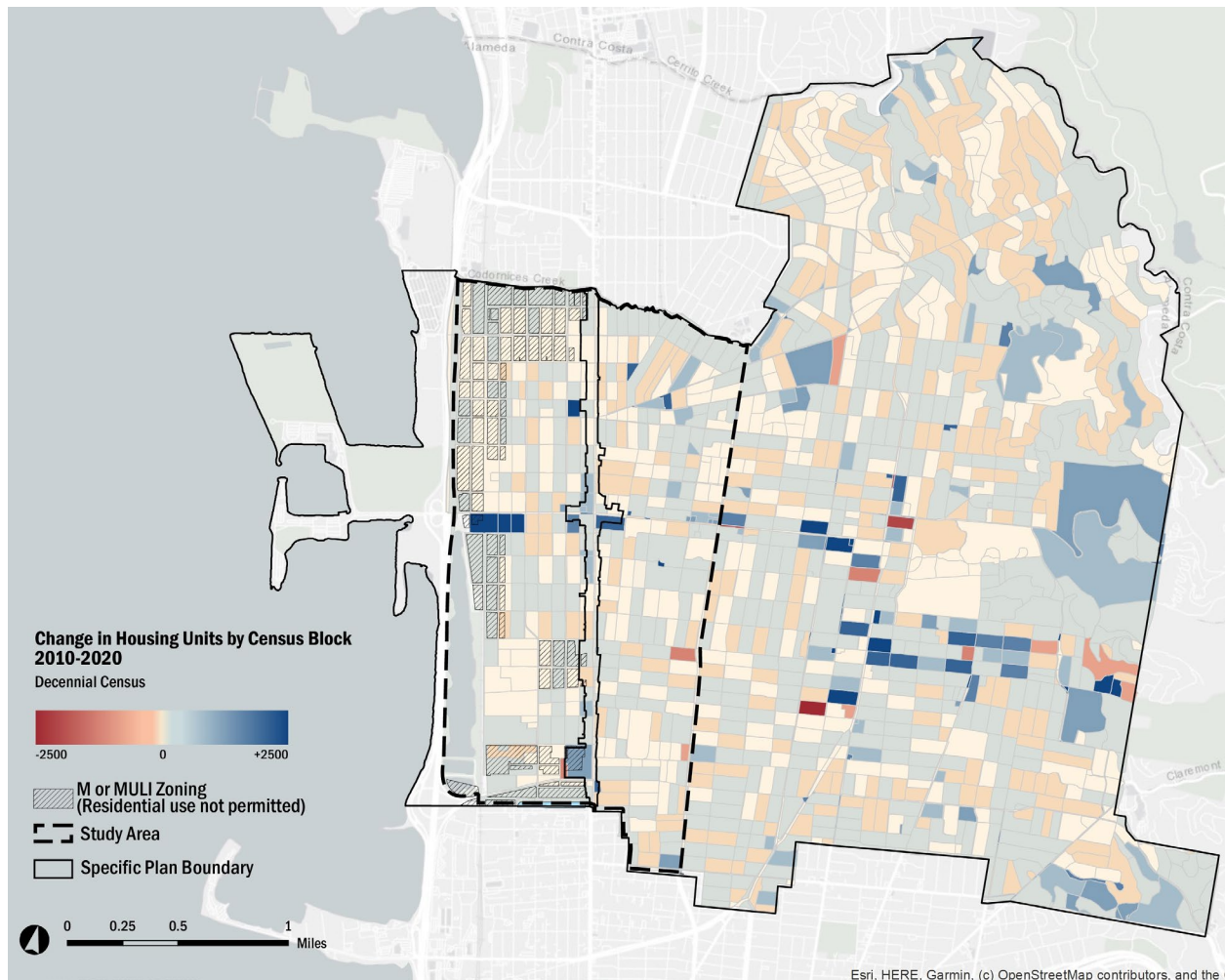


Figure 3. Change in Housing Units by Census Block, 2010 to 2020. Source: United States Census Bureau. Decennial Census. 2010, 2020, Table H1.



## Racial and Ethnic Diversity and Equity

**Racial and Ethnic Population Change:** The White population increased by over 3,900 (+45%) from 2000 to 2020. In the same time span, the Black population decreased by over 2,600 (-39%), while the population increase of Hispanic/ Latinx, Asians/ API, and other races was moderate.<sup>5</sup> See **Figure 4**. Historical data shows citywide Black population decreased from its peak of 27,421 (23.5% of total population) in 1970 to 9,812 (8% of total population) in 2020. See **Figure 5**.

**Changes in Racial and Ethnic Diversity:** From 2000 to 2020, the Diversity Index<sup>6</sup> for the Study Area decreased slightly from 72.8% to 71.6% while the city's Diversity Index increased from 63.9% to 67.6%. In comparison, the Alameda County's Diversity Index was 74.6% in 2020.<sup>7</sup>

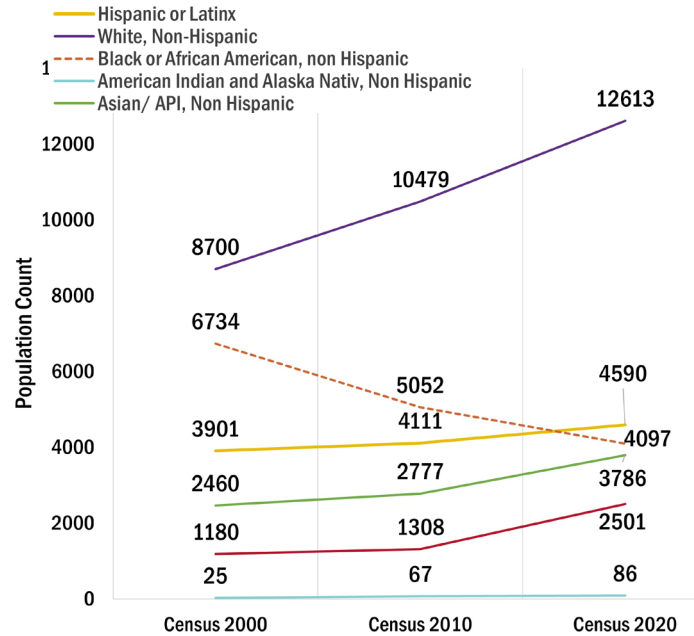


Figure 4. Population Shift by Race and Ethnicity in Study Boundary. Source: United States Census Bureau. Decennial Census. 2010, Table P7. 2020, Table P1.

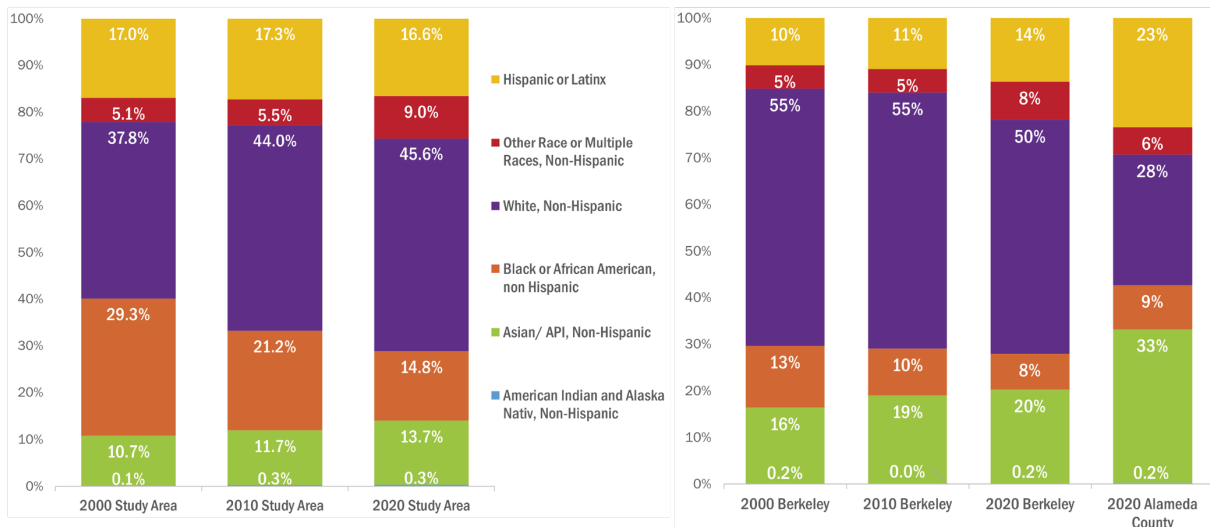


Figure 5. Comparison of Racial Composition in Study Area, Berkeley, and Alameda County. Source: United States Census Bureau. Decennial Census. 2010, Table P7. 2020, Table P1.

**Historic Redlining and Equity:** In 1933, as part of the federal program and policies, the Home Owners' Loan Corporation (HOLC) was created to refinance home mortgages and expand home buying opportunities. HOLC is the originator of the color-coded mortgage security risk practice known as redlining and redlined the majority of the Specific Plan Area and Study Area. See **Figure 6**. This discriminatory practice withheld significant investment to areas deemed "D (Hazardous)," because of adjacent industrial areas, older buildings, and the presence of "undesirable populations" (e.g., Jewish, Asian, Mexican, and Black families). Due to this redlining practice, marginalized minority

<sup>5</sup> United States Census Bureau. Decennial Census. 2000, Table 7. 2010-2020 Table 9. [Online] <https://data.census.gov/>.

<sup>6</sup> A measure used by the U.S. Census Bureau that calculates the probability of two random people, picked from a population, are from different Racial and Ethnic Groups. The higher the number, the more diverse a population is.

<sup>7</sup> United States Census Bureau. Decennial Census. 2000, Table 7. 2010-2020 Table 9. [Online] <https://data.census.gov/>.

communities were restricted to south and west Berkeley. Although effectively eliminated by 1966 by the Supreme Court, impacts are still seen today as areas that were redlined are often found to be more prone to racial and economic segregation, economic inequality, risk of displacement, and associated conditions.

As a result of being historically underserved, the Study area is part of the Metropolitan Transportation Commission (MTC)'s Equity Priority Communities (EPCs)<sup>8</sup>. The EPC designation helps provide funding and assistance to census tracts that have a significant concentration of underserved populations, such as households with low incomes, limited English proficiency, zero-vehicle households, seniors 75 years and over, people with disability, single-parent families, and severely rent-burdened households, and people of color. EPC designations are used to make decisions about:

- Planning, including Plan Bay Area, the Transportation Improvement Program and equity analyses;
- Investment of funds, including the Active Transportation Program, OBAG Grants, Community-Based Transportation Planning Grants and the Lifeline Transportation Program; and
- Engagement with the community<sup>9</sup>

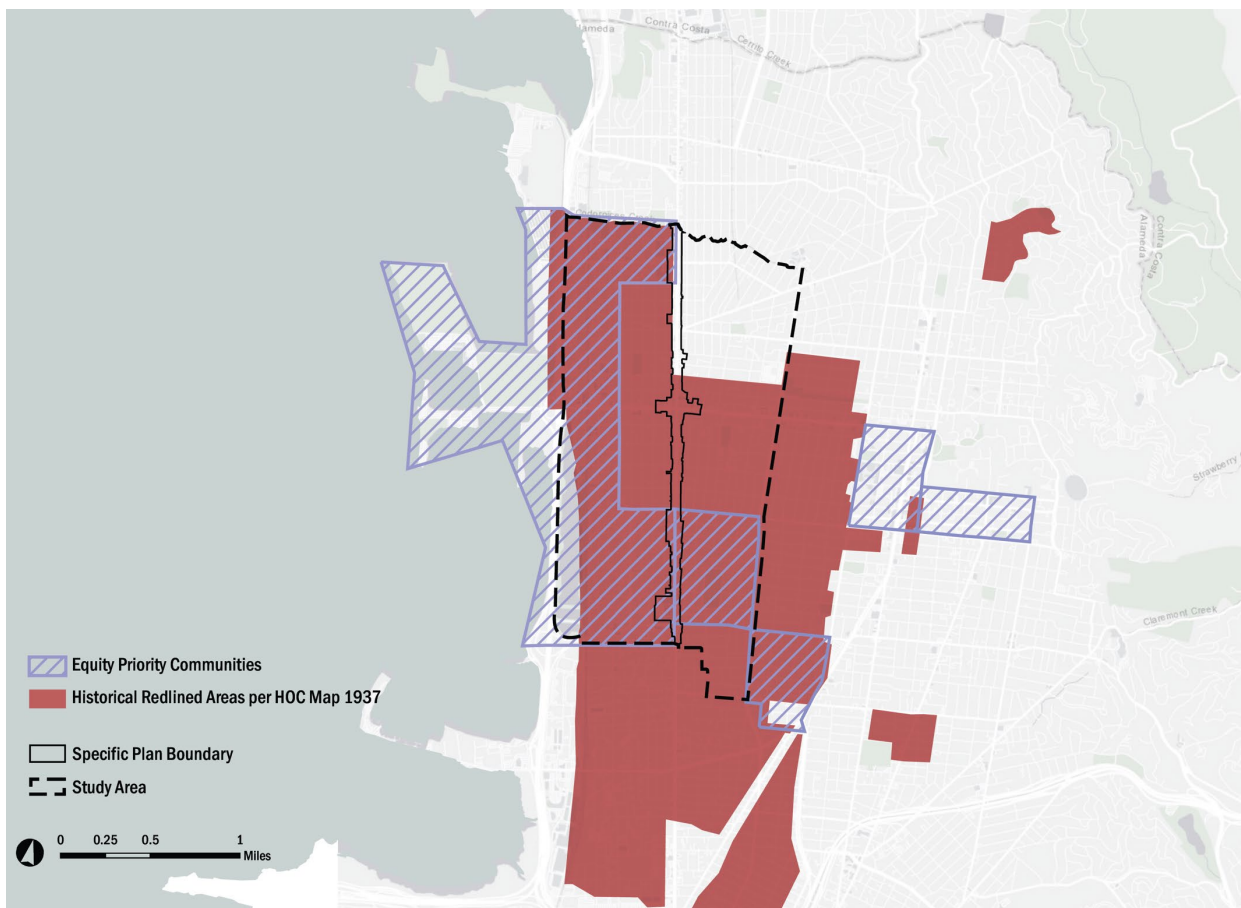


Figure 6. Equity Priority Communities and Historical Redlined Areas. Robert K. Nelson and Edward L. Ayers, *Mapping Redlining, 2023*. Metropolitan Transportation Commission (MTC), *Equity Priority Communities*, 2021.

<sup>8</sup> Equity Priority Communities (EPC) is a term defined by the Metropolitan Transportation Commission (MTC) that identifies Bay Area communities that are or have historically been underserved. For more information, go to: <https://mtc.ca.gov/planning/transportation/access-equity-mobility/equity-priority-communities>.

<sup>9</sup> More about EPC priorities in funding programs can be found on the MTC weblink above.

## Household and Housing Conditions

### Household Income Distribution

The neighborhoods in the Study Area are a mix of high- and low-income households. To better visualize the location of lower-income households, **Figure 7** shows the household income range of the lowest twenty percent in each census tract in Berkeley. Neighborhoods to the south and east of San Pablo Avenue have the lowest income quintiles ranging from \$15,000 - \$45,000. The tracts north of University Avenue display higher quintile ranges, with lowest quintiles over \$30,000.

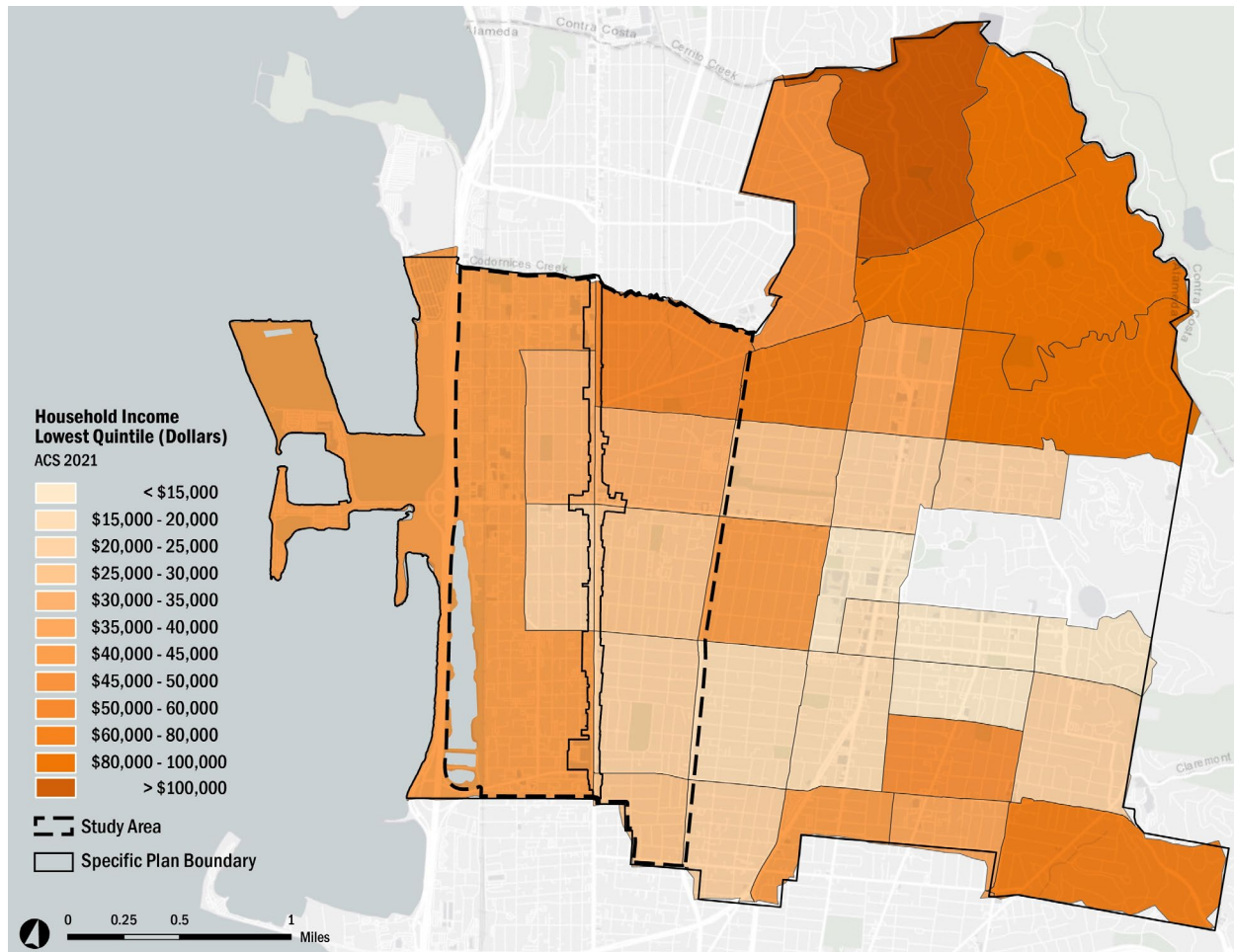


Figure 7. Household Income for Lowest Quintile. Source: United States Census Bureau. ACS. 2021, Table B19080.

## Household Tenancy

Citywide Berkeley had more renter-occupied units (54%) than owner-occupied (46%) in 2021. The Study Area, with about 10,781 units, has a higher share of renters (55.3%) relative to owners (44.7%) compared to the Citywide share.<sup>10</sup> See **Figure 8**.

## Overcrowded Housing

U.S. Census Bureau defines overcrowded housing as units with 1.01 or more persons per room, excluding bathrooms and kitchens.<sup>11</sup> If the occupancy surpasses 1.5 persons per room, a unit is classified as severely overcrowded. In 2021, the Study Area contained 319 occupied units that were overcrowded. This accounts for 30% of overcrowded housing citywide, while only 17% of the city's total households and 22% of the city's population live in the Study Area.<sup>12</sup> In the Study Area, significantly more renter-occupied households (237) were overcrowded than owner-occupied (82 households).

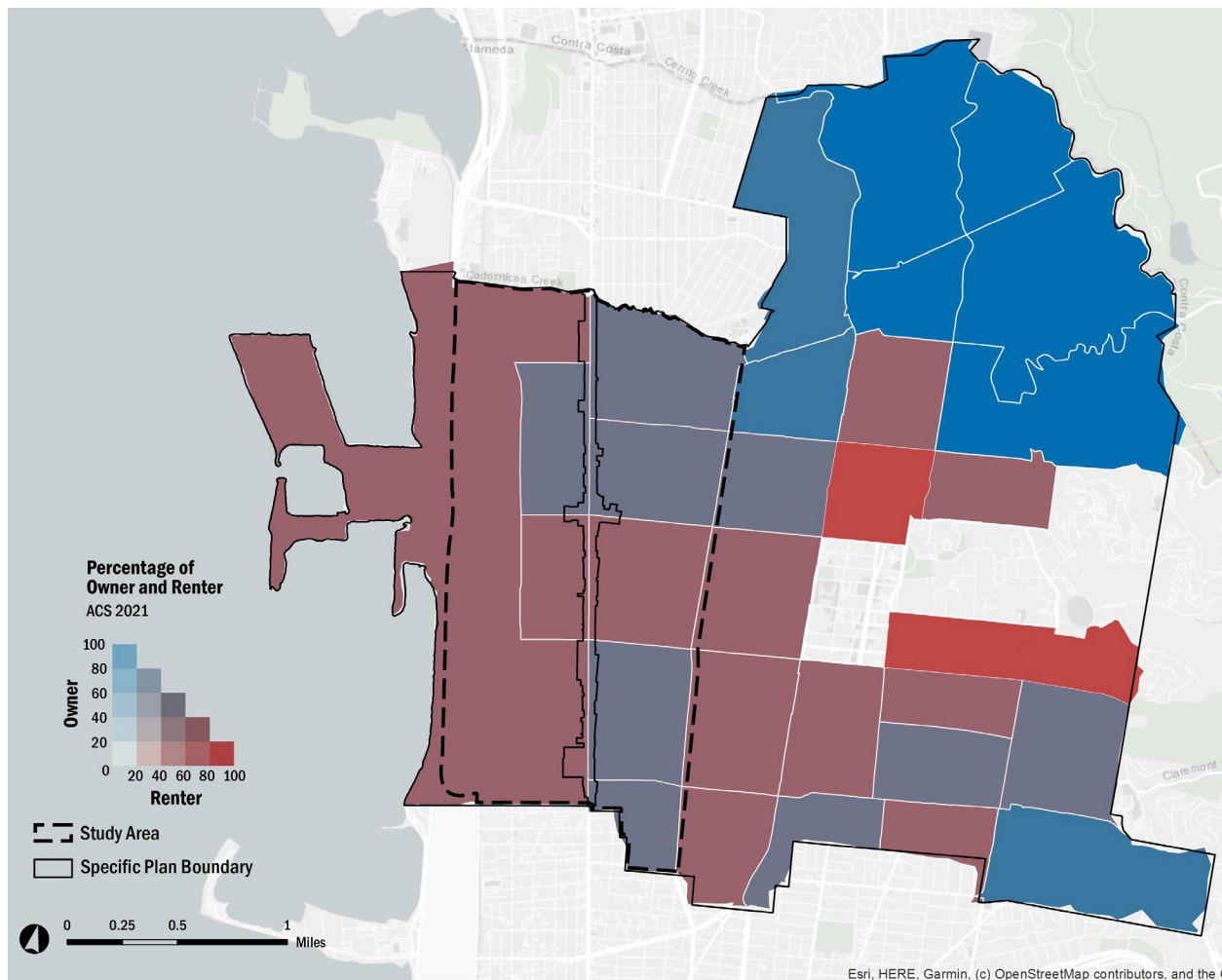


Figure 8. Mix of Households that Own or Rent in Berkeley. United States Census Bureau. ACS. 2021, Table DP04.

<sup>10</sup> United States Census Bureau. American Community Survey. 2021, Table B25014. [Online] <https://data.census.gov/>.

<sup>11</sup> Definition of overcrowding and severe overcrowding are from the US Department of Housing and Urban Development. For more information, go to: [hcd.ca.gov/planning-and-community-development/housing-elements/building-blocks/overpayment-payment-and-overcrowding](https://hcd.ca.gov/planning-and-community-development/housing-elements/building-blocks/overpayment-payment-and-overcrowding).

<sup>12</sup> United States Census Bureau. American Community Survey. 2021, Table B25014. [Online] <https://data.census.gov/>.



## Household Income and Housing Cost

In 2021, the Study Area median household income (\$93,871) was about \$7,000 below the Berkeley median (\$101,048). The median household incomes increased by similar levels in both the Study Area (+79%) and Berkeley as whole (+78%) from 2010 to 2021.<sup>13</sup>

Renters at the southern end of the Study Area pay higher shares of their income on rent on average. In several neighborhoods on the northern end of the Study Area, the average tenant is paying less than 20% of their income in rent, while there are several neighborhoods on the south end of the Study Area where the average is above 50%.<sup>14</sup> See **Figure 9**.

Owners in the area are spending a lower share of their income on housing costs, costs reflect sum of payments for mortgages, deeds of trust, contracts to purchase, or similar debts, on the property than renters are, on average.<sup>15</sup> See **Figure 10**.

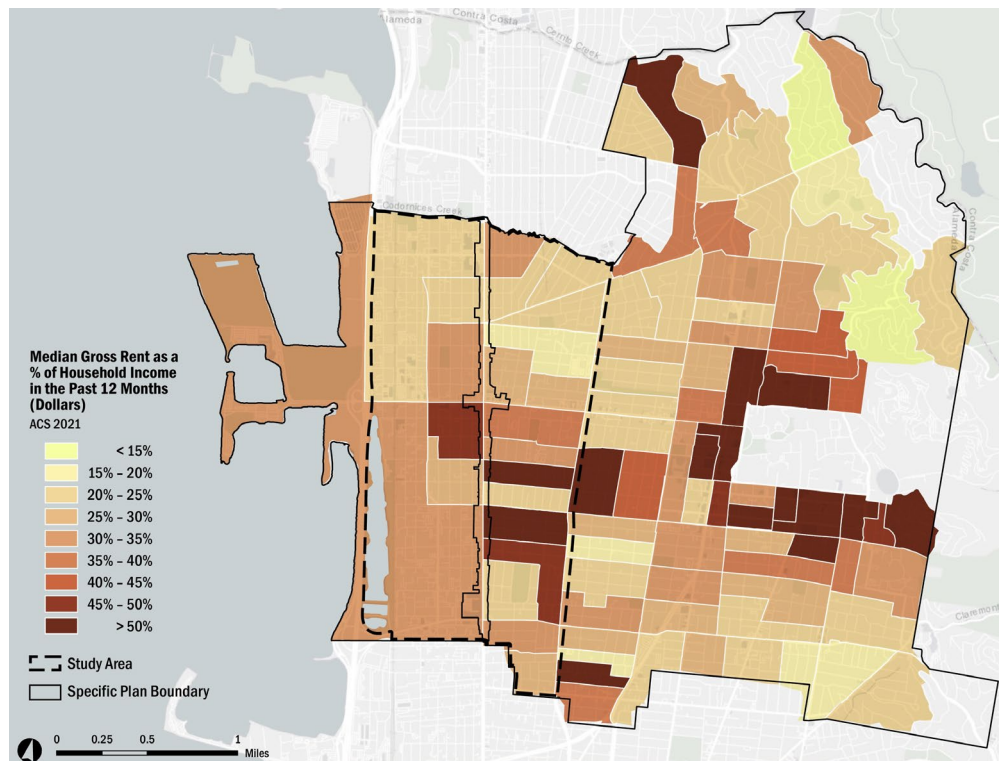


Figure 9. Median Gross Rent as a Percentage of Household Income. Source: United States Census Bureau. ACS. 2021, Table B25071.

<sup>13</sup> United States Census Bureau. American Community Survey. 2021, Table S2503. [Online] <https://data.census.gov/>.

<sup>14</sup> United States Census Bureau. American Community Survey. 2021, Table B25071. [Online] <https://data.census.gov/>.

<sup>15</sup> United States Census Bureau. American Community Survey. 2021, Table B25092. [Online] <https://data.census.gov/>.

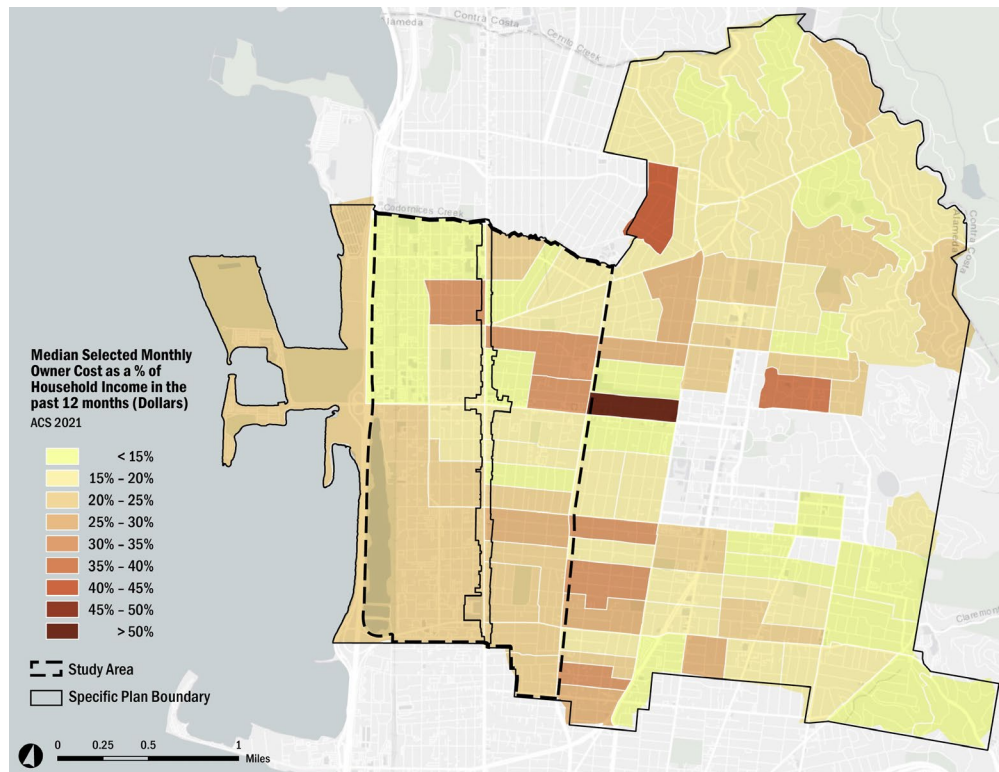


Figure 10. Median Selected Monthly Owner Cost as a Percentage of Household Income.<sup>16</sup>  
Source: United States Census Bureau. ACS. 2021, Table B25092.

## Housing Cost Burden

In the Study Area, more than half of tenants are cost-burdened,<sup>17</sup> meaning they spend more than 30 percent of their gross household income on rent and utilities. Of those tenants, 26% are severely cost-burdened, meaning they are spending more than 50 percent of their income.<sup>18</sup>

For severely cost-burdened households (1,513 households), 73 percent (1,118 households) earn less than \$35,000 and spend more than 50 percent of their income for rent.<sup>19</sup>

## Household Eligibility for Affordable Housing

Approximately half of Study Area households earn less than 80 percent of Area Median Income and a third earn less than 50 percent of Area Median Income.<sup>20</sup> These households would likely be eligible for affordable housing.

<sup>16</sup> "Selected Monthly Owner Cost" includes recurring payments like debt (if any), taxes, insurance and utilities. For more information on definition and methodology, please visit: <https://www.census.gov/quickfacts/fact/note/US/HSG650221>

<sup>17</sup> Definition of cost-burden and severe cost-burden are from the US Department of Housing and Urban Development. For more information, go to: [hcd.ca.gov/planning-and-community-development/housing-elements/building-blocks/overpayment-payment-and-overcrowding](https://hcd.ca.gov/planning-and-community-development/housing-elements/building-blocks/overpayment-payment-and-overcrowding).

<sup>18</sup> United States Census Bureau. American Community Survey. 2021, Table B25074. [Online] <https://data.census.gov/>

<sup>19</sup> United States Census Bureau. American Community Survey. 2021, Table B25074. [Online] <https://data.census.gov/>

<sup>20</sup> United States Census Bureau. American Community Survey. 2021, Table B19001 [Online] <https://data.census.gov/>. United States Department of Housing and Urban Development, Income Limits, 2021[Online] <https://data.HUD.gov/> Street Level Advisors calculations.

## Infrastructure Assessment

Infrastructure includes utility service for domestic water, wastewater, stormwater, telecommunications, electricity, and natural gas. According to the 2023-2031 Housing Element Update Environmental Impact Report (EIR), existing utility systems for domestic water, wastewater, stormwater, telecommunications, electricity, and natural gas facilities in Berkeley have sufficient capacity to serve the planned housing developments. *Relocation or construction of new or expanded facilities resulting in significant environmental impacts would not occur, and adequate wastewater capacity exists to serve the project's projected demand in addition to the provider's existing commitments. Impacts would be less than significant.*<sup>21</sup>

Residential capacity based on existing zoning assumes 2,588 existing units in the Specific Plan Area and between 3,700 to 5,350 future multifamily units in the next 8 years. Existing versus future capacity for non-residential use is not anticipated to have much effect on utility upgrade needs. The Housing Element Update EIR studied the sites inventory including a total of 15,153 units. The increase in units in the San Pablo Specific Plan area is negligible in relation to the required infrastructure needs, however some localized improvements will likely be required.

- Localized upsizing of domestic water and wastewater in San Pablo Avenue may be necessary to accommodate the additional units. The City of Berkeley and EBMUD typically require individual developments to make these upgrades.
- Stormwater from new development will be required to comply with the Municipal Regional Stormwater NPDES Permit (MRP) requirements. Rainwater management including bioswales, permeable paving, underground stormwater storage and/ or rain gardens will be required.
- Telecommunications, electricity and natural gas upgrades will continue to be available from the providers. Typically, the utility companies will upgrade facilities as needed.
- Lighting is provided by the City's Public Works Department.

The Specific Plan process includes consideration of corridor wide and/or district level infrastructure improvements. This approach could result in efficiencies, multiple benefits, and could spread the cost of localized infrastructure upgrades over multiple developments.

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<sup>21</sup> City of Berkeley [2023-2031 Housing Element Update, Draft Environmental Impact Report](#); City of Berkeley; August 2022, page ES-21.

# Mobility Conditions, Projects, and Planning

## Transportation Focus of the Specific Plan

San Pablo Avenue is a California state highway (State Route 123) and improvements within the street right of way require approval by Caltrans. The City of Berkeley is responsible for maintenance of the sidewalks and medians, including street trees and landscaping.

The Specific Plan is not making transportation improvements to San Pablo Avenue, because the Alameda Transportation Commission (Alameda CTC) has completed a multimodal planning project for San Pablo Avenue throughout Alameda County. The project has led to three projects that will result in construction of safety improvements for all users, bus stop improvements, and parallel bicycle facility improvements, as well as a short segment of bicycle and bus lanes on the southern end of San Pablo Avenue in Berkeley.

The Specific Plan effort focused on the public realm of the sidewalks along San Pablo Avenue, parking management, and other transportation improvements that are not being addressed through the Alameda CTC efforts.

## Traffic Volumes

Annual Average Daily Traffic (AADT) volumes along San Pablo Avenue average about 20,000 vehicles per day in Berkeley. In addition to serving as a major thoroughfare for local travel and providing access to local businesses and residents, San Pablo Avenue also is an alternative route for travelers on I-80 during periods of heavy freeway congestion. Cross streets providing interstate access include Gilman Street (9,000 AADT), University Avenue (19,000 AADT), and Ashby Avenue (42,000 AADT).<sup>22</sup>

## Transit Network

**AC Transit** – AC Transit provides bus service throughout western Alameda County and Contra Costa County and operates 12 bus routes within the study area that provides direct access to the plan area. See **Table 1** and **Figure 11**. AC Transit developed a new network in response to changing travel patterns through the AC Transit Realign Plan, which was implemented in August 2025. The Realign Plan did not significantly alter the service within the Specific Plan Area.

**Table 1: AC Transit Service Summary (August 2023)**

| Line       | Route                            | Nearest Bus Stops                                              | Weekday            |         | Weekend            |         |
|------------|----------------------------------|----------------------------------------------------------------|--------------------|---------|--------------------|---------|
|            |                                  |                                                                | Hours              | Headway | Hours              | Headway |
| <b>12</b>  | MLK Jr. – Temescal – Grand       | On Gilman Street between San Pablo Avenue and Tenth Street     | 5:55 AM – 12:55 AM | 20 min  | 6:00 AM – 12:00 AM | 30 min  |
| <b>36</b>  | Dwight – Shellmound – Adeline    | On Dwight Way between Tenth Byron Streets                      | 5:50 AM – 12:35 AM | 30 min  | 5:50 AM – 12:30 AM | 30 min  |
| <b>51B</b> | University – College – Rockridge | On University Avenue between Tenth and Curtis Streets          | 4:55 AM – 12:20 AM | 15 min  | 5:00 AM – 12:20 AM | 15 min  |
| <b>52</b>  | UC Village – Cedar – UC Campus   | On San Pablo Avenue between Albany City Limit and Cedar Street | 6:00 AM – 11:45 PM | 15 min  | 8:15 AM – 8:25 PM  | 20 min  |

<sup>22</sup> San Pablo and Ashby Avenue data source – Caltrans Traffic Census Program, 2021; Gilman Street data source – collected for the Gilman Gateway rezoning project, 2019; and University Avenue data source: collected for the San Pablo Avenue Corridor Project, 2018.

| Line            | Route                                             | Nearest Bus Stops                                                    | Weekday                               |             | Weekend            |            |
|-----------------|---------------------------------------------------|----------------------------------------------------------------------|---------------------------------------|-------------|--------------------|------------|
|                 |                                                   |                                                                      | Hours                                 | Headway     | Hours              | Headway    |
| <b>72 / 72M</b> | Hilltop – CCC – San Pablo / Macdonald – San Pablo | Along entire length of San Pablo Avenue                              | 4:45 AM – 1:20 AM                     | 15 min      | 4:55 AM – 1:45 AM  | 20 min     |
| <b>72L</b>      | San Pablo Rapid                                   | Along entire length of San Pablo Avenue                              | 6:00 AM – 8:15 PM                     | 30 min      | 7:00 AM – 7:55 PM  | 30 min     |
| <b>800</b>      | Richmond – Oakland Transbay All Nighter           | On University Avenue at San Pablo Avenue                             | 12:20 AM – 7:25 AM                    | 30 min      | 12:20 AM – 7:25 AM | 30 min     |
| <b>802</b>      | San Pablo All Nighter                             | On San Pablo Avenue between University Avenue and Oakland City Limit | 12:40 AM – 5:35 AM                    | 60 min      | 12:40 AM – 5:35 AM | 60 min     |
| <b>G</b>        | Colusa – Solano Transbay                          | On San Pablo Avenue between Albany City Limit and University Avenue  | 7:00 AM – 9:45 AM, 4:10 PM – 6:50 PM  | 30 – 60 min | No service         | No service |
| <b>FS</b>       | Shattuck – University Transbay                    | On University Avenue at San Pablo Avenue                             | 6:10 AM – 8:30 AM, 4:30 PM – 7:25 PM  | 90+ min     | No service         | No service |
| <b>J</b>        | Sacramento – Christie Transbay                    | On Ashby Avenue at San Pablo Avenue                                  | 7:10 AM – 10:10 AM, 4:45 PM – 7:00 PM | 20 – 60 min | No service         | No service |

Source: AC Transit website, August 2025 Schedules; Fehr & Peers, CD+A, 2025.

**West Berkeley Shuttle** – This is a free shuttle funded by the Berkeley Gateway Transportation Management Association that provides transit connections between the Ashby BART station and major employment centers in West Berkeley. The shuttle operates on weekdays from 6:00 AM to 10:00 AM and 3:00 PM to 7:00 PM with approximately 30-minute headways. The West Berkeley Shuttle does not currently have any stops on San Pablo Avenue or in the Specific Plan Area. See **Figure 11** illustrates the route alignment.

**Bear Transit** – This is UC Berkeley’s shuttle system, primarily providing service between Campus Park, Downtown Berkeley, and Berkeley Hills. Bear Transit is free for the UC Berkeley community and members of the public may ride for a \$1 fare. Prior to the COVID-19 pandemic, Bear Transit provided service to the plan area on the Campus Shared Services (CSS Line). The CSS line operated between the North Berkeley BART Station and the UC Berkeley Shared Services Building on 4<sup>th</sup> Street via Delaware Street, San Pablo Avenue, Cedar Street, and Virginia Street.

**Lawrence Berkeley National Laboratory (LBL) Shuttle** – The LBL operates a free shuttle service for LBL employees and guests between LBL and North Berkeley BART and other destinations in West and North Berkeley. The shuttle provides morning service between 6:00AM and 11:00AM and afternoon service between 3:30PM and 7:30PM. The shuttle operates at 60-minute headways during both periods. The shuttle stops along San Pablo Avenue at Cedar Street, Gilman Street, and Buchanan Street during both morning and afternoon service.

**Other Existing and Planned Shuttle Services** – In addition to the shuttles described above, Kaiser Permanente used to operate an employee shuttle between the North Berkeley BART Station and its facility on Second Street at Virginia Street in West Berkeley prior to the pandemic. Although this shuttle crossed San Pablo Avenue, they did not directly serve the Specific Plan Area.

The Berkeley Commons Project (600 Addison Street), and TheLAB (747 Bancroft Way) are recently approved developments in West Berkeley that are conditioned to operate shuttles between the North Berkeley BART Station

and their respective sites. Although these shuttles would cross San Pablo Avenue, they are not expected to directly serve the Specific Plan Area.

**BART** – BART provides regional commuter rail transit in Alameda, Contra Costa, San Francisco, San Mateo, and Santa Clara counties. As of August 2023, BART trains operate weekdays from 5:00 AM to 2:00 AM, Saturdays from 6:00 AM to 2:00 AM, and Sundays from 8:00 AM to 2:00 AM. The North Berkeley, the Downtown Berkeley, and the Ashby BART stations are located to the east of San Pablo Avenue. **See Figure 11.**

These stations are served by the Richmond-Berryessa-North San José (orange) and Richmond-Millbrae/SFO (red) lines. Other destinations in the BART system can be reached by transferring at stations in Oakland. As of August 2023, the Berryessa-North San José line provides service every 15 minutes on weekdays and every 30 minutes on Saturdays, Sundays, and Holidays. The Richmond-Millbrae/SFO line provides service every 15 minutes on weekdays and every 30 minutes on Saturdays, Sundays, and Holidays. In June 2023, there were approximately 3,400, 8,900, and 3,700 entries and exits on an average weekday from the North Berkeley, Downtown Berkeley, and Ashby BART stations, respectively.<sup>23</sup>

**Capitol Corridor** - Amtrak's Capitol Corridor route operates between San Jose and Sacramento and stops at the Berkeley Rail Station. The station is located under the University Avenue overpass, about 0.5 miles west of San Pablo Avenue. There are 12 daily weekday departures and arrivals and 11 daily weekend departures and arrivals per direction at the Berkeley Station.<sup>24</sup> In FY2021, the station served about 26,000 rail passengers.<sup>25</sup> The Amtrak station is served by AC Transit Line 51B, with additional bus service nearby. The station provides basic amenities, including outside seating and automobile and bicycle parking.

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<sup>23</sup> [Bay Area Rapid Transit 2019 Monthly Ridership Reports.](#)

<sup>24</sup> [Amtrak Capitol Corridor Schedule.](#)

<sup>25</sup> [Amtrak California Fact Sheet, Fiscal Year 2021.](#)



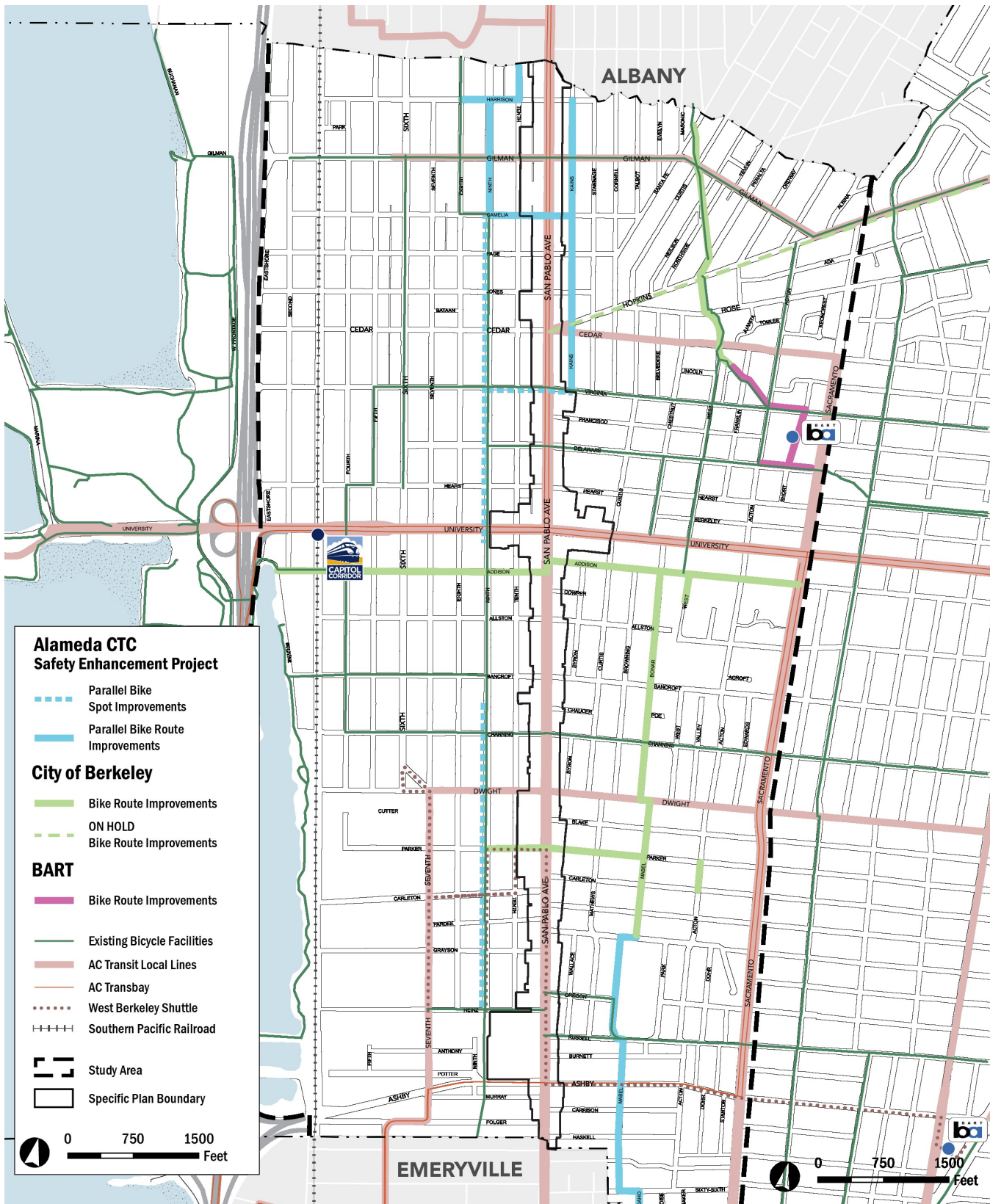


Figure 11. Transit Lines and Bicycle Routes. Source: City of Berkeley, Alameda CTC, and Fehr & Peers, 2023.



## Transit-First Policy Implementation Plan – December 2022

This plan provides policies and guidelines for implementing the City’s Transit-First Policy (Berkeley General Plan Policy T-4) and for future planning for the City’s existing transit priority corridors. The plan aligns with the City’s Climate Action Plan goals to prioritize transit over single-occupant vehicles and reduce emissions. Objectives of the plan include improving transit efficiency, reliability, and accessibility, increasing transit ridership, and prioritizing transit corridors.

It identifies San Pablo Avenue as a Primary Transit Route and a corridor for future study of transit infrastructure needs based on the AC Transit Major Corridors Study (2016). San Pablo Avenue Corridor together with the Telegraph and University Avenue Corridors are AC Transit designated future Bus Rapid Transit Corridors and part of the AC Transit Long-Term Improvements (by 2040) plan.

The document describes Alameda CTC’s San Pablo Corridor Project as the lead project for the design of future transit improvements to San Pablo Avenue, and recommends continuing work with Alameda CTC, Caltrans, and neighboring cities to develop a long-term implementation plan for the whole corridor to meet projected transit needs of planned land uses and anticipated growth of housing.

## Council Referral for BRT in Berkeley

In September 2023, the City Council referred to the City Manager to move forward with a feasibility analysis and community engagement process to develop options for Bus Rapid Transit (BRT) for AC Transit’s 51B route, including on University Avenue which is designated a Primary Transit Route by AC Transit through their Major Corridors Study.

If the City continues to pursue implementation of BRT service on University Avenue to Downtown this would improve transit access from the San Pablo Specific Plan Area to Downtown, UC Berkeley, BART, and other locations proximate to University Avenue. It would also reinforce the importance of the San Pablo Avenue and University Avenue Node.

## Transportation Safety

The entire length of San Pablo Avenue is included in the City of Berkeley’s High-Injury Network. Between 2017 and 2021, there were 190 collisions on San Pablo Avenue that resulted in an injury or death, representing 7% of the Berkeley total.<sup>26</sup>

**Vision Zero Action Plan** - This plan was approved March 10, 2019, and describes the goal to eliminate all traffic fatalities and severe injuries in Berkeley by 2028 through data-driven engineering strategies. The plan prioritizes infrastructure within an Equity Priority Area, which includes much of the Study Area. Between 2008 and 2018, 46% of severe and fatal collisions within Berkeley occurred within the EPA area. The plan also identifies San Pablo Avenue as a High-Injury Street, the streets in Berkeley with the most severe injury or fatality collisions between 2008 and 2018. During that time, there were multiple collisions on San Pablo Avenue that resulted in severe injury to pedestrians and vehicle occupants, but no reported fatalities.

Implementation of the Alameda CTC San Pablo Corridor Project’s Safety Enhancements Project and the bike infrastructure projects are described below. This work will improve traffic calming and pedestrian safety and support the goals of the Vision Zero Action Plan.

## Ongoing Projects, Approved Plans and Future Planning

Current City, countywide, and regional action plans focus on multimodal strategies to achieve improvements for all modes of transportation in San Pablo Specific Plan and Study Areas. The alignments of these improvement projects are mapped in **Figure 11**.

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<sup>26</sup> Statewide Integrated Traffic Records System (SWITRS) via Transportation Injury Mapping System (TIMS), 2017-2021.

**San Pablo Avenue Corridor Project** – This project is led by the Alameda County Transportation Commission (“Alameda CTC”) and consists of three near-term projects in the Specific Plan Area to improve safety and transit reliability along the San Pablo Avenue Corridor. Additional information about these projects can be found on the Alameda CTC web site.<sup>27</sup>

- The **Safety Enhancements Project** will construct improvements for pedestrians and cyclists to cross San Pablo Avenue more safely and improve transit speed and reliability along San Pablo Avenue. Transit improvements include bus stop bulb-outs for Rapid Bus stops, lighting upgrades, and some bus stop relocations to improve bus operations. Within Berkeley, improvements will extend between Heinz Avenue and the northern city limit.
- The **Parallel Bike Improvement Project** will construct bike safety and connectivity improvements along streets parallel to and across San Pablo Avenue in Berkeley, Albany, and Oakland. Improvements on parallel streets will consist of diverters, traffic circles, modifications to existing stop controls, traffic humps, and vertical separation for bicycles.
- The **Bus and Bike Lanes Project** located primarily within the Cities of Oakland and Emeryville will convert one travel lane in each direction on San Pablo Avenue to a bus-only lane and convert on-street parking lanes to protected bike lanes. In Berkeley, the Project’s bicycle improvements will extend along San Pablo Avenue from the southern city limit to Heinz Avenue, a distance of approximately 0.25 miles, and the bus improvements will end at the Ashby Avenue intersection.

**Other multimodal projects** – The City is moving forward with implementation of several projects identified in the 2017 Bike Plan within the Study Area. These, combined with the Alameda CTC projects, will improve accessibility and safety for bicyclists and pedestrians, enhancing connectivity between the Specific Plan Area and the surrounding Study Area. The project include:

- **Ohlone Greenway Safety Improvements Project** – This project will improve a portion of the existing pathway from Virginia Gardens to the crossing of Santa Fe Avenue. The project is in conceptual design and has completed initial public engagement. Design is expected to be completed in mid-2024 with construction occurring soon after, assuming necessary additional funds are secured.
- **Hopkins Corridor Traffic and Placemaking Study** – A small portion of this project, from Gilman Street to Sacramento Street is within the Study Area. The project’s goal is to make the street safer and more accessible for all modes of transportation. As of November 2023, the project is on hold due to City staffing constraints and a final decision by City Council regarding project design.
- **West Hopkins Corridor Street Rehabilitation Project** – This project includes Hopkins Street from Gilman Street to San Pablo Avenue. Similar to the other Hopkins Study, as of November 2023, the project is on hold.
- **Parker-Addison Mobility and Safety Improvement Project** – This project will provide bike boulevard and associated improvements to connect from the West Street multiuse pathway to San Pablo Park via Bonar and Mabel Streets. It will also improve Parker Street to connect with the 9<sup>th</sup> Street Bike Boulevard. Design is nearly complete and construction is expected to occur in 2024.
- **Addison Street Bicycle Boulevard Project** – This project has received funding, but design and public involvement has not yet begun. The project’s goal is to make improvements to the Addison Street Bicycle Boulevard from Aquatic Park to Sacramento Street.
- **North Berkeley Bicycle and Pedestrian Access Improvements** – This is a BART project that is under construction and is improving bicycle and pedestrian access at and around the North Berkeley BART Station to improve connectivity from the Ohlone Greenway at Virginia Gardens to the crossing and connection to the Ohlone Greenway at Sacramento Street.

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<sup>27</sup> General website for the Alameda CTC project can be found here <https://www.alamedactc.org/programs-projects/multimodal-arterial-roads/sanpabloave>. Boards illustrating the locations for specific improvements for the Safety Enhancement and Parallel Bike Improvement Projects can be found on the “Key Materials” page.

# Land Use Planning Policies and Gaps

## Existing Land Use Policies and Standards

### General Plan

The General Plan land use designation along the entire San Pablo Avenue frontage is **Avenue Commercial**. The land use designations for properties adjacent to the corridor include **Manufacturing**, **Manufacturing Mixed-Use**, **Low Medium Density Residential**, **Medium Density Residential**, and **High Density Residential**. The Study Area, beyond the Specific Plan Area, includes a broader range of land uses including **Neighborhood Commercial**, **Institutional**, **Open Space**, and **Low Density Residential** in addition to those above. See Figure 12.

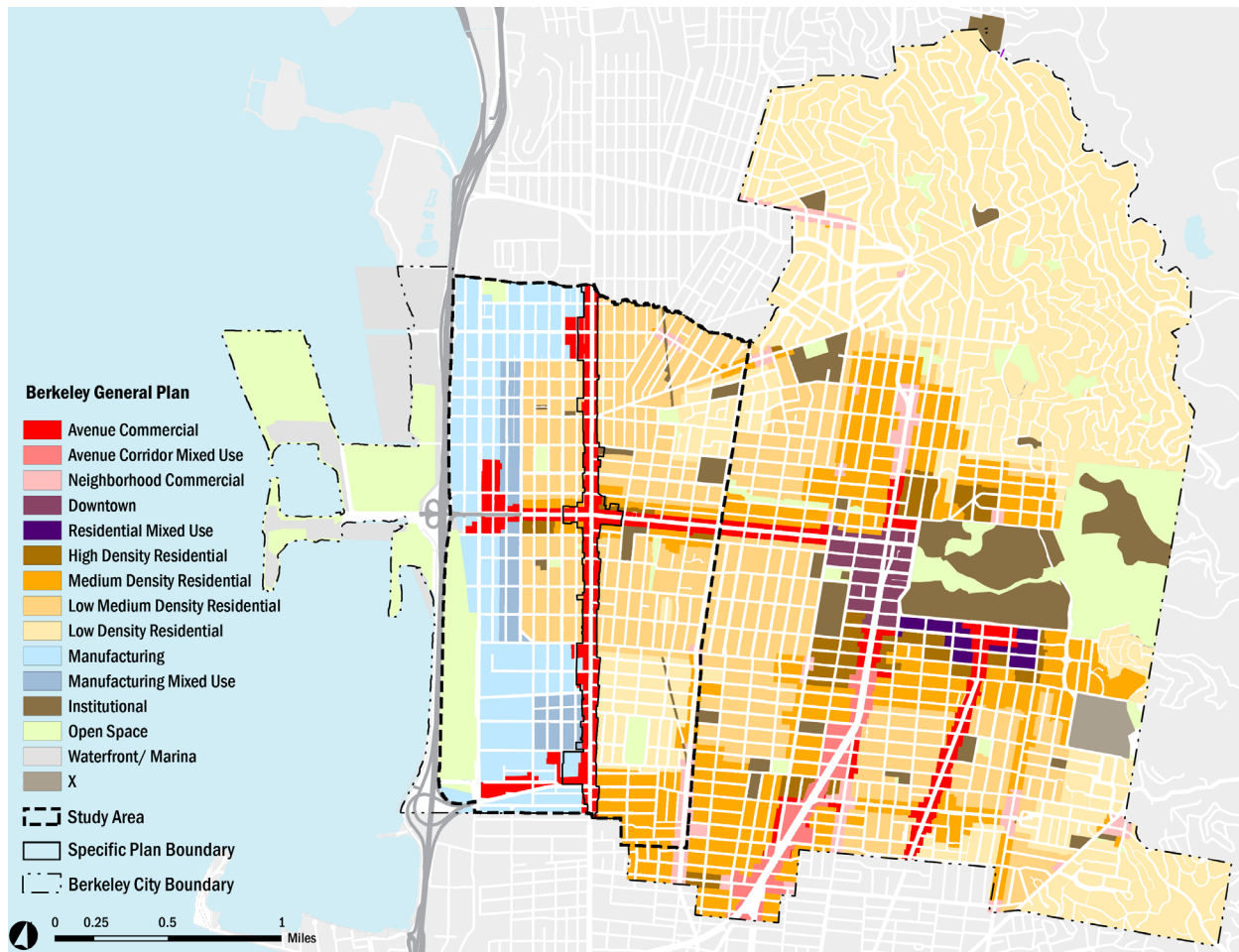


Figure 12. Berkeley General Plan. Source: City of Berkeley, 2023.

### 2023-2031 Housing Element Update

The City's 2023-2031 Housing Element Update (as amended on February 17, 2023) identifies the City's specific housing needs and outlines goals, policies, and programs to address them, including housing affordability and diversity. The City also provides annual reports on its progress toward meeting Housing Element Program objectives. Some key 2023-2031 Housing Element Update goals and programs include:

## Housing Element Goals:

- **Goal A Housing Affordability:** Berkeley residents should have access to quality housing at a range of housing options and prices. Housing is least affordable for people at the lowest income levels, especially those with extremely low income, and City resources should focus on this area of need.
- **Goal B Housing Preservation & Improvement:** Existing housing should be maintained and improved. The City should promote efficiency in new and existing housing to improve building comfort and safety, reduce energy and water use and costs, provide quality and resilient housing, and reduce greenhouse gas emissions. Improvements that will prepare buildings for a major seismic event should be encouraged.
- **Goal C Housing Production:** Berkeley should provide adequate housing capacity to meet its current and future housing needs, including coordinating with the UC and other agencies. New housing should be developed to expand opportunities and choices to meet the diverse needs of all socioeconomic segments of the community, and should be safe, healthy and resilient.
- **Goal D Special Needs Housing & Homelessness Prevention:** Berkeley should expand the supply of housing for special needs groups, including housing affordable to those with extremely low incomes.
- **Goal E Affirmatively Further Fair Housing:** The City should continue to take meaningful actions to affirmatively further fair housing choices in Berkeley.
- **Goal F Mitigate Governmental Constraints:** Berkeley should identify and mitigate barriers to the construction and improvement of housing.

## Housing Element Programs:

- **Program 27 – Priority Development Areas (PDAs), Commercial and Transit Corridors.** In 2022, the City initiated the San Pablo Avenue Specific Plan project to increase allowed densities, study design standards, public improvements, and mechanisms to incentivize affordable housing. The plan will also coordinate with other PDAs and commercial corridors to expand opportunities along transit corridors.<sup>28</sup>
- **Program 1 - Affordable Housing Berkeley.** The Berkeley Housing Authority (BHA) established Affordable Housing Berkeley Inc., as a non-profit entity to act as the development arm of the BHA and produce affordable housing units in Berkeley. In October 2023, the BHA approved a strategic plan for Affordable Housing Berkeley Inc., which is geared towards small housing purchase of up to seven building units.
- **Program 2 – Housing Choice Vouchers.** The City assists up to 2,000 households by providing Housing Choice Vouchers, Project-based Section 8 Vouchers, Moderate Rehabilitation (SROs), Emergency Housing Vouchers, Mainstream Voucher Program, and Veterans Affairs Supportive Housing. In 2024, BHA housed an average of 1,759 households and is continuously issuing new vouchers to families on the waitlist.
- **Program 4 – Housing Trust Fund.** Berkeley's Housing Trust Fund (HTF) pools funds for affordable housing construction from a variety of sources with different requirements, and makes them available to developers through a single application process.
- **Program 5 – Preservation of At-Risk Housing.** The City will monitor and assist in preserving deed-restricted housing.
- **Program 10 - Housing Preference Policies.** In July 2023, Berkeley adopted a policy to provide a preference for current residents and descendants of residents of the city's historically redlined areas. Households with ties to redlined areas receive priority in leasing new City funded or regulated affordable units.
- **Program 11 – Rental Assistance.** The City utilizes CDBG and local Measure P funding to contract with Community Based Organizations (CBOs) to provide supportive services. These services help stabilize households in rental assistance programs and to move unhoused community members into permanent supportive housing.
- **Program 12 – Workforce Housing.** Support local efforts to expand the construction of workforce housing that is affordable to households earning between 60 and 120 percent of area median income (AMI). In March

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<sup>28</sup> City of Berkeley, 2025. Housing Element and General Plan Annual Progress Report. Available at: <https://berkeleyca.gov/sites/default/files/documents/2025-03-28%20%20Housing%20Element%20and%20General%20Plan%20Annual%20Progress%20Reports.pdf>

2023, the City achieved its goal of entitling 110 affordable units, with a preference for Berkeley Unified School District employees.<sup>29</sup>

- **Program 14 – Housing for Homeless Persons with Disabilities.** provide local subsidy to Resources for Community Development (RCD) for a 119-unit very low income development for households earning between 10 and 50 percent AMI (Supportive Housing in People’s Park) with at least 50 percent of the units dedicated to previously unhoused residents with mental health conditions.

The full list of Goals, Policies and Programs is available in the City’s Housing Element Update. However, as illustrated here, between current State Law and the City’s Housing Element, there is a strong foundation for affordable housing production throughout Berkeley, including within the Specific Plan Area.

## Zoning

As noted above, properties fronting San Pablo Avenue are predominantly zoned West Berkeley Commercial (C-W). See **Figure 13**. The City’s zoning also delineates Commercial Designated Nodes along San Pablo and University Avenues. The **West Berkeley Commercial Designated Nodes** are located in areas around major intersections along San Pablo Avenue with Gilman Street, Cedar Street, University Avenue, Dwight Way, and Ashby Avenue. The intent of these nodes is to intensify retail, commercial, and mixed-use activity to support a strong commercial and pedestrian-oriented environment by requiring that ground floors be activated with select commercial uses. A **University Commercial District Node Area** is located on the east side of the University and San Pablo intersection. This designation requires that new residential uses be integrated with non-residential uses. The existing characteristics of the nodes are discussed below in the existing land use section.

## Development Standards

The development standards and ground floor uses, as of November 2023, for the zoning districts within the Plan Area are outlined in **Appendix A1**.

Within the C-W and C-U zoning districts, which make up the majority of the Specific Plan Area, key standards include:

- Non-residential Floor Area Ratio (FAR)s of 2.2-3.0.
- Maximum height in the C-W district of three stories and 40 feet for residential- or commercial-only development, and four stories and 50 feet for mixed-use and live-work developments.
- Maximum height in the C-U of three stories and 36 feet for single use and mixed-use development *outside the nodes*, and four stories and 48 feet for mixed-use *within the nodes*. Residential-only development in the nodes requires a use permit.
- Ground floor commercial uses in the C-W zone are only required in the designated nodes. Outside the nodes, ground floor uses are permitted in accordance with Berkeley Municipal Code (BMC) 23.204-1. Unpermitted uses in the C-W designated include open air markets, vehicle rentals and washes. Within both the C-U zone nodes and non-nodes areas, ground floor residential uses require a Use Permit.

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<sup>29</sup> Ibid.



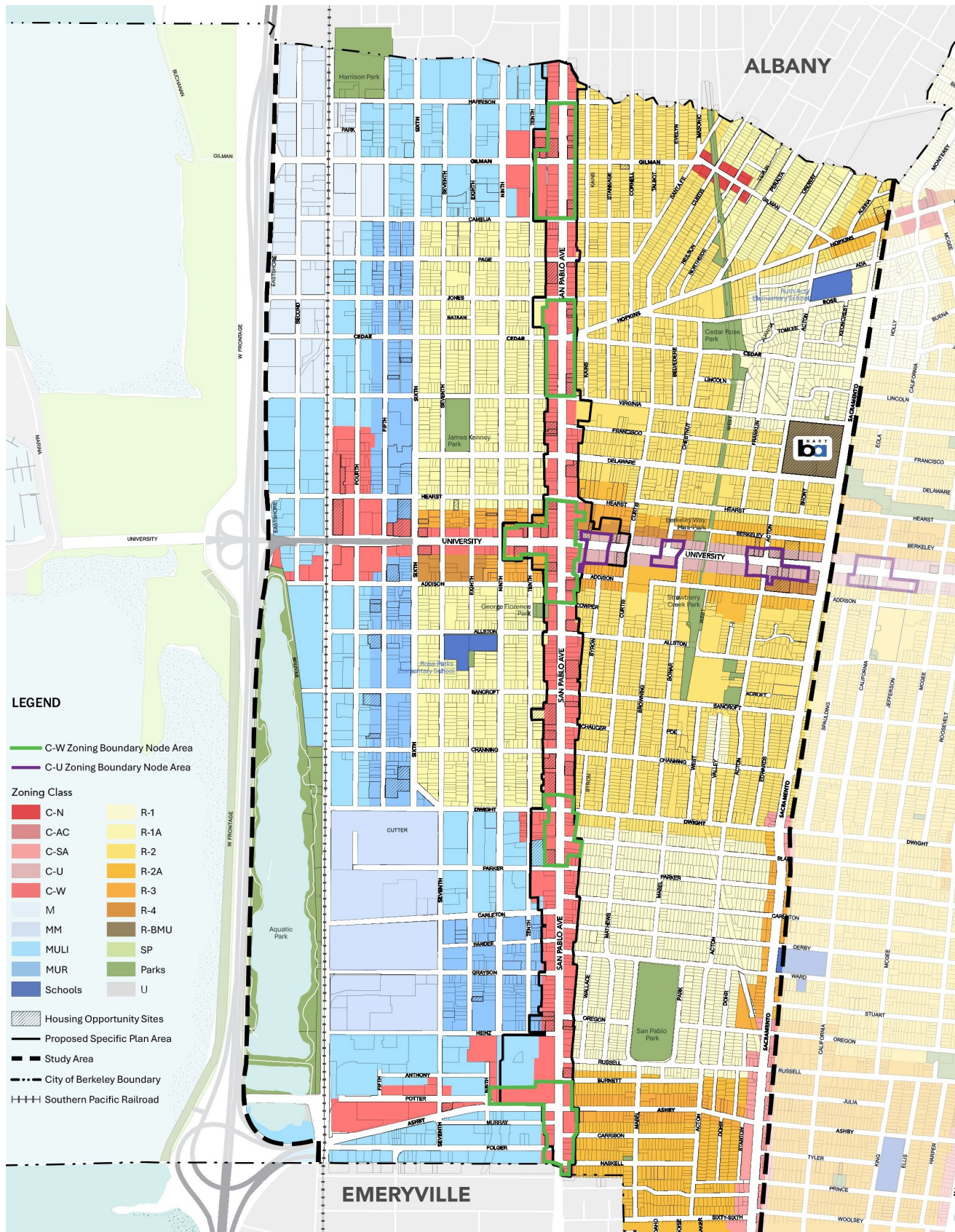


Figure 13. Zoning Map with designated nodes in the Specific Plan and Study Areas. Source: City of Berkeley

## Permit Review Process

**Ministerial and Discretionary Review** Ministerial review is a process for development approval involving little or no personal judgement by the zoning officer or Zoning Adjustments Board (ZAB). The zoning officer or ZAB ensures that the proposed development meets all the “objective zoning standards” and “objective design review standards” in effect at the time that the application is submitted but uses no special discretion or judgement in reaching a decision. In contrast, *Discretionary Review* is a process for development that is subject to public notice to neighbors, and in some cases, a public hearing.

**Residential and Mixed-Use Review within the Specific Plan Area** – As shown in the **Table 2** below, most of the residential and mixed-use development within the Specific Plan Area, which is predominantly zoned C-W, requires an Administrative Use Permit (AUP) or Use Permit (UP), which require discretionary review. Design Review is also required for projects in any non-residential zone, such as the C-W zoning district.

Recent state legislation has established and expanded eligibility for streamlined and/or ministerial review and approval for projects (see the overview of recent state laws below). Legislation includes changes to the development review process timeline and requirements, as well as limitations on the City’s discretion regarding project approval, imposing certain development standards, and the applicability of the California Environmental Quality Act (CEQA).

## Existing Land Use

The Study Area has a mix of existing land uses with a significant amount of single and multi-family residential that vary significantly in density and scale ranging from 6 du/acre for R-1 single-family to 75 du/acre for R-4 multi-family. Other uses include light industrial, commercial, including retail, vehicle repair, offices and food and alcohol service, personal and household services, retail financial services, and public and quasi-public uses.

**Ground Floor Uses** vary throughout the corridor. See **Figure 14**. Residential uses include multifamily, mixed-use, live-work, and a few single-family homes. Live-work spaces are a built space used or designed to be used both as a workplace and as a residence by one or more persons, and a mixed-use space is a use of a lot or building with two or more different land uses.<sup>30</sup> There are a variety of existing commercial ground floor uses, however the main uses include services, retail, and auto. A more detailed overview of the existing commercial uses is provided in the Commercial Risk Displacement section below.

**Upper Floor Uses** are primarily residential with some commercial office uses.

**Table 2: Typical Permits Required, by Housing Type<sup>31</sup> (Orange indicates design review required)**

| Housing Type                                                                                  | R-1 | R-1A | R-2 | R-2A | R-3 | R-4 | C-U             | C-W                    | MU-LI               | MU-R                  |
|-----------------------------------------------------------------------------------------------|-----|------|-----|------|-----|-----|-----------------|------------------------|---------------------|-----------------------|
| Duplex                                                                                        | NP  | UP   | UP  | UP   | UP  | UP  | UP <sup>1</sup> | UP                     | NP                  | UP <sup>2</sup>       |
| Multi-family                                                                                  | NP  | NP   | UP  | UP   | UP  | UP  | UP <sup>1</sup> | UP                     | NP                  | AUP/UP <sup>2,3</sup> |
| Mixed-Use Projects                                                                            | NP  | NP   | UP  | UP   | UP  | UP  | UP <sup>1</sup> | ZC/AUP/UP <sup>4</sup> | NP                  | AUP/UP <sup>2,3</sup> |
| Live-work                                                                                     |     |      |     |      |     |     | ZC              | AUP/UP <sup>5</sup>    | AUP/UP <sup>6</sup> | AUP/UP <sup>6</sup>   |
| Group Living Accommodation                                                                    | NP  | NP   | NP  | NP   | UP  | UP  | UP <sup>1</sup> | UP                     | NP                  | UP <sup>2</sup>       |
| ZC = Zoning Certificate, AUP = Administrative Use Permit, UP = Use Permit, NP = Not Permitted |     |      |     |      |     |     |                 |                        |                     |                       |

<sup>30</sup> City of Berkeley, 2023. Municipal Code section 23.502.020 Defined Terms.

<sup>31</sup> City of Berkeley, 2023. 2023-2031 Housing Element Update, pg. 81-82.



<sup>1</sup> Residential uses must be part of a mixed-use development within University Avenue Node Areas; outside of Node Areas exclusively residential projects are permitted with a use permit.

<sup>2</sup> UP required within 150' of M or MM district or a construction product manufacturing or primary product manufacturing use. See BMC Section 23.206.090.B.8.

<sup>3</sup> AUP required for 3-4 units; UP required for 5 or more units. See BMC Section 23.206.090.B.7. For mixed use projects, see also Section 23.206.090.B.9.

<sup>4</sup> Permit required dependent on project size and other factors. See BMC Section 23.204.140.B.2.

<sup>5</sup> AUP required when a project has 9 or fewer live/work units and does not involve conversion of an existing dwelling unit. All other live/work projects require a use permit. See BMC Section 23.312.030.C.3.

<sup>6</sup> Permit required dependent on floor area, number of units, and other factors. See BMC Section 23.312.030.D.

**Clusters of Related Uses** – As seen in **Figure 14**, a mix of uses are distributed throughout San Pablo Specific Plan Area without distinct pattern or clustering of related uses. Many of the predominant land uses, such as auto, manufacturing, and services, are dispersed along the street, with the exception that retail uses are mostly located within the designated commercial nodes. Many businesses including a diverse range of restaurants, grocers, and retailers are distributed throughout the corridor (see Commercial Displacement Risk section below for additional detail on the existing commercial uses within the Specific Plan Area).

**Designated Nodes** – The West Berkeley Plan adopted in 1993 identified Commercial Nodes along San Pablo Avenue. The Berkeley Zoning Ordinance identifies these nodes as “Designated Nodes” within the C-W zone. Overall, the existing uses within the Designated Nodes are consistent with the C-W zoning allowed-uses.

The **Gilman Node** currently includes a substantial amount of retail including two clusters of commercial chain stores, some auto-oriented businesses, and restaurants, and other businesses. It lies adjacent to mixed-use light industrial zones to the west and residential neighborhoods to the southwest and the east. The 55-year-old KC’s BBQ restaurant closed their location in this node in April 2023.



*Gilman intersection looking east.*

The **Cedar Node** includes the Jones, a mixed-use project. The node accommodates small retail businesses, food establishments, and auto-related ventures. In 2022, the nearby former motels—Golden Bear Inn and Quality Inn were converted to permanent housing for persons experiencing homelessness or at risk of homelessness. Retail queues, such as for Acme Bread, add to pedestrian activity in the area. A long-time business, Animal Farm Discount Pet Foods and associated Wild Bird Annex closed in 2023.



*Jones building to the northwest of the Cedar intersection.*

The **University Node** has historically been an active area. In recent years the northern portion of the node has experienced business closures with several larger retail spaces and the former Wells Fargo Bank remaining unoccupied, while the southern section experiences more consistent use and pedestrian activity, thanks to its collection of restaurants, bars, and services. The eastern and western parts consist of a blend of South Asian businesses situated amidst surface parking lots. The Specific Plan boundary includes an adjacent University Avenue Node to the east of San Pablo Avenue.



*University intersection looking northeast.*

The **Dwight Node** is a walkable center of mixed commerce. Aside from the auto-oriented businesses in the northwest portion of the node, much of the node features restaurants, offices (including several non-profit organizations), and retail, as well as some multifamily buildings. The southern end of the node includes a Housing Element opportunity site (opportunity site #32).



*Café Chiave at southwest corner of Dwight intersection.*

The **Ashby Node** is characterized by two new housing developments that incorporate mixed-use retail spaces on their ground floors (3015 and 3006 San Pablo Avenue). The northern side of the node includes the historic Heinz building which features a substantial setback (approximately 32 feet) and a narrow sidewalk (approximately 6 feet). It includes office and institutional uses, such as the Kala Art Institute. Ashby Plaza includes Looking Glass Photo & Camera, which has been based in Berkeley for over 50 years. The former Walmart building on the northeast corner has been vacant since 2021.



*Looking south towards Ashby intersection from in front of the historic Heinz Building.*

There are other areas not defined as nodes that provide neighborhood serving commercial retail, such as the intersection at Bancroft Avenue and south of Delaware Street.



*Storefronts on the southeast corner of Delaware Street.*



Figure

\*Note: Ground Floor Use is based on the Land Use Codes, which have been summarized to reflect main use for the individual parcels. The current ground floor activity on site might differ.

14. Ground Floor Use based on Land Use Codes. Source: City of Berkeley, 2023. Alameda County Assessor, 2023.



## State Legislation and Regional Policies

Several state laws and regional policies have been approved since the adoption of the City's General Plan in 2002. Many of these laws have made changes to the development review process, timeline, and requirements, as well as defined limitations on the City's discretion regarding project approval, conformance with certain development standards, and the applicability of the California Environmental Quality Act (CEQA). The Berkeley Municipal Code continues to be updated to remain consistent with the laws and policies. The following provides an overview of relevant legislation and policy to the Specific Plan.

### State Legislation

- **Senate Bill 375** (2009): This legislation requires California to reduce greenhouse gas emissions by setting reduction targets, preparing regional Sustainable Communities Strategies, and aligning land use, housing, and transportation planning processes. As a Priority Development Area, the Specific Plan Area is part of the Bay Region's Sustainable Communities Strategy, which could help qualify Specific Plan implementation projects for funding.
- **Housing Accountability Act (HAA)**: This legislation limits cities' ability to deny, reduce the density of, or make infeasible housing development projects or emergency shelters that are consistent with the City's objective local development standards and contribute to meeting housing need. The HAA was first enacted in 1982 and is continually amended to expand and strengthen its provisions. This effects how the Specific Plan's standards can be written and enforced.
- **Senate Bill 330** (2019): This legislation limits cities' ability to impose restrictions on housing developments. SB 330 seeks to expedite the housing approval process, enhance housing supply, and ensure predictability for developers by reducing regulatory uncertainty and potential obstacles to new housing construction. This also effects how standards can be written and enforced.
- **Senate Bill 35** (2017): SB 35 streamlines the housing approval process for qualifying multifamily residential projects with certain minimum affordable housing. This allows such projects to move more quickly through the City's review process and restricts the City's ability to reject these proposals to encourage the development of affordable housing. See more at the [Housing and Community Development SB 35 Guidelines](#).
- **Assembly Bill 1397** (2017): AB1397 requires that sites identified under the 5th RHNA cycle for development that were unused be incorporated into the 6th cycle, with by-right approval for developments that include at least 20% affordable units for lower incomes.
- **Density Bonus** (Gov Code 65915): State density bonus provisions have changed frequently and significantly in recent years to further incentivize certain types of housing, including but not limited to various levels of affordability, senior, transitional, veterans, and student. In exchange for a commitment to build the specified housing type or meet a specified level of affordability, the City must allow a density bonus — an increase over the maximum allowable residential density. In addition to increasing density under density bonus law, developers can use "waivers" and "concessions" to reduce, modify, or waive development standards. The City cannot deny a requested concession or incentive unless they can make a written finding, based upon substantial evidence, that the requested incentive or concessions: 1) does not result in identifiable and actual cost reductions, 2) would have a specific adverse impact on public health, safety or on property which is listed on the state Register of Historical Resources and there is no feasible method to satisfactorily mitigate the specific adverse impact without making the project unaffordable to the affordable households; or 3) would be contrary to state or federal law. The use of concessions can limit the applicability of development standards and other requirements for projects that qualify for a density bonus.
- **Assembly Bill 2011** (2022): AB 2011 allows for by-right approval of one-hundred percent affordable and mixed-income housing projects in zones where office, retail, or parking are the principally permitted use. This allows for the development of housing along commercial corridors when projects meet specific development standards, with one-hundred percent affordable projects facing the fewest requirements.

- **Senate Bill 6** (2022): SB 6 passed alongside AB 2011 and also allows for the development of housing where office, retail, or parking are the principally permitted use. SB 6 does not contain any explicit affordability requirements, nor does it allow for by-right approval. Should project applicants choose to adhere to the affordability requirements of SB 35, they may receive a streamlined approval process.
- **Assembly Bill 2097** (2022): This legislation prohibits parking requirements on most residential, commercial, and industrial development projects located within one-half mile of a major transit stop, unless the local agency makes certain findings. Stops along San Pablo Avenue have AC Transit bus service that qualifies them as major transit stops. Findings that could necessitate minimum parking requirements include: the project advances the City towards meeting its lower-income Regional Housing Needs Allocation (RHNA), it fulfills specific housing needs, such as housing for people with disabilities, or it is within one-half mile of existing residential or commercial parking.
- **Assembly Bill 101** (2019): AB 101 requires that Low Barrier Navigation Centers (LBNC) receive by-right approval in areas zoned for mixed-use and nonresidential zones permitting multi-family uses. LBNCs are housing first, low barrier, service-oriented shelters that aim to help people experiencing homelessness find permanent housing.
- **Assembly Bill 2162** (2018): This legislation requires that supportive housing be considered an allowed use by-right in zones where multi-family and mixed-uses are permitted, provided that the proposed project meets specified criteria.

## Regional Policies

- **Plan Bay Area and Priority Development Areas:** Plan Bay Area 2050 is a long-range regional plan developed by MTC and Association of Bay Area Governments (ABAG) that integrates strategies to improve housing, the economy, transportation, and the environment with a focus on the region as a whole. The plan utilizes a combination of regulatory measures, funding mechanisms, community engagement, and ongoing assessment to implement these strategies. Priority Development Areas (PDAs) are designated areas that align transit access with opportunities of increased density of development. The majority of the San Pablo Specific Plan Area is a PDA.
- **Transit Oriented Communities (TOC) Policy:** In 2022, MTC adopted a regional TOC Policy. The potential application of the TOC Policy to the San Pablo Specific Plan is discussed in the Resilience and Climate Adaptation section of the document below.

## Existing Policy Capacity Assessment

As of 2020, there were 2,588 existing housing units in the Specific Plan Area. The majority of existing housing units, 2,018 homes, are in multi-family housing with 5 or more units. See **Figure 15**.

The Housing Element sites inventory analysis identifies 75 sites for potential housing development within the Specific Plan Area (representing 20% of all the sites identified citywide). Based on existing land use and zoning regulation, the Housing Element demonstrates capacity for approximately 3,700 units on the 75 sites (representing 28% of the total capacity of the Housing Element sites inventory citywide). See **Figure 16** and **Appendix B**.

The Housing Element Update sites inventory identifies sites under three categories: likely sites, pipeline sites, and opportunities sites. Likely sites and pipeline sites include housing projects that have either already been approved or are actively engaging with the City in anticipation of submitting an application for review. The Housing

Plan Area Existing Housing Units

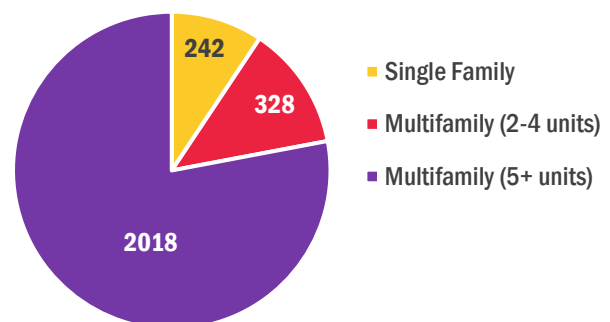


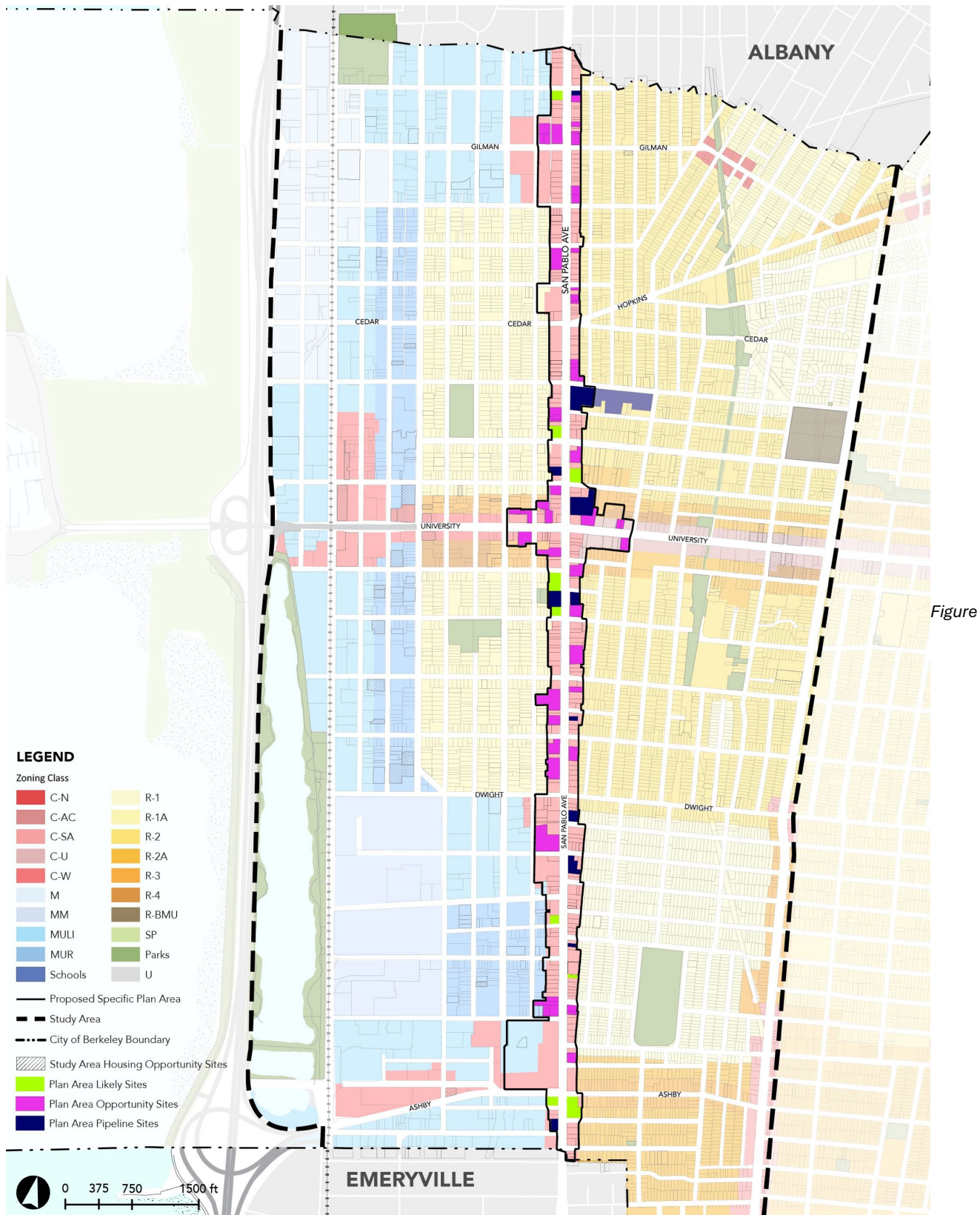
Figure 15. Distribution of Existing Housing Units in the Plan Area by Type. Source: City of Berkeley, 2023.

Element Update identifies 51 opportunity sites, 9 likely sites, and 15 pipeline sites within the Plan Area. Opportunity sites are vacant or underutilized sites with near-term potential for residential or mixed-use development. A range of land uses exist on opportunity sites. See **Table 3**. The majority of opportunity sites within the Plan Area are commercial uses at 35%, followed by vacant or parking lots at 27%.

**Table 3: Existing Use of Specific Plan Area Housing Element Opportunity Sites**

| Existing Use                                                                 | # of SPA Boundary Opportunity Sites | % of SPA Boundary Opportunity Sites |
|------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Auto-related uses (auto-body shops, car washes, smog shops, one gas station) | 8                                   | 16%                                 |
| Commercial uses (incl. storage facilities and one laundromat)                | 18                                  | 35%                                 |
| Retail/restaurant uses                                                       | 9                                   | 18%                                 |
| Vacant/parking lot                                                           | 14                                  | 27%                                 |
| Single-family/parking lot                                                    | 1                                   | 0.02 %                              |
| Public Lands                                                                 | 1                                   | 0.02%                               |

Source: Street Level Advisors and Gordon Consulting, 2023.



Figure

16. Plan Area Housing Element Update Housing Sites Inventory. Source: City of Berkeley. "Housing Element Update 2023-2031", 02.17.26



The Housing Element sites inventory shows **capacity** for an additional 3,700 units within the Specific Plan Area, based on existing zoning regulations. However, **actual** housing production relies on a number of factors including the housing development community (both private and non-profit) market conditions, construction costs, the decisions of individual property owners, and other factors that are not controlled by the City. In addition, and as outlined above, developers may use Density Bonus state law, which would allow for additional units. However, higher construction costs and increases in financing costs could reduce the anticipated housing production.

# Affordable Housing Policies and Potential Production

## Recent and Current Production

Citywide income restricted affordable units made up approximately 12.6% of housing units completed between 2015 and 2022.<sup>32</sup>

## Potential Production

- As of 2022, there were 11 housing development projects that had been entitled along San Pablo Avenue but not yet issued Certificates of Occupancy. These buildings will provide 589 housing units, including an estimated 111 restricted affordable units (19.7%). An additional 2,029 units are under plan review.<sup>33</sup>
- The City's Housing Element identifies an additional 51 opportunity sites in the Study Area that could accommodate 2,023 housing units. If these projects use state density bonus at the rate that has been typical of recent projects in Berkeley, the City may see development of over 2,700 housing units.
- The approved and anticipated sites along San Pablo Avenue could accommodate approximately 5,349 housing units including 824 deed-restricted affordable units (15.4% of the total). See **Table 4**.
- If a regional housing bond is approved in November 2024, a higher share of Study Area sites are likely to be developed as 100% affordable housing projects.
- In addition to onsite affordable units, this level of development could generate roughly \$20 million in in lieu fees which is sufficient to fund about one-third of the local subsidy needed to support the projected number of 100% affordable buildings in the Specific Plan Area.

**Table 4: Potential Housing Production**

|                                                                             | Total Units | 100% Affordable | Onsite Affordable | % Affordable |
|-----------------------------------------------------------------------------|-------------|-----------------|-------------------|--------------|
| Approved                                                                    | 589         | 63              | 52                | 19.7%        |
| Permit Applications, etc                                                    | 2,029       | 110             | 192               | 14.9%        |
| Housing Element Opportunity Sites (including potential density bonus units) | 2,731       | 148             | 258               | 14.9%        |
| Total All Sites                                                             | 5,349       | 321             | 503               | 15.4%        |

Source: City of Berkeley, Annual Progress Reports 2018-2022 and 6<sup>th</sup> Cycle Housing Element, Street Level Advisors calculations.

**Berkeley Affordable Housing Preference Policy** – In July 2023, Berkeley adopted a policy to provide a preference for current residents and descendants of residents of the city's historically redlined areas. Households with ties to redlined areas receive priority in leasing new City funded or regulated affordable units.

<sup>32</sup> CA Department of Housing and Community Development, 5th Cycle RHNA Progress Report.

<sup>33</sup> City of Berkeley Annual Progress Reports to the California Department of Housing and Community Development 2018-2022.

# Commercial Displacement Risk

## Existing Commercial Conditions

**Local and Regional Commercial Tensions** – Berkeley’s Office of Economic Development’s (OED’s) 2016 Economic Development Work Session identified two primary commercial tensions on San Pablo Avenue.

- Local and regional interests for transportation and land use compete for space.
- Demand for housing development in the area threatens the existing concentration of auto businesses along San Pablo Avenue.

Local interests for the corridor emphasize better walkability, multi-modal transportation options, a broad range of businesses, and housing infill development. Regional interests support car access, street parking, and clusters of specialized businesses not widely available in other parts of Berkeley. This assessment suggests that those tensions continue in the Specific Plan Area.

**Pandemic and Broader Economic Impacts** – Nationally, small businesses closed at unprecedented rates from February to April of 2020. African-American, Latinx, Asian, immigrant, and women business owners were disproportionately affected, with African-American businesses owners most impacted.<sup>34</sup> Since then, many small businesses have re-opened or opened for the first time. During 2023, business owners cite inflation, supply chain effects, and filling open jobs as among their primary concerns.<sup>35</sup> Given this context, locally owned businesses on San Pablo Avenue are likely facing a baseline of vulnerability to displacement and/or closure given the pandemic, supply chain shifts, and inflation; businesses owned by people of color, immigrants, and women are likely feeling these pressures more acutely.<sup>36</sup>

**Vacancy Rates** – According to OED data, San Pablo Avenue’s ground floor commercial vacancy rate (by square footage) doubled from 5.5% in 2017 to 10.8% in 2022. This rate increased most significantly, by three percentage points, from 2020 to 2021 and then again from 2021 to 2022, likely due to the impacts of the COVID-19 pandemic. This vacancy rate was notably higher than other commercial corridors such as Solano (3.7%), Elmwood (7.7%), and North Shattuck (4.4%), but similar to University (12.8%), Downtown (11.9%) and South Berkeley (11.8%) neighborhoods. By November 2024, the citywide ground floor commercial vacancy rate decreased from previous years, specifically San Pablo Avenue’s vacancy rate dropped to 7.1%, which was lower compared to Downtown Berkeley (10.8%) and Telegraph Avenue (9.9%)<sup>37</sup>

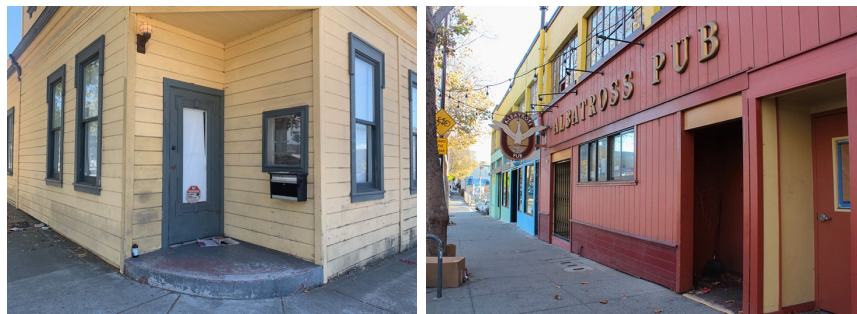


Figure 17. High-profile commercial closures include, from left to right, Ohmega Salvage and Albatross Pub.

<sup>34</sup> Fairlie, Robert. “The Impact of Covid-19 on Small Business Owners: Evidence of Early-Stage Losses from the April 2020 Current Population Survey.” 05, 2020.

<sup>35</sup> National Federation of Independent Business. Small Business Optimism Index, October 2023.

<sup>36</sup> Fairlie, Robert. “[The Impact of Covid-19 on Small Business Owners: Evidence of Early-Stage Losses from the April 2020 Current Population Survey](#).” 05, 2020.

<sup>37</sup> City of Berkeley. [Berkeley Economic Dashboards Update](#). Special Meeting – City Council Work session, Feb 26, 2025, page 3. Accessed August 29, 2025

## Locally Owned, Brick and Mortar Businesses and Associated Displacement Risks

The inventory of businesses on San Pablo Avenue was constructed based on the City of Berkeley's Business License database and a site visit conducted on August 3, 2023, along San Pablo Avenue. Because the scope of this analysis is limited to displacement risk and is not a broad market analysis, the inventory focuses on the narrower universe of businesses that are more likely to face consequential displacement pressures: locally owned businesses with brick-and-mortar storefronts on the corridor. These businesses were then classified according to type (see **Figure 20** for a map of these ground floor businesses) and according to displacement risk (dependence on car access and street parking; key business-owner demographics; historic and cultural significance; and accessibility to lower-income residents). A summary of key findings is below.

**Locally Owned<sup>38</sup>, Brick and Mortar Business Characteristics:** Because the City does not collect demographic data about local business owners, this inventory used business-owner information from the active business license dataset, business websites, news articles, LinkedIn, Instagram, and Yelp to make exploratory conclusions about business-owner demographics; this assessment did not include a survey that asked business owners to share their demographic characteristics. Preliminary findings include:

- 90% of brick and mortar businesses on the corridor are likely locally owned businesses;
- 21% of those businesses are likely owned by women;
- 41% are likely owned by people of color; and,
- 28% likely hold some form of historic or cultural significance.

Given that a significant number of businesses on the corridor are likely owned by women and/or people of color and they may be facing baseline pressures coming out of the pandemic and due to inflation and additional structural barriers to capital, contracts, and market access, there is an opportunity during the Specific Plan process to direct additional time and attention to these businesses to understand how to best support their success and longevity on the corridor.

**Commercial Parking Needs** – Businesses along the street rely on customers being able to access the corridor via car and street parking. Several local businesses, such as Tokyo Fish Market, Emerald City Gowns, East Bay Nursery, and Cafe Leila, have small parking lots specific to those businesses, but most do not. Prior City assessments have identified auto and home improvement businesses as particularly dependent on street parking. Based on active business license data, auto businesses comprise 20% of brick and mortars and home improvement businesses make up 12% of brick and mortars. This assessment also estimates that businesses that A) are specialized and may need to attract customers from a broader geographic radius or that B) may be particularly difficult to shift to a customer base that relies on walking, biking and/or public transit (e.g., a customer base of families with children) are especially dependent on car access and street parking. All told, this category of businesses that are likely to be especially reliant on car access and street parking includes 35% of locally owned, brick and mortar businesses on the corridor.

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<sup>38</sup> Whether businesses were locally owned was determined primarily according to owner information in the City's business license database and business websites and social media platforms. Local ownership means that the owner is based anywhere in the nine-county Bay Area.



Figure 18. Examples of businesses with small off-street parking lots, from left to right, Tokyo Fish Market and East Bay Nursery.

**Auto Businesses** – Auto businesses are prevalent and dispersed across the corridor. Many of these businesses opened in the 1970s and 1980s, although one appears to go back as far as 1946. There is an opportunity for the Specific Plan to evaluate the desire and needed policies for auto businesses to remain on the San Pablo corridor, particularly as auto technology continues to evolve.

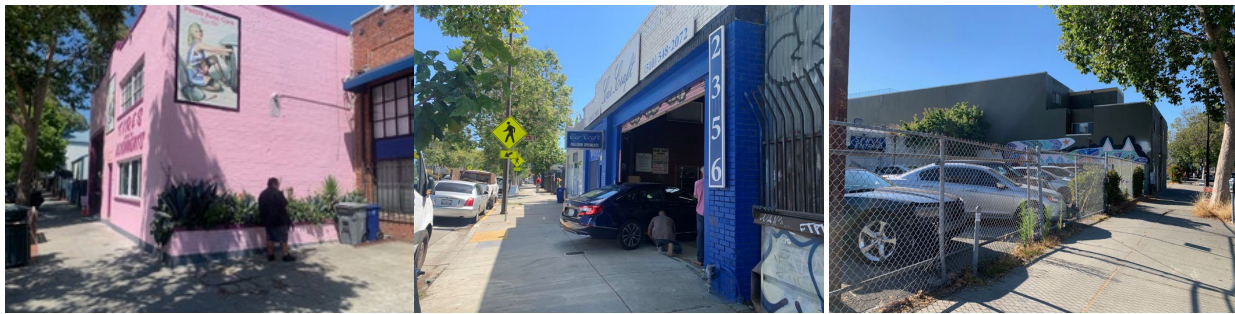


Figure 19. Example auto businesses include, from left to right, Patti's Auto Care, Car Craft Collision Specialists, and Used Car Sales.

**Businesses potentially accessible to low-income residents** – This inventory anecdotally identified businesses that meet the criterion of offering a lower relative price point for their goods or services and finds that approximately 10% of locally owned brick and mortar businesses may be particularly accessible to low-income residents in the area. These businesses were identified because they a) are a type of business that typically markets to lower-income residents (e.g., laundromat, corner store, to-go restaurant); b) they were described in online reviews as offering lower prices than their competitors; or c) they offer lower prices than similar businesses on the corridor (e.g., a vegetarian egg breakfast costs \$10.95 vs. \$19). The businesses identified include retail stores, a laundromat, restaurants, grocery stores, beauty salons, and several corner stores. As more market-rate housing is built on San Pablo Avenue, these businesses may face increased displacement pressures if the overall population becomes higher-income and rents and property taxes increase.

## Potential Future Changes to Supply of Commercial Space

Current zoning does not require ground floor commercial space outside of commercial nodes. But the zoning code does allow extra height for mixed-use buildings along the corridor, and this appears to be encouraging developers to propose mixed-use projects along the corridor, with a few exceptions. The zoning code requires and encourages ground floor commercial space at the intersection of major transit corridors within commercial nodes. Discussions with developers, leasing agents, and real estate professionals indicate that a combination of rental costs, general retail and business conditions, and physical design of spaces (e.g., configuration and size of spaces, service and utility design) constrain the ability to lease these new commercial spaces.



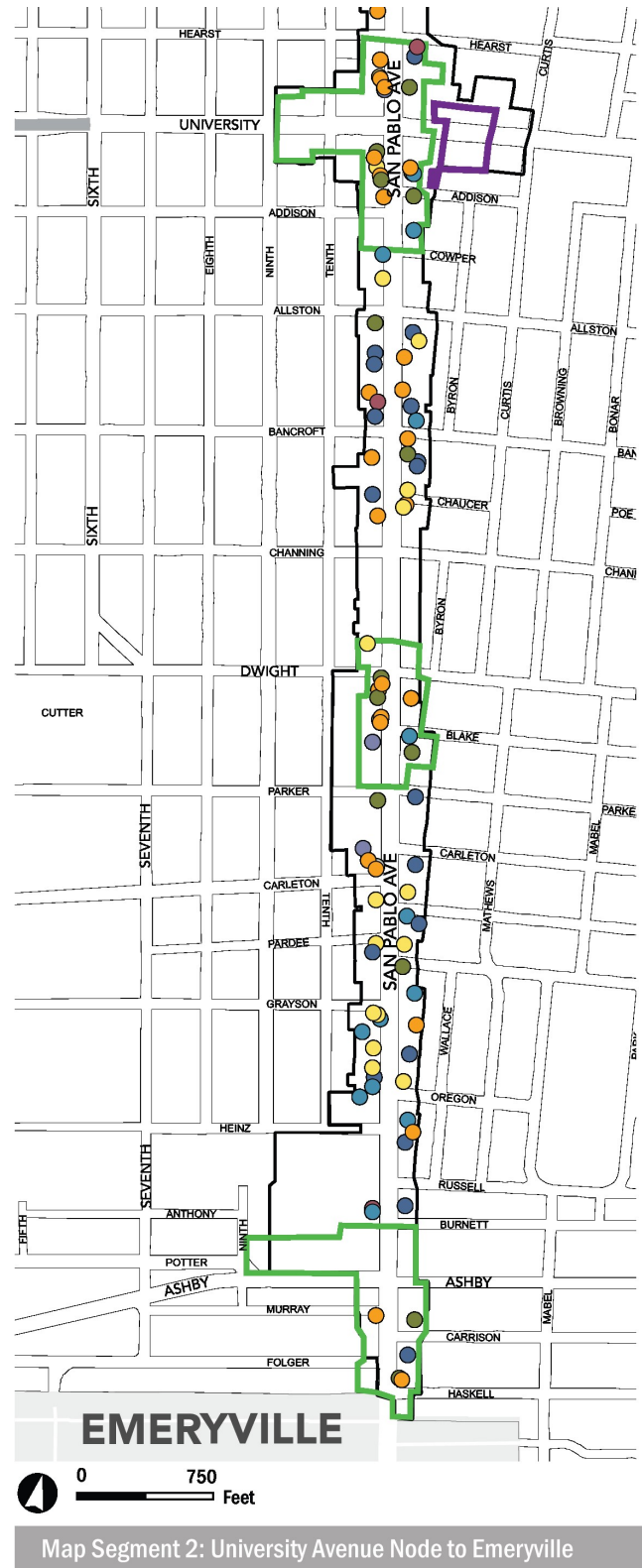
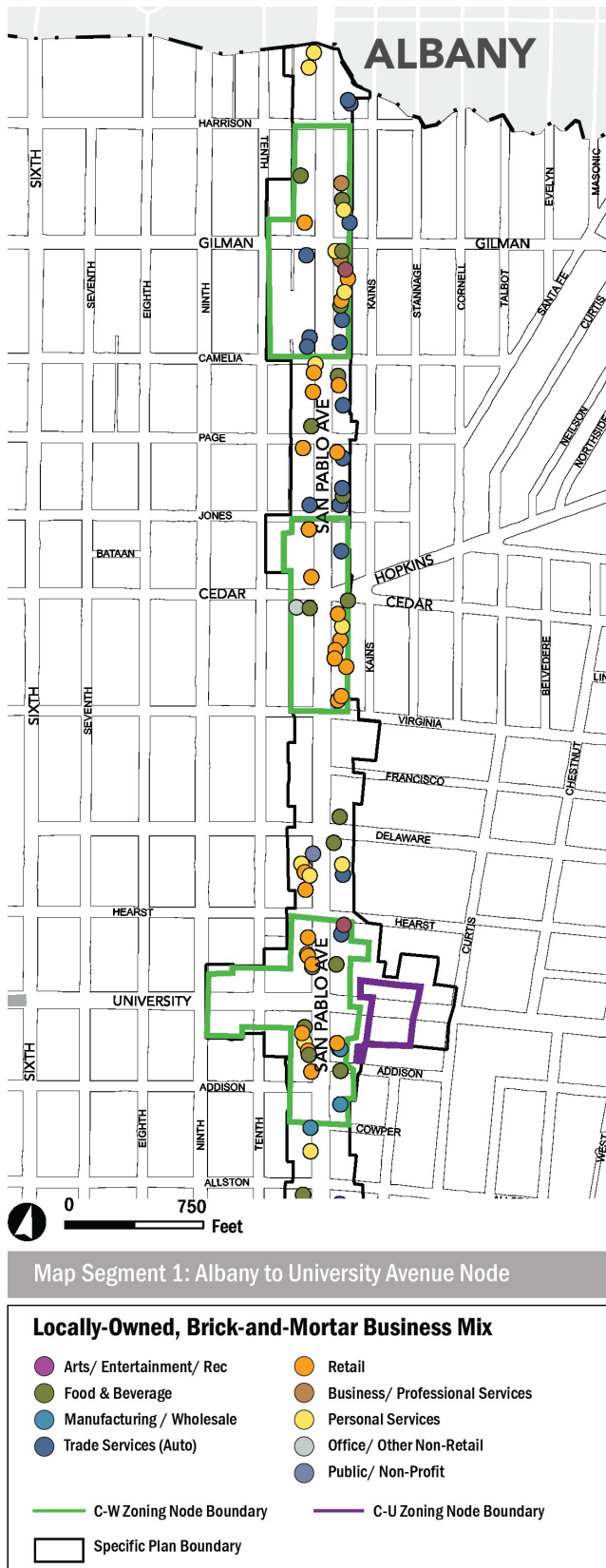


Figure 20. Mix of ground floor locally owned, brick and mortar businesses. Source: Street Level Advisors and Gordon Consulting, 2023.

## Public Realm Assessment

The public realm along San Pablo Avenue is defined by the qualities of streetscape - the sidewalk area within the public right of way and the improvements and activities that take place there. The context along the street affects the quality and experience of the public realm. The context includes the buildings, parking lots, and other frontages next to the street and the activities that occur there. Also, the conditions and quality of the roadway, median, and parking/loading lanes of San Pablo Avenue have an impact on the quality and experience of the public realm.

The public realm along San Pablo Avenue varies in quality and character See **Figure 21**. The Specific Plan process will explore options for common elements throughout the corridor, such as trees, and the potential for segment or district improvements. Places could have distinct decorative features like pedestrian lighting, artwork, and planting to create an inviting atmosphere. Currently, some uses and buildings provide distinct features that enhance the public realm, such as restaurants, cafes, and small businesses. These create a more engaging and active public realm.

Stretches with poor sidewalk conditions and landscaping that is not maintained, paired with vandalized or vacant building frontages or high fencing, contrast with the areas of activity. Those locations have less foot traffic and fewer parked cars.



Figure 21. The public realm along San Pablo Avenue varies in quality and character.

## Streetscape Conditions

### Landscape

The street trees along the sidewalks and landscaped medians are an asset for San Pablo Avenue's public realm. See **Figure 22**. However, there are gaps in the tree canopy and maintenance issues with trees and tree wells along the sidewalks.



Figure 22 Mature London Plane trees define the character of San Pablo Avenue.

In addition, there is limited landscaping along most of the sidewalks. See **Figure 23**. Some other major streets in Berkeley have business improvement districts that manage installation and maintenance of landscape, but San Pablo Avenue does not have any improvement districts.





Figure 23. The condition of tree wells varies throughout the corridor.

## Lighting

Existing lighting along the street primarily illuminates the roadway and intersections. Nighttime sidewalk lighting levels tend to be low between intersections, unless storefront uses, buildings, or pedestrian lights at bus stops illuminate the sidewalk. See **Figure 24**. The 2004 Improvement Plan identified this issue and set new lighting standards. While there has been some implementation of the standards in front of new development, there have not been recent publicly funded pedestrian lighting improvements along San Pablo Avenue. The Alameda CTC Safety Enhancement Project will upgrade lighting at some improved bus stops and pedestrian crossings.



Figure 24. Existing roadway and pedestrian lighting.

## Street Furnishings

Street furnishings such as benches and trash receptacles are almost exclusively at bus stops. There are some businesses that provide outdoor “café” seating for their patrons. See **Figure 25**.

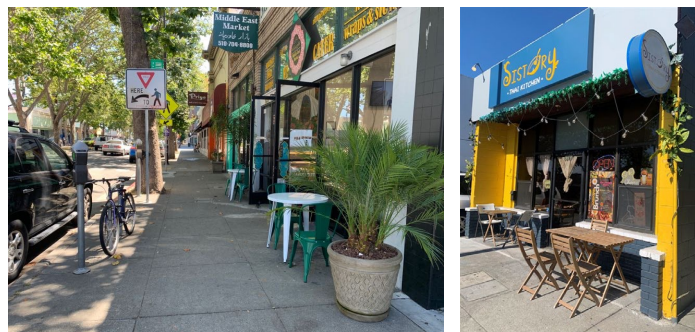


Figure 25. Existing private outdoor “café” seating.

## Sidewalk

Sidewalk conditions are variable. There are locations where adjacent parcels are vacant, underutilized, or for other reasons trash, leaf, and debris clutter the sidewalk. There are also places where the sidewalk needs repair. Typically, when development occurs adjacent sidewalks are reconstructed by the developer. See **Figures 26, 27, and 28**. There are several locations along the street where the sidewalks are new and are in good condition. The two Alameda CTC

projects will be making some sidewalk improvements, including widened sidewalks with bus bulbs into the parking lane at bus stops served by AC Transit Rapid service, see further discussion in the Mobility section.



Figure 26. Existing 13 ft. wide sidewalk.



Figure 27. Many existing sidewalks are in poor condition.



Figure 28. Some buildings provide additional sidewalk space.

## Building and Site Frontages

There is a wide variety of frontage conditions along San Pablo Avenue today from tall fences or blank facades to active “storefront” restaurants and sidewalk tables.

There are older buildings that are vacant, several of which appear to not be actively on the market to be leased. Some, but not all, older buildings along the street have articulation, building form, and materials that are visually engaging and include murals. **Figure 29.**

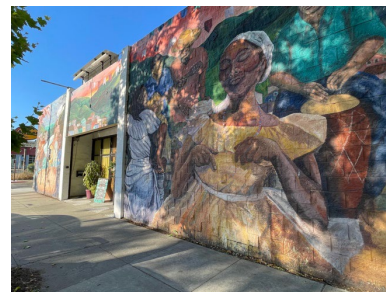


Figure 29. Painted storefronts with murals provide visual interest when the building does not allow for windows and can represent the culture and values of the local community.

Some new developments have contributed to the landscape character of the street by setting back the ground level of the building to provide additional sidewalk and space of landscape, such as the landscape planters at The Jones north of Cedar Street. **Figure 30.** Others like Aquatic at Ashby have a small seating area and a bench and rain shelter built into the additional sidewalk level space. **Figure 31.**



Figure 30. Ground floor setback and planters at The Jones.



Figure 31. Semi-public space with seating and bus stop integrated in the Aquatic at Ashby frontage.



## Parking Lots and Gas Stations

There are locations with larger parking lots or other auto circulation, such as the Solar Car Wash, the REI shopping center parking lot, and the McDonald's, which cater to vehicular movement, as opposed to pedestrians. The sidewalk frontages of these sites are typically not supportive of pedestrian activity along the street.

**Activity and use of underused spaces.** In some locations food trucks and trailers utilize former and current gas station locations as semi-permanent locations, which include makeshift outdoor seating. **Figure 32.** These illustrate the potential for active use of underutilized parking lots even if the parking is more heavily used on particular days or seasons.



Figure 32. Food trucks and trailers use underutilized parking and sites.

## Safety

Conditions along the street can create an environment that feels unsafe. Assessment of crime data from the Berkeley Police Department from August 2022 to August 2023 shows a total of 578 incidents in the Specific Plan Area, which makes up 5 percent of the overall crime incidents in Berkeley during that time. Improved lighting at night, improvements to the general condition of the public realm, and development that supports activity along the street can change the impression that San Pablo Avenue is a particularly unsafe place.

## Community Life along San Pablo Avenue

Community life describes the condition of people being in a public space and feeling part of and having the opportunity to interact with other community members who use the space. The physical constraints of the street and development patterns along San Pablo Avenue restrict public space to the typical 13-foot-wide sidewalks along the street.

## Designated Nodes and Clusters of Activity

San Pablo Avenue features clusters of retail and other uses adjacent to five major intersections—Gilman Street, Cedar Street, University Avenue, Dwight Way, and Ashby Avenue—these are nodes of activity, each presenting a distinct mix of businesses and urban form that supports that activity. See **Figure 34** (Method of assessment, see **Table 5**). The 1993 West Berkeley Plan identified these locations as Commercial Nodes, and other public policies and regulations have been shaped to reinforce these nodes. The current zoning ordinance also provides some special standards, as discussed in the Land Use Planning policies section above. These have been successful to a greater or lesser extent in each node, and the extent of success has been affected by economic realities and property owner decisions.

## Semi-Public Spaces

While there are no public parks along San Pablo Avenue, there are small enclaves of semi-public space, often as private outdoor spaces associated with restaurants and cafés. Also, some parking lots or other paved areas are used by adjacent businesses. Some new developments have included public benches or other elements in ground floor setbacks that are also semi-public.

Table 5: Methodology of assessing frontage activity along San Pablo.

|                                                                                          | Sidewalk                                | Building Frontage                                                                                            | Other                                                                         |
|------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| <b>Frontages that activate the sidewalk</b>                                              | Maintained and landscaped if any        | Well maintained brick-and-mortar with pedestrian engaging features, such as storefront windows, murals, etc. |                                                                               |
| <b>Inactive Frontages that support some aspects of a comfortable walking environment</b> | Maintained and landscaped if any        | Landscape buffered setback, murals with minimal or no visible activity.                                      | Maintained, landscaped buffered parking lots, or yards of auto-oriented uses. |
| <b>Inactive Frontages</b>                                                                | Poorly maintained and landscaped if any | Poor maintained, visibly damaged and/or looks unoccupied/ abandoned.                                         | Parking lots and yards without landscape buffer.<br>Fenced vacant land        |

Source: CD+A, 2023

## Community Events and Social Engagement

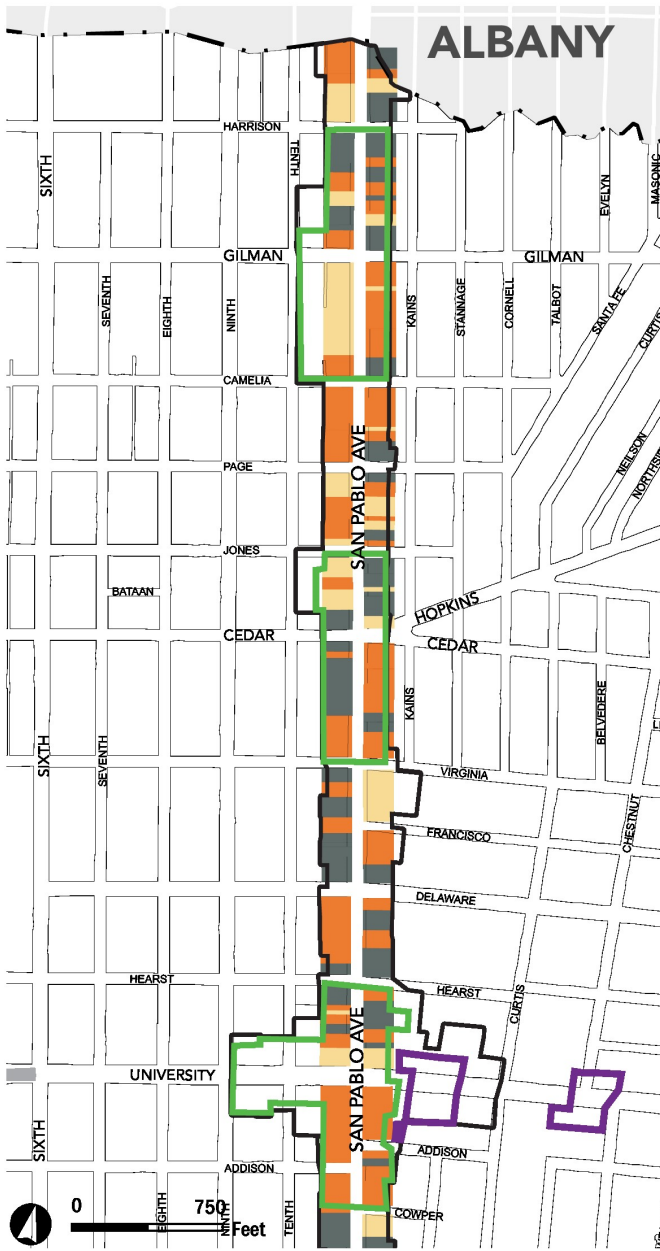
There are existing organizations in the area that do provide community gathering venues, like Brasarte and Ashkenaz. Also, there are existing models for short term use of streets as public spaces – the SF Bay Brazilian Day & Lavagem festival, **Figure 33**, events during street closures in the Gilman District, and neighborhood street parties on blocks of streets that cross San Pablo Avenue.



Figure 33. 1901 San Pablo Avenue houses Brasarte and other Brazilian culturally oriented groups. The center and left photos show the 2023 Brazilian Day & Lavagem event on the block of Hearst St just east of San Pablo Avenue.

## Study Area Community Spaces

The limited sidewalk or other public space within the San Pablo Avenue right of way make it make it difficult to create community gathering spaces within the Specific Plan Area. While opportunities may exist to create some smaller community spaces on side streets, residents and users of the Specific Plan Area are likely to rely on community space in the surrounding Study Area. The Specific Plan process can define ways to improve connections between the Specific Plan Area and surrounding parks, schools, and other community spaces can be improved.



Map Segment 1: Albany to University Avenue Node

**Frontage Activity**

- Frontages that Activate the Sidewalk and Support a Comfortable Walking Environment
- Inactive Frontages that Support Some Aspects of a Comfortable Walking Environment
- Inactive Frontages that do not Support a Comfortable Walking Environment

**Commercial Nodes**

- C-W Zoning Boundary
- University Ave Node Area
- Study Area
- Specific Plan Boundary



Map Segment 2: University Avenue Node to Emeryville

Figure 34. Observation of Frontage Activity along the corridor. Source: City of Berkeley. CD+A. 2023.

# Resilience and Climate Adaptation Conditions and Plans

## Existing Plans

**Local-Hazard Mitigation Plan (LHMP), 2019** – The LHMP serves to assess current hazards and vulnerabilities, outlines a five-year Mitigation Strategy to reduce vulnerabilities through various actions, and ensures eligibility for pre-disaster mitigation grants and post-disaster federal and state recovery funding by meeting Federal Disaster Mitigation Act of 2000 requirements<sup>39</sup>.

- **Risk of Liquefaction:** During a major earthquake event, much of the study area and westernmost parts of the city are at risk of liquefaction. Liquefaction can destroy pavements and dislodge foundations.
- **Potentially Seismically Vulnerable Buildings:** The LHMP discusses the Retrofit Grants Program and the updating of the city's inventory of Seismically Vulnerable Buildings in 2018. The update added 1,047 potentially vulnerable building that had not been previously identified. This increase was mainly due to the expansion of building construction types that were considered at risk. A number of the seismically vulnerable buildings are in the San Pablo Specific Plan Area, see **Figure 35**. This map reflects properties that are eligible for the Cal OES/FEMA Grant Program.
- **Floods:** Creek flooding in Berkeley has the potential to affect about 675 structures, mainly in the western, industrial area of the city. Storm drain overflow creates localized flooding in many intersections in Berkeley. FEMA flood risk maps illustrate the risks in the western industrial area. While this is within the Study Area, the flood risk maps indicate a very small area of flood risk potential on two properties in the Specific Plan area adjacent to Codornices Creek and the city of Albany. The LHMP also describes areas of the city that are at risk to localized flooding from storm drain overflow. San Pablo Avenue within the Potter Watershed between Ward and Murry Street has the potential to experience storm drain overflow.<sup>40</sup>
- **Hazardous Materials Transportation:** San Pablo Avenue is one of the streets in Berkeley that is a hazardous materials transportation route. Collisions with trucks carrying dangerous materials have occurred and can be expected to occur in the future.
- **Climate Change:** Like regions across the globe, the San Francisco Bay Area is experiencing negative impacts of climate change. Berkeley's Climate Action Plan identifies the City's plan for emissions reductions, known as climate change mitigation.
- **Hazardous Material Release:** The City has identified 15 facilities in Berkeley with sufficiently large quantities of toxic chemicals to pose a high risk to the community. Eleven of those 15 facilities are distributed in the most western parts of the Study Area, with 10 located south of University Avenue. Natural hazards identified in the plan could trigger the release of hazardous materials and put nearby residents at risk of exposure.

**Climate Action Plan (CAP)** – The plan, adopted in 2009, represents key strategies for achieving a sustainable future in Berkeley. Within transit corridors such as the San Pablo Avenue corridor, the City's CAP advocates for smart growth and increased 'walkability', 'bikeability', and public transit ridership.

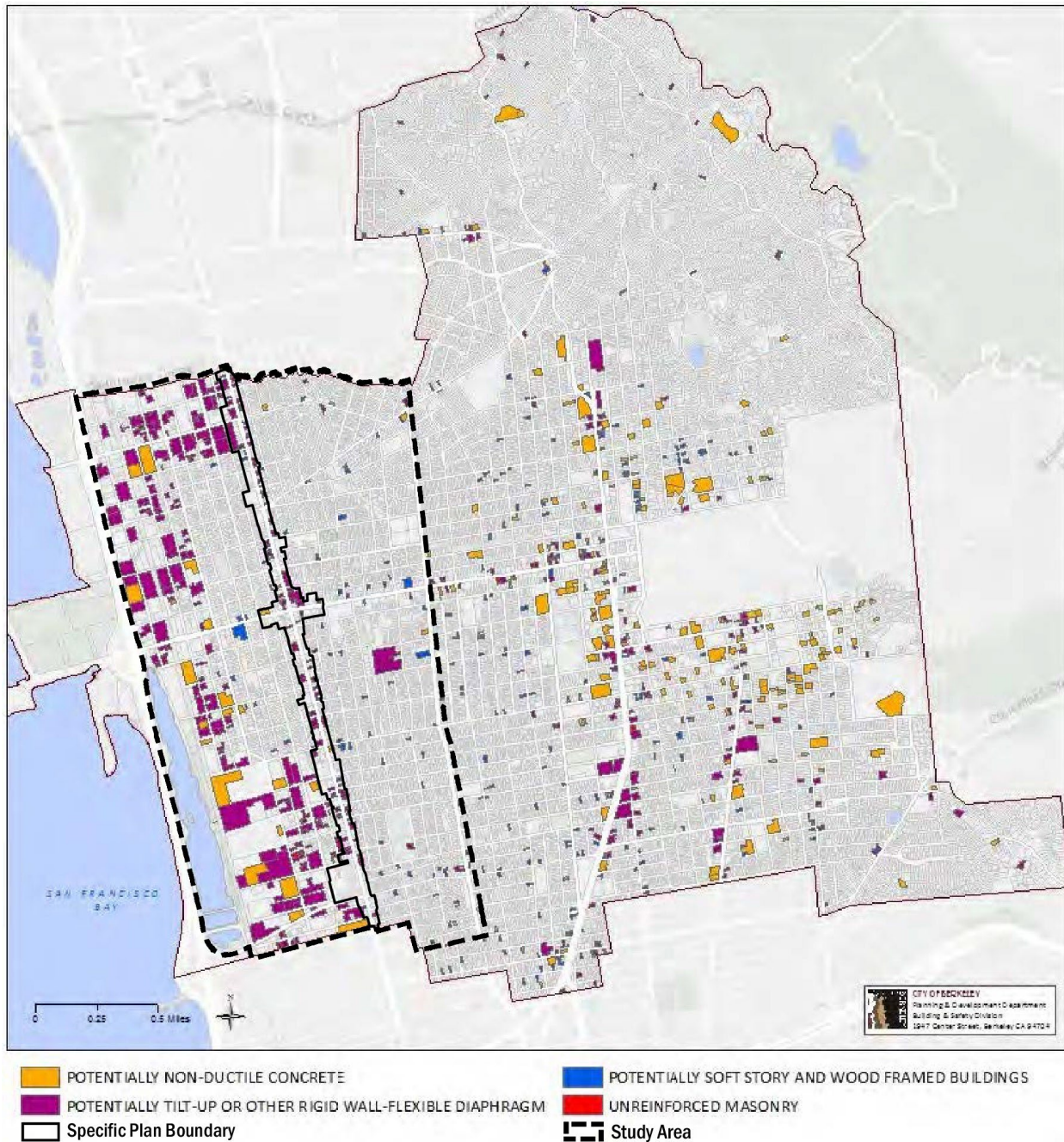
- General Plan Open Space and Recreation:
  - As part of the City of Berkeley's General Plan, the City adopted the Open Space and Recreation Element in 2002. The Open Space and Recreation Element applies the following policies to the various parks and other natural areas in the Study Area, which include Strawberry Creek Park, George Florence Park, and San Pablo Park.

<sup>39</sup> See Federal Emergency Management Agency (FEMA) [Regulations and Guidance](#) for further information.

<sup>40</sup> City of Berkeley. "2019 Local Hazard Mitigation Plan", 12.10.2019, p.9. <https://berkeleyca.gov/sites/default/files/2022-01/Local-Hazard-Mitigation-Plan-2019.pdf>



- Policy OS-4 Working with Other Agencies: Work with the Berkeley Unified School District, the University of California, the East Bay Municipal Utility District, and the East Bay Regional Park District to improve, preserve, maintain, and renovate their open space and recreation facilities.



35. Updated Inventory of Seismically Vulnerable Buildings (2018). Source: 2019 Local Hazard Mitigation Plan.

- Policy OS-7 Serving Disadvantaged Populations: Within the context of open space resource allocations for new or expanded facilities, give high priority to providing additional facilities for populations that are disadvantaged or underserved.
- Policy OS-10 Access Improvements: Improve transit, bicycle, disabled, and pedestrian access to and between open space and recreation facilities.



**Urban Tree Canopy** – Berkeley’s tree canopy encompasses approximately 38,000 trees. The Climate Action Plan recognizes an inequitable distribution of urban tree canopy in Berkeley, with fewer trees located in the West and South Berkeley neighborhoods, which includes the Study Area. This disparity in the tree canopy is graphically represented in **Figure 36**. The 2023 Climate Action Plan Update report recognizes this existing condition and states that the city will plant 1,000 new street trees along streets in West and South Berkeley neighborhoods over the next two years.

In contrast to the overall distribution throughout the city, San Pablo Avenue displays a relatively even distribution and dense tree coverage when compared to other corridors like University Avenue. This is due to three rows of trees (along both sidewalks and in the median of San Pablo Avenue) that are relatively consistent throughout the corridor. This is the result of efforts over the past 10 or so years to fill in gaps in the tree canopy along San Pablo Avenue.

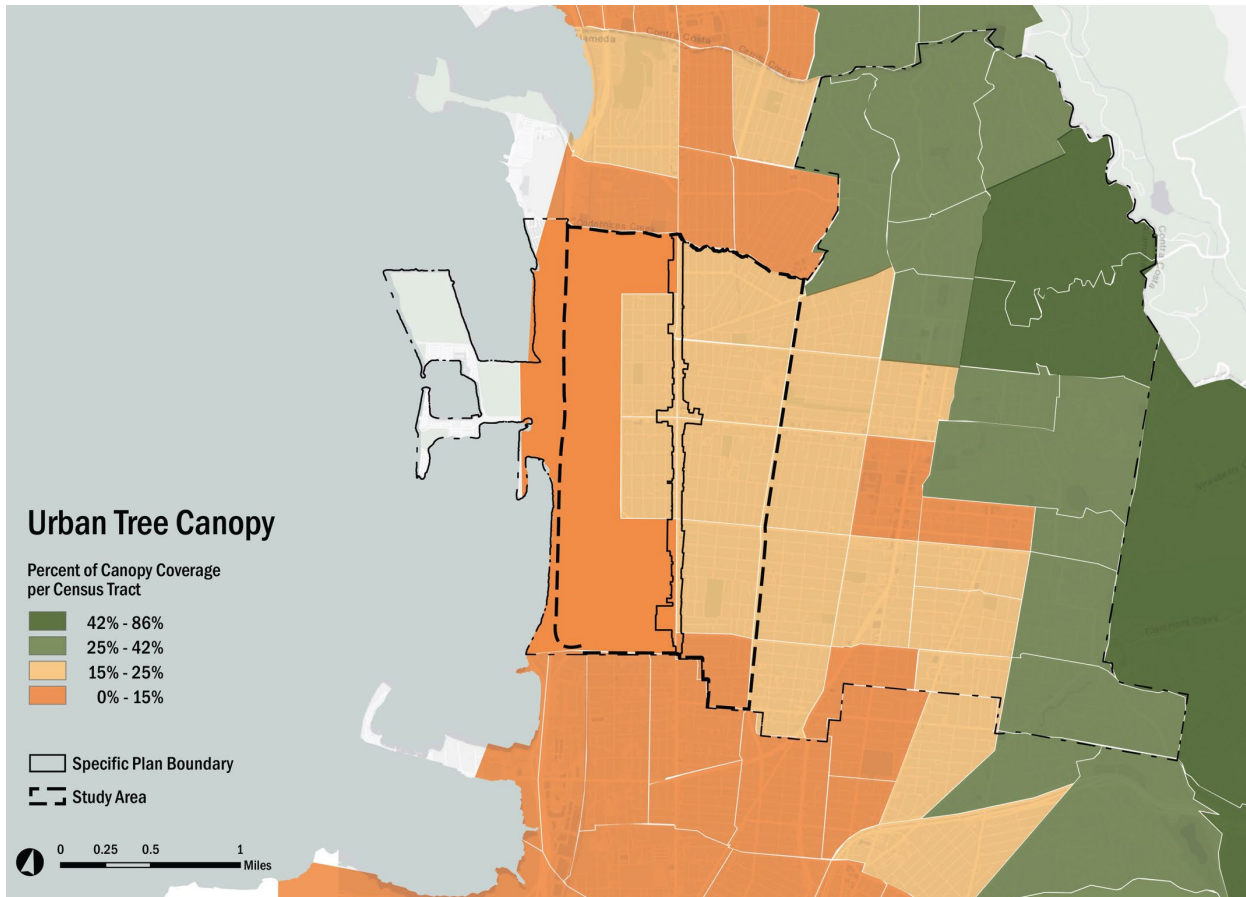


Figure 36. Urban Tree Canopy - percent coverage per Census Tract. Source: EarthDefine, USDA Forest Service, California Department of Forestry and Fire Protection, 2018.

## Potential Future Opportunities

**Transit-Oriented Community (TOC) Designation** – In 2022, the Metropolitan Transportation Commission (MTC) adopted a TOC Policy to boost the overall housing supply and increase residential densities in transit-rich areas of the Bay Area; spur commercial development near transit hubs; promote bus transit, walking, biking and shared mobility; and foster partnerships to create transit-oriented communities where people of all income levels, racial and ethnic backgrounds, ages and ability levels can live, work and thrive. Future MTC One Bay Area Grant (OBAG) funding cycles will consider funding revisions to prioritize investments in TOCs.

Although not currently designated, the San Pablo Specific Plan Area is a potential future TOC given its mix of land uses including housing, jobs, services, and shopping with close proximity to transit. While only a small portion of the

Specific Plan area is within proximity to the types of existing transit that meet the requirements for TOC designation, see **Figure 37**, the City could choose to “opt in” the area as a TOC. The intersection of University and San Pablo Avenues is within ½ mile of the Berkeley Capitol Corridor Station (Tier 4 TOC designation). Should AC Transit implement bus rapid transit (BRT) service on San Pablo Avenue, the Specific Plan Area would qualify as a Tier 3 TOC. This designation could provide opportunities for the City to receive targeted funding for public improvements in the Specific Plan Area. To be eligible for OBAG 4 and other discretionary MTC funds that may be linked to TOC Policy compliance, the City would need to demonstrate compliance with TOC requirements prior to the adoption of OBAG 4 funding requirements which is expected to occur in 2026.<sup>41</sup>

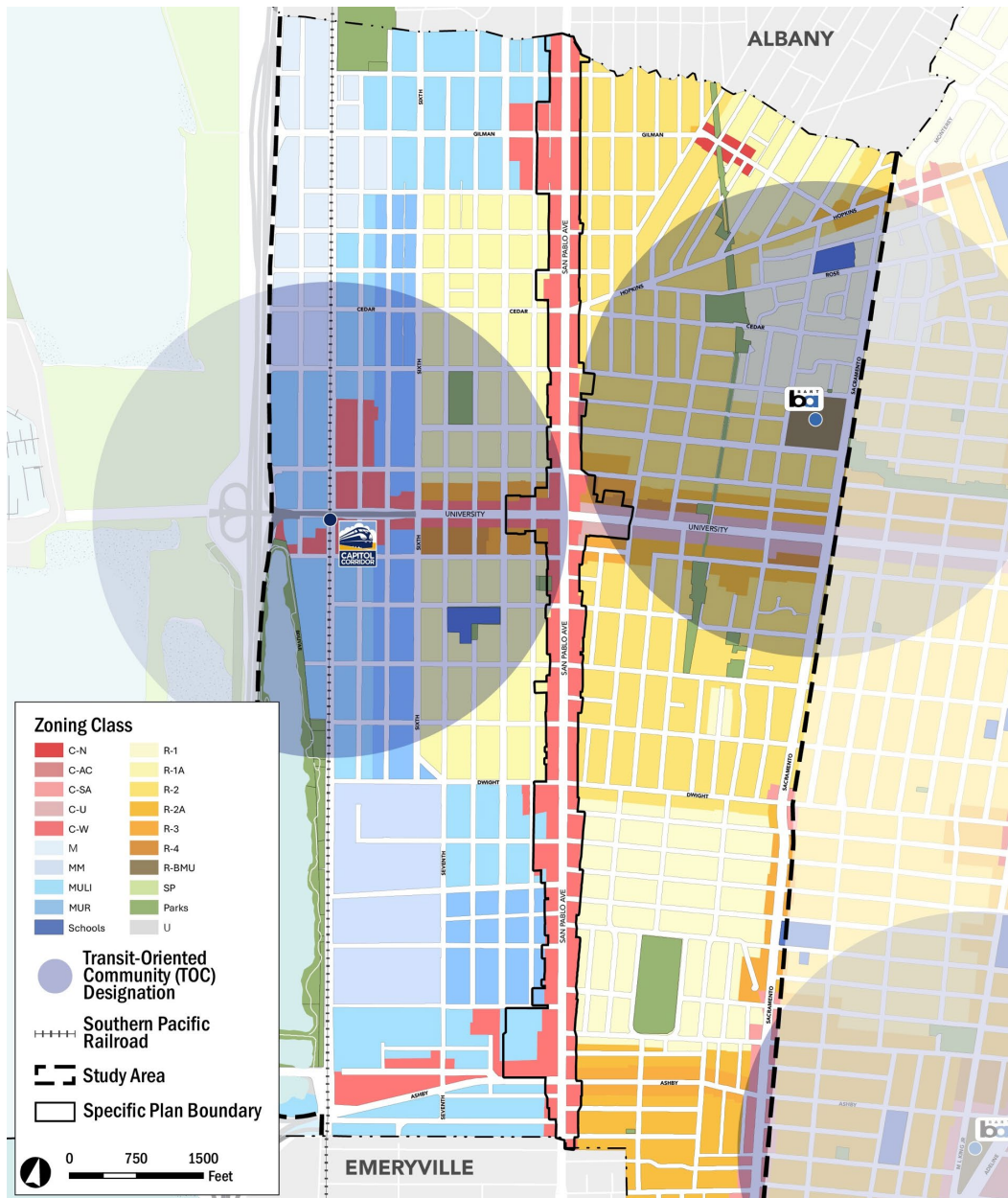


Figure 37. Transit Oriented Community (TOC) Designation. Source: City of Berkeley, MTC, 2023.

<sup>41</sup> More information about MTC's TOC policy can be found at <https://mtc.ca.gov/planning/land-use/transit-oriented-communities-toc-policy>.

Appendix A.1

Table 1: Residential District Development Standards

| Zoning District                 | Min Lot Area (sq. ft.) | Density (sq. ft.) Min Lot Area Per Unit | Height Limit     |                              |                | Yard <sup>3</sup> |       |      |      |             |                      | Maximum Lot Coverage           |                               |                 | Usable Open Space Per Unit (sq. ft.) | Density Assumption for Housing Element Update (du/acre) <sup>7</sup> |
|---------------------------------|------------------------|-----------------------------------------|------------------|------------------------------|----------------|-------------------|-------|------|------|-------------|----------------------|--------------------------------|-------------------------------|-----------------|--------------------------------------|----------------------------------------------------------------------|
|                                 |                        |                                         | Avg. Height      | Max. Height (height overlay) | Stories (#)    | Story             | Front | Rear | Side | Street Side | Building Separati on | Main Building Height (stories) | Interior and Through Lots (%) | Corner Lots (%) |                                      |                                                                      |
| R-1 Single Family               | 5,000                  | —                                       | 28' <sup>1</sup> | 35'                          | 3              | All               | 20'   | 20'  | 4'   | 4'          | —                    | 1 to 3                         | 40                            | 40              | 400                                  | 6                                                                    |
| R-1A Limited Two Family         | 5,000                  | —                                       | 28' <sup>1</sup> | 35'                          | 3              | 1                 | 20'   | 20'  | 4'   | 4'          | 8' <sup>6</sup>      | 1                              | 40                            | 45              | 400                                  | 15                                                                   |
|                                 |                        |                                         |                  |                              |                | 2                 | 20'   | 20'  | 4'   | 4'          | 12' <sup>6</sup>     | 2                              | 40                            | 45              |                                      |                                                                      |
|                                 |                        |                                         |                  |                              |                | 3                 | 20'   | 20'  | 4'   | 4'          | 16' <sup>6</sup>     | 3                              | 40                            | 45              |                                      |                                                                      |
| R-2 Restricted Two Family       | 5,000                  | 2,500                                   | 28' <sup>1</sup> | 35' <sup>2</sup>             | 3              | 1                 | 20'   | 20'  | 4'   | 10'         | 8'                   | 1                              | 45                            | 50              | 400                                  | 20                                                                   |
|                                 |                        |                                         |                  |                              |                | 2                 | 20'   | 20'  | 4'   | 10'         | 12'                  | 2                              | 40                            | 45              |                                      |                                                                      |
|                                 |                        |                                         |                  |                              |                | 3                 | 20'   | 20'  | 6'   | 10'         | 16'                  | 3                              | 35                            | 40              |                                      |                                                                      |
| R-2A Restricted Multiple Family | 5,000                  | 1,650                                   | 28' <sup>1</sup> | 35' <sup>2</sup>             | 3              | 1                 | 15'   | 15'  | 4'   | 6'          | 8'                   | 1                              | 45                            | 50              | 300                                  | 25                                                                   |
|                                 |                        |                                         |                  |                              |                | 2                 | 15'   | 15'  | 4'   | 8'          | 12'                  | 2                              | 40                            | 45              |                                      |                                                                      |
|                                 |                        |                                         |                  |                              |                | 3                 | 15'   | 15'  | 6'   | 10'         | 16'                  | 3                              | 35                            | 40              |                                      |                                                                      |
| R-3 Multiple Family             | 5,000                  | — <sup>3</sup>                          | 35'              | 35' <sup>10</sup>            | 3              | 1                 | 15'   | 15'  | 4'   | 6'          | 8'                   | 1                              | 45                            | 50              | 200 <sup>5</sup>                     | 40                                                                   |
|                                 |                        |                                         |                  |                              |                | 2                 | 15'   | 15'  | 4'   | 8'          | 12'                  | 2                              | 45                            | 50              |                                      |                                                                      |
|                                 |                        |                                         |                  |                              |                | 3                 | 15'   | 15'  | 6'   | 10'         | 16'                  | 3                              | 30                            | 45              |                                      |                                                                      |
| R-4 Multi Family                | 5,000                  | — <sup>3</sup>                          | 35' <sup>8</sup> | 35' <sup>9</sup>             | 3 <sup>4</sup> | 1                 | 15'   | 15'  | 4'   | 6'          | 8'                   | 1                              | 45                            | 50              | 200 <sup>5</sup>                     | 75                                                                   |
|                                 |                        |                                         |                  |                              |                | 2                 | 15'   | 15'  | 4'   | 8'          | 12'                  | 2                              | 45                            | 50              |                                      |                                                                      |
|                                 |                        |                                         |                  |                              |                | 3                 | 15'   | 15'  | 6'   | 10'         | 16'                  | 3                              | 40                            | 45              |                                      |                                                                      |
|                                 |                        |                                         |                  |                              |                | 4                 | 15'   | 17'  | 8'   | 12'         | 20'                  | 4                              | 35                            | 40              |                                      |                                                                      |
|                                 |                        |                                         |                  |                              |                | 5                 | 15'   | 19'  | 10'  | 14'         | 24'                  | 5                              | 35                            | 40              |                                      |                                                                      |
|                                 |                        |                                         |                  |                              |                | 6                 | 15'   | 21'  | 12'  | 15'         | 28'                  | 6                              | 35                            | 40              |                                      |                                                                      |

<sup>1</sup> Up to 35’ allowed with an AUP.

<sup>2</sup> May exceed with an AUP.

<sup>3</sup> No minimum lot area per unit except for Group Living Accommodations (GLA). 1 GLA room for every 350 sq. ft; additional room allowed for any remaining lot area of more than 200 sq. ft.

<sup>4</sup> Main Buildings may exceed 35 ft. and three stories in height, to a height of, but not exceeding, 65 ft. and six stories subject to obtaining a Use Permit.

<sup>5</sup> 200 sq. ft. for each dwelling unit, 90 sq. ft. for each person in a Group Accommodation Room.

<sup>7</sup> As noted on page C-17 of the housing element. These Average Densities are conservative estimates of the number of units that could be developed. Table C-7 in the HEU demonstrates the Average and Maximum Density.

<sup>8</sup> Main Buildings may exceed 35 ft. and three stories in height, to a height of, but not exceeding, 65 ft. and six stories subject to obtaining a Use Permit.

<sup>9</sup> Up to 35’ allowed with an AUP, 65’ and six stories allowed with Use Permit.

<sup>10</sup> Residential Additions max. 16’ or 35’ with an AUP.

Table 2: Commercial and Mixed-Use and Residential Development Standards

| Zoning District       | Max. FAR (Non-Res/MU only) | Max. Height (Com-Res-Only/MU) | Max. Stories (Com-Res-only/MU) | Open Space (SF/unit) (MU/Res. only) | Max. Coverage (Com-Res-Only/MU) | Setbacks <sup>3</sup>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Main Building Separation                                                                                                                                               | Min. Lot Area (SF)      | Density (DU/acre) | Density Assumption for Housing Element Update (du/acre) <sup>7</sup> |
|-----------------------|----------------------------|-------------------------------|--------------------------------|-------------------------------------|---------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------|----------------------------------------------------------------------|
| C-U University Avenue | 2.2-3.0/None               | 36-48’ <sup>1</sup> /36’      | 3-4 <sup>1</sup>               | 200                                 | 100%/40-50%                     | Res/Non-Res. Uses           | <b>Front/street (non-res. fronting on University Avenue):</b> <ul style="list-style-type: none"><li>• Avg 2'</li><li>• 2' at all sidewalk pedestrian entries.</li></ul> <b>Front/street (res. fronting on University Avenue):</b> <ul style="list-style-type: none"><li>• Avg 2'</li><li>• Max 10'<sup>5</sup></li></ul> <b>Front/street (not fronting University Avenue and confronting a non-res. district):</b> No minimum.<br><b>Rear (south side of University Avenue; abutting res. district):</b> Min 10' or 10% of lot depth, whichever is greater, and average of 20' <sup>6</sup><br><b>Rear (south side of University Avenue not abutting res. district):</b> No minimum.<br><b>Rear (north side of University Avenue):</b> per section 23.204.060.D.5, must not cast a shadow at noon more than 20' onto any lot in a residential district as calculated when the sun is at a 29-degree angle above the horizon (winter solstice).<br><b>Interior side:</b> No Minimum<br><b>Street side:</b> 2' average | Res. only projects: <ul style="list-style-type: none"><li>• 1<sup>st</sup> story: 8'</li><li>• 2<sup>nd</sup> story: 12'</li><li>• 3<sup>rd</sup> story: 16'</li></ul> | None/5,000 <sup>2</sup> | None              | 150                                                                  |
|                       |                            |                               |                                |                                     |                                 | Res. Only Uses <sup>8</sup> | <b>Front<sup>9</sup>:</b> <ul style="list-style-type: none"><li>• Avg 2'</li><li>• Max 10'</li></ul> <b>Rear:</b> 15'<br><b>Interior:</b> <ul style="list-style-type: none"><li>• 1<sup>st</sup> story: 4'</li><li>• 2<sup>nd</sup> story: 4'</li><li>• 3<sup>rd</sup> story: 6'</li></ul> <b>Street side:</b> <ul style="list-style-type: none"><li>• 1<sup>st</sup> story: 6'</li><li>• 2<sup>nd</sup> story: 8'</li><li>• 3<sup>rd</sup> story: 10'</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                        |                         |                   |                                                                      |
| C-W West Berkeley     | 3.0                        | 40-50’                        | 3-4 <sup>4</sup>               | 40                                  | 100%                            | None <sup>3</sup>           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | None                                                                                                                                                                   | None                    | 150               |                                                                      |

<sup>1</sup> 3<sup>rd</sup> floor and above residential only.

<sup>2</sup> Standards included are for residential or mixed use. Standards differ slightly for live/work project.

<sup>3</sup> Lots abutting/confront a residential district: same as required front and street side setback in adjacent residential district, 5 ft interior side, and 10 ft or 10% of the lot depth, whichever is less, rear setback. See Section 23.304.030.C.2.

<sup>4</sup> 50 ft. and 4 stories allowed for mixed-use projects. The 4th floor must be residential or live/work.

<sup>5</sup> A maximum setback of 10 ft is only permitted for landscaping that enhances the streetscape and provides privacy for residential units on the first floor.

<sup>6</sup> See 23.304.030(C)(2)(b) (Modifications in Commercial Districts) for allowed reductions.

<sup>7</sup> As noted on page C-17 of the housing element. These Average Densities are conservative estimates of the number of units that could be developed. Table C-7 in the HEU demonstrates the Average and Maximum Density.

<sup>8</sup> May be modified with a UP(PH).

<sup>9</sup> Setback area must be used to accommodate landscaping that enhances the streetscape and provides a sense of privacy for residential units on the first floor.

Table 3: Manufacturing Districts Development Standards

| Zoning District                                  | Min Lot Area (sq. ft.)              |                    | Min. Lot Width | Height Limit                          |                                | Lot Line Setbacks |                         |            |             | Building Separation | Maximum Lot Coverage | FAR                  | Usable Open Space Per Unit (sq. ft.) |     | Density Assumption for Housing Element Updates (du/acre) <sup>7</sup> |
|--------------------------------------------------|-------------------------------------|--------------------|----------------|---------------------------------------|--------------------------------|-------------------|-------------------------|------------|-------------|---------------------|----------------------|----------------------|--------------------------------------|-----|-----------------------------------------------------------------------|
|                                                  |                                     |                    |                |                                       |                                | Front             | Rear                    | Side       | Street Side |                     |                      |                      |                                      |     |                                                                       |
| M Manufacturing                                  | 20,000                              |                    | N/a            | 45'                                   |                                | No Minimum        | No Minimum              | No Minimum | No Minimum  | No Minimum          | 100%                 | 2.0                  | N/A                                  |     | N/A                                                                   |
| MM Mixed Manufacturing                           | 20,000                              |                    | N/a            | 45'                                   |                                | No Minimum        | No Minimum              | No Minimum | No Minimum  | No Minimum          | 100%                 | 2.0                  | N/A                                  |     | N/A                                                                   |
| MU-LI Mixed Use-Light Industrial                 | No Minimum                          |                    | N/a            | 45'                                   |                                | No Minimum        | No Minimum              | No Minimum | No Minimum  | No Minimum          | 100%                 | 2.0                  | N/A                                  |     | N/A                                                                   |
| MU-R Mixed Use-Residential District <sup>8</sup> | New Lot                             | No Minimum         | 40'            | Live/work                             | 28' and 3 stories <sup>3</sup> | 5'                | No Minimum <sup>5</sup> | No Minimum | 5'          | No Minimum          | 100%                 | 1.0/1.5 <sup>6</sup> | Per Dwelling Unit                    | 150 | 24.5                                                                  |
|                                                  |                                     |                    |                | Residential or mixed-use <sup>2</sup> | 35' and 3 stories              |                   |                         |            |             |                     |                      |                      |                                      |     |                                                                       |
|                                                  | Per Dwelling Unit or Live/Work Unit | 1,250 <sup>1</sup> |                | All other uses                        | 35' and 2 stories <sup>4</sup> |                   |                         |            |             |                     |                      |                      |                                      |     |                                                                       |

<sup>1</sup> One additional dwelling unit allowed for remaining lot areas between 750 and 1,250 square feet.

<sup>2</sup> Mixed use is defined here as a building with 50 percent or more of gross floor area used for residential (including live/work) purposes.

<sup>3</sup> Maximum 35 ft. with a Use Permit.

<sup>4</sup> Maximum 3 stories for arts/craft studios and light manufacturing (with no other non-residential uses) on a block without dwelling units.

<sup>5</sup> Minimum 5 ft. if rear of lot abuts a street.

<sup>6</sup> Maximum 1.5 for buildings with 50 percent or more residential or live/work floor area.

<sup>7</sup> As noted on page C-17 of the housing element. These Average Densities are conservative estimates of the number of units that could be developed. Table C-7 in the HEU demonstrates the Average and Maximum Density.

<sup>8</sup> Standards included are for residential or mixed use. Standards differ slightly for live/work project.

Table 4: Ground Floor Uses along San Pablo Avenue

|                      | Allowed Ground Floor Uses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Allowed Ground Floor Uses with Use Permit                                                                                            | Minimum Floor to Ceiling Height | Minimum Floor Area <sup>2</sup> | Minimum Street Frontage <sup>3</sup> | Minimum Area for Retail Sales, Personal and Household Services, or Food Service <sup>4</sup> | Maximum Area for Office Use <sup>4</sup> |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------|
| C-W                  | See Table 23.204-1. <sup>1</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | N/A                                                                                                                                  | N/A                             | N/A                             | N/A                                  | N/A                                                                                          | N/A                                      |
| C-W Designated Nodes | Retail Sales, personal and household services, retail financial services (banks), food and alcohol service, lodging, entertainment and assembly uses, gasoline/vehicle fuel stations, vehicle repair, new car sales, used vehicle sales, required access to and lobbies serving upper-story uses. Prohibited Uses: Vehicle rentals, used vehicle sales when not principally in buildings, vehicle washes, tire sales and service, open air markets, circus/carnivals. Public utility substation buildings or tanks. | N/A                                                                                                                                  | N/A                             | N/A                             | N/A                                  | N/A                                                                                          | N/A                                      |
| C-U                  | See Table 23.204-1 and BMC 23.204.060.B.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Residential Only Uses, Ground floor residential uses (incl. leasing and management offices and other similar resident-serving uses). | 12 ft.                          | 15%<br>10% with Use Permit      | 50%                                  | No minimum                                                                                   | No maximum                               |
| C-U Designated Node  | Residential uses must be integrated with non-residential uses in a mixed-use development.                                                                                                                                                                                                                                                                                                                                                                                                                           | N/A                                                                                                                                  | 12 ft.                          | 30%<br>20% with Use Permit      | 75%                                  | 75%<br>50% with Use Permit                                                                   | 25%                                      |

<sup>1</sup> Mixed-use projects in C-W are subject to permit requirements in Table 23.204-41.

<sup>2</sup> Calculated as percent of project land area.

<sup>3</sup> Calculated as percent of project’s University Avenue frontage.

<sup>4</sup> Calculated as percentage of minimum required ground floor commercial floor area.



Appendix A.2

Table 1: Housing Sites Inventory for the Plan Area and City of Berkeley

|                                                           | City<br>(sites) | SPA SP<br>(sites)   (% of City) |     | Affordability            |     |     |       |     |     |          |     |      |                |       |     | Total           |                                 |     |
|-----------------------------------------------------------|-----------------|---------------------------------|-----|--------------------------|-----|-----|-------|-----|-----|----------|-----|------|----------------|-------|-----|-----------------|---------------------------------|-----|
|                                                           |                 |                                 |     | Extremely Low / Very Low |     |     | Low   |     |     | Moderate |     |      | Above Moderate |       |     | City<br>(units) | SPA SP<br>(units)   (% of City) |     |
| Pipeline Sites - Applications Under Review or Anticipated | 69              | 15                              | 22% | 437                      | 134 | 31% | 142   | 54  | 38% | 41       | 30  | 73%  | 3,991          | 921   | 23% | 4,611           | 1,139                           | 25% |
| Likely Sites - Entitled Projects since 2018               | 48              | 9                               | 19% | 133                      | 34  | 26% | 166   | 0   | 0%  | 9        | 0   | 0%   | 1,793          | 486   | 27% | 2,101           | 520                             | 25% |
| Opportunity Sites: Underutilized                          | 158             | 46                              | 29% | 1,571                    | 560 | 36% | 1,557 | 555 | 36% | 1,831    | 473 | 26%  | 1,205          | 337   | 28% | 6,164           | 1,925                           | 31% |
| Opportunity Sites: Vacant                                 | 101             | 5                               | 5%  | 37                       | 0   | 0%  | 36    | 0   | 0%  | 36       | 36  | 100% | 216            | 62    | 29% | 325             | 98                              | 30% |
| Total                                                     | 376             | 75                              | 20% | 2,178                    | 728 | 33% | 1,901 | 609 | 32% | 1,917    | 539 | 28%  | 7,205          | 1,806 | 25% | 13,201          | 3,682                           | 28% |

Source: City of Berkeley, 2023. 2023-2031 Housing Element Update. Tables C-3, C-6, and C-10.

# Appendix B: Opportunity Sites

## San Pablo Avenue Specific Plan

- Final Draft -



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## Opportunity Sites Tables

**Table 1: List of 2023-2031 Housing Element Update Opportunity Sites Within the Specific Plan Area**

| HE Site Number | APN              | Address             | Vacant Lot | Existing Land Use                                                                             | Acres |
|----------------|------------------|---------------------|------------|-----------------------------------------------------------------------------------------------|-------|
| 12a            | 060<br>235401100 | 1041 GILMAN ST      | No         | Parking lot                                                                                   | 0.19  |
| 12b            | 060<br>235401302 | 1233 10TH ST        | No         | Parking lot                                                                                   | 0.32  |
| 12c            | 060<br>235401200 | 1031 Gilman St      | No         | Parking lot                                                                                   | 0.15  |
| 13a            | 057<br>208801100 | 1071 UNIVERSITY AVE | No         | Parking lot                                                                                   | 0.3   |
| 13b            | 057<br>208801500 | 1917 10TH ST        | No         | Parking lot                                                                                   | 0.25  |
| 15a            | 059<br>228702500 | 1629 SAN PABLO AVE  | No         | 1-story retail (party store)                                                                  | 0.11  |
| 15b            | 059<br>228702400 | 1633 SAN PABLO AVE  | No         | 1-story retail (party store)                                                                  | 0.11  |
| 15c            | 059<br>228702102 | 1639 SAN PABLO AVE  | No         | 1-2 story commercial                                                                          | 0.3   |
| 16             | 060<br>235401001 | 1049 GILMAN ST      | No         | 1-story retail (liquor, Dollar Tree)                                                          | 0.61  |
| 17             | 059<br>233100200 | 1440 SAN PABLO AVE  | No         | 2-story freestanding furniture strip retail and parking lot (West Berkeley Commercial Center) | 0.67  |
| 18             | 056<br>198303103 | 2235 SAN PABLO AVE  | No         | 2-story storage facility and parking lot (Berkeley Self Storage)                              | 0.7   |
| 19             | 056<br>193200803 | 2424 SAN PABLO AVE  | No         | Self-service car wash                                                                         | 0.73  |
| 22             | 056<br>193300602 | 2332 SAN PABLO AVE  | No         | 1-story commercial building and open lot dedicated to plants - East Bay Nursery               | 1.03  |
| 32             | 054<br>178000801 | 2546 SAN PABLO AVE  | No         | 1-story Bank of America (temporarily closed) and large parking lot                            | 1.43  |
| 38             | 057<br>208502600 | 1111 UNIVERSITY AVE | No         | 1-story commercial (Halmar Work Clothes Center)                                               | 0.47  |
| 46             | 056<br>198304001 | 2197 SAN PABLO AVE  | No         | 1-story standalone restaurant (Jack in the Box) and parking lot                               | 0.4   |
| 47a            | 060<br>240502100 | 1275 SAN PABLO AVE  | No         | 1-story garage or storage facility                                                            | 0.06  |
| 47b            | 060<br>240502000 | 871 HILLSIDE AVE    | No         | 1-story auto-related office and parking lot (smog shop)                                       | 0.29  |
| 48a            | 058<br>212701200 | 1730 SAN PABLO AVE  | No         | 1-story commercial (building materials store); adjacent to parking lot                        | 0.07  |
| 48b            | 058<br>212701101 | 1726 SAN PABLO AVE  | No         | Parking lot for building materials store                                                      | 0.14  |
| 48c            | 058<br>212700901 | 1724 SAN PABLO AVE  | No         | 1-story retail (Cafe Leila, accessories shop) and parking lot                                 | 0.26  |
| 49a            | 053<br>166101900 | 1043 HEINZ AVE      | No         | Large parking lot and single family house                                                     | 0.2   |
| 49b            | 053<br>166101801 | 2840 SAN PABLO AVE  | No         | Parking lot                                                                                   | 0.26  |
| 50a            | 060<br>240401801 | 1399 SAN PABLO AVE  | No         | Chevron Gas Station                                                                           | 0.21  |

|      |                  |                     |     |                                                                                                                                                                                                                       |      |
|------|------------------|---------------------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 50b  | 060<br>240402000 | 1337 SAN PABLO AVE  | No  | Autobody shop and parking lot                                                                                                                                                                                         | 0.22 |
| 51a  | 053<br>166101400 | 2830 SAN PABLO AVE  | No  | 1- story commercial                                                                                                                                                                                                   | 0.15 |
| 51b  | 053<br>166101501 | 2832 SAN PABLO AVE  | No  | 1- story commercial                                                                                                                                                                                                   | 0.31 |
| 52a  | 057<br>208901201 | 1011 UNIVERSITY AVE | No  | 2-story standalone vacant commercial building (former Premier Cru wine store).                                                                                                                                        | 0.24 |
| 52b  | 057<br>208901500 | 1925 9TH ST         | No  | Public land, parking lot behind Bauman College                                                                                                                                                                        | 0.15 |
| 53   | 056<br>192802701 | 2407 SAN PABLO AVE  | No  | Cement lot with storage sheds                                                                                                                                                                                         | 0.36 |
| 54   | 056<br>198200201 | 2111 SAN PABLO AVE  | No  | Parking lot                                                                                                                                                                                                           | 0.42 |
| 55   | 057<br>208602903 | 1819 SAN PABLO AVE  | No  | 1-story autobody shop and parking lot, (Nate's Green Garage, auto detailing)                                                                                                                                          | 0.42 |
| 56   | 056<br>193200401 | 2400 SAN PABLO AVE  | No  | 2-story retail and cement lot (Nu Gu Na restaurant + Ohmega Salvage)                                                                                                                                                  | 0.44 |
| 58   | 056<br>197300601 | 1010 UNIVERSITY AVE | No  | UA Homes parking lot                                                                                                                                                                                                  | 0.46 |
| 59   | 056<br>197800802 | 2040 SAN PABLO AVE  | No  | Vacant 1-story commercial building                                                                                                                                                                                    | 0.46 |
| 107a | 057<br>208500702 | 1187 UNIVERSITY AVE | No  | 1-story laundromat, last sold in Oct 2016, 10 surface parking spaces, no lease or tenant data available on CoStar, Walker's Paradise (97), Good Transit (65); lot owned by same owner as adjacent lot (057 208500801) | 0.08 |
| 107b | 057<br>208500801 | 1181 UNIVERSITY AVE | No  | 1-story restaurant (Eat @ Thai – tenant since Jul 2016), no sale data available on CoStar; Walker's Paradise (97), Good Transit (65); lot owned by same owner as adjacent lot (057 208500702)                         | 0.11 |
| 109  | 056<br>197900100 | 1198 UNIVERSITY AVE | No  | Auto car wash                                                                                                                                                                                                         | 0.28 |
| 111  | 060<br>239501700 | 1501 SAN PABLO AVE  | No  | Vacant 1-story commercial building                                                                                                                                                                                    | 0.07 |
| 112  | 053<br>166202100 | 2835 SAN PABLO AVE  | No  | Vacant 1-story commercial building (former BPOE Lodge - permanently closed)                                                                                                                                           | 0.08 |
| 113a | 060<br>239503100 | 1513 SAN PABLO AVE  | No  | 1-story autobody shop                                                                                                                                                                                                 | 0.06 |
| 113b | 060<br>239503301 | 1507 SAN PABLO AVE  | No  | Vacant 1-story storefront for sale                                                                                                                                                                                    | 0.15 |
| 114  | 060<br>239500100 | 1100 PAGE ST        | No  | Parking lot                                                                                                                                                                                                           | 0.11 |
| 115  | 060<br>240502401 | 1229 SAN PABLO AVE  | Yes | Vacant 1-story commercial building, for sale sign                                                                                                                                                                     | 0.12 |
| 116  | 053<br>166200101 | 2825 SAN PABLO AVE  | Yes | Vacant lot                                                                                                                                                                                                            | 0.17 |
| 117  | 060<br>240503101 | 1205 SAN PABLO AVE  | Yes | Vacant lot                                                                                                                                                                                                            | 0.17 |
| 118  | 056<br>192602000 | 2309 SAN PABLO AVE  | No  | 1-story commercial + parking lot (Afghan Burrito)                                                                                                                                                                     | 0.19 |
| 121  | 053<br>162901901 | 2959 SAN PABLO AVE  | No  | 1-story commercial/auto-related use (Berkeley Star Smog)                                                                                                                                                              | 0.25 |
| 122  | 057<br>208800400 | 1900 SAN PABLO AVE  | Yes | Vacant lot                                                                                                                                                                                                            | 0.27 |

|     |                  |                    |     |                                                                        |      |
|-----|------------------|--------------------|-----|------------------------------------------------------------------------|------|
| 124 | 056<br>193302403 | 2366 SAN PABLO AVE | No  | 1-story commercial building + parking lot<br>(Berkeley Patients Group) | 0.33 |
| 195 | 059<br>228702000 | 1117 VIRGINIA ST   | Yes | Vacant lot, same owner as 1639 San Pablo                               | 0.06 |

**Table 2: San Pablo Avenue Specific Plan Proposed Opportunity Sites**

| SP Add.<br>Sites # | APN                                      | Address                                       | Vacant<br>Lot | Existing Land Use                                                  | Acres | Site Criteria / Rationale                                                                                                                                                                                                                                                                                                                   |
|--------------------|------------------------------------------|-----------------------------------------------|---------------|--------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A                  | 053<br>165200105<br>and 053<br>165200101 | 1099 ASHBY<br>AVE                             | No            | 1 and up to 3 story<br>commercial with<br>large surface<br>parking | 6.32  | Large property with significant surface parking, overall low FAR. Could infill parking lot with structured parking and new development. Historic buildings likely a combination of preserving some full buildings and some only preserving street facing facades. Have factored down site area to assume 60% of total site being developed. |
| B                  | 053<br>166102000                         | 1035 HEINZ<br>AVE                             | No            | 1 story light<br>industrial                                        | 0.14  | Same ownership as adjacent HE Opportunity site parcels.                                                                                                                                                                                                                                                                                     |
| C                  | 053<br>166102100                         | 1033 HEINZ<br>AVE                             | No            | 1 story light<br>industrial                                        | 0.12  | Small property surrounded by other properties under one ownership.                                                                                                                                                                                                                                                                          |
| D                  | 053<br>162802601                         | 2995 SAN<br>PABLO AVE                         | No            | 1 story commercial<br>and surface parking<br>lot                   | 0.60  | Large parcel with vacant building (former Walgreens) and relatively low FAR                                                                                                                                                                                                                                                                 |
| E                  | 054<br>178601600<br>and 054<br>178601401 | 2625 AND<br>2641 SAN<br>PABLO AVE<br>BERKELEY | No            | 1 story commercial<br>and surface parking<br>lot                   | 0.44  | Two parcels with one owner, low FAR current development                                                                                                                                                                                                                                                                                     |
| F                  | 054<br>178401900                         | 2551 SAN<br>PABLO AVE<br>BERKELEY             | No            | 1 story commercial<br>with side service<br>and parking area        | 0.32  | Currently a towing service, low FAR                                                                                                                                                                                                                                                                                                         |
| G                  | 056<br>193300500                         | 2300 SAN<br>PABLO AVE<br>BERKELEY             | No            | Surface Parking Lot                                                | 0.23  | Different owner address from adjacent East Bay Nursery (a HE Opp Site) but both in Moraga; suspect could be one development project                                                                                                                                                                                                         |
| H                  | 57-2085-7-1                              | 1199<br>UNIVERSITY<br>AVE                     | No            | 1-story commercial<br>building (Foster's<br>Freeze)                | 0.21  | Same ownership as adjacent HE Opportunity site parcels.                                                                                                                                                                                                                                                                                     |
| I                  | 57-2085-14-1                             | 1101<br>UNIVERSITY<br>AVE                     | No            | 1 story 2-3 tenant<br>commercial building<br>with some parking     | 0.30  | Has been vacant for several years, appeared to have last sold in 2023                                                                                                                                                                                                                                                                       |

|   |                                          |                                   |     |                                                                                                |      |                                                                                                    |
|---|------------------------------------------|-----------------------------------|-----|------------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------|
| J | 057<br>208901401                         | 1001<br>UNIVERSITY<br>AVE         | No  | 1-2 story<br>community building                                                                | 0.48 | This is the city-owned parcel at northeast corner of 9th and University.                           |
| K | 057<br>208800500<br>and 057-<br>2088-6   | 1920 and<br>19xx SAN<br>PABLO AVE | Yes | 1 parcel w/ 1 story<br>commercial building<br>and some open<br>space other parcel<br>vacant    | 0.32 | Same ownership two parcels                                                                         |
| L | 060<br>235401403                         | 1235 10TH ST                      | No  | 1-story commercial<br>building and parking                                                     | 0.26 | C-W zoned property about 0.6 FAR<br>recommending to add to Gilman Node                             |
| M | 060<br>235400300<br>and 060<br>235400402 | 1212 and<br>1214 SAN<br>PABLO AVE | No  | 1- story vacant<br>commercial building<br>and 1-story light<br>industrial/auto<br>serving bldg | 0.29 | Same owner as approved project to the<br>north                                                     |
| N | 060<br>239501600                         | 1443 SAN<br>PABLO AVE             | No  | 1-story commercial<br>building                                                                 | 0.17 | HE Opp Site #114 is a parking lot that serves<br>adjacent building and has same property<br>owner. |
| O |                                          | 1095<br>University<br>Ave         | No  | 2-story vacant<br>commercial                                                                   | 0.11 | Former Wells Fargo Bank building                                                                   |

# Opportunity Sites Key Map

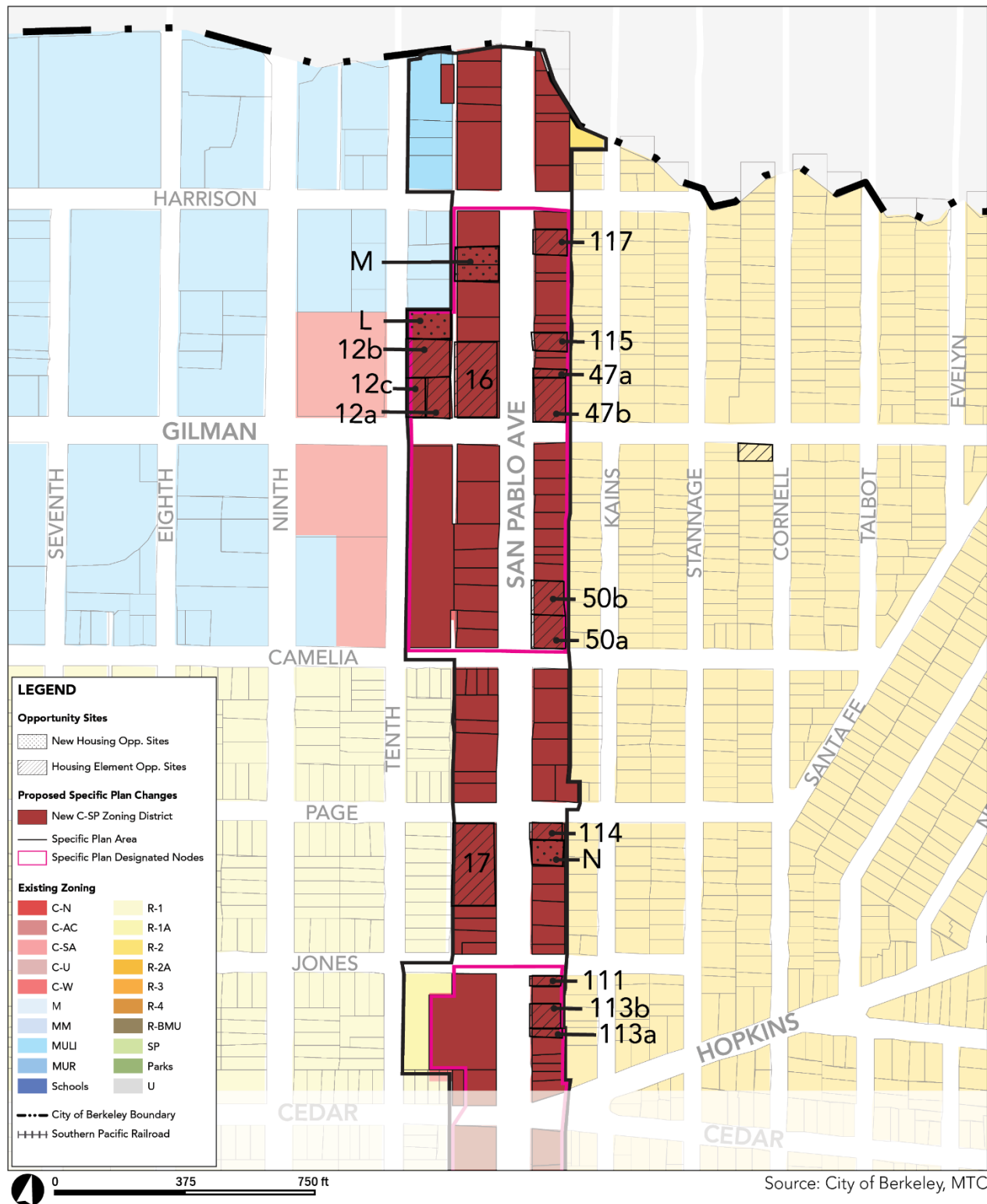


Figure B.1 Opportunity Sites Map – Part 1

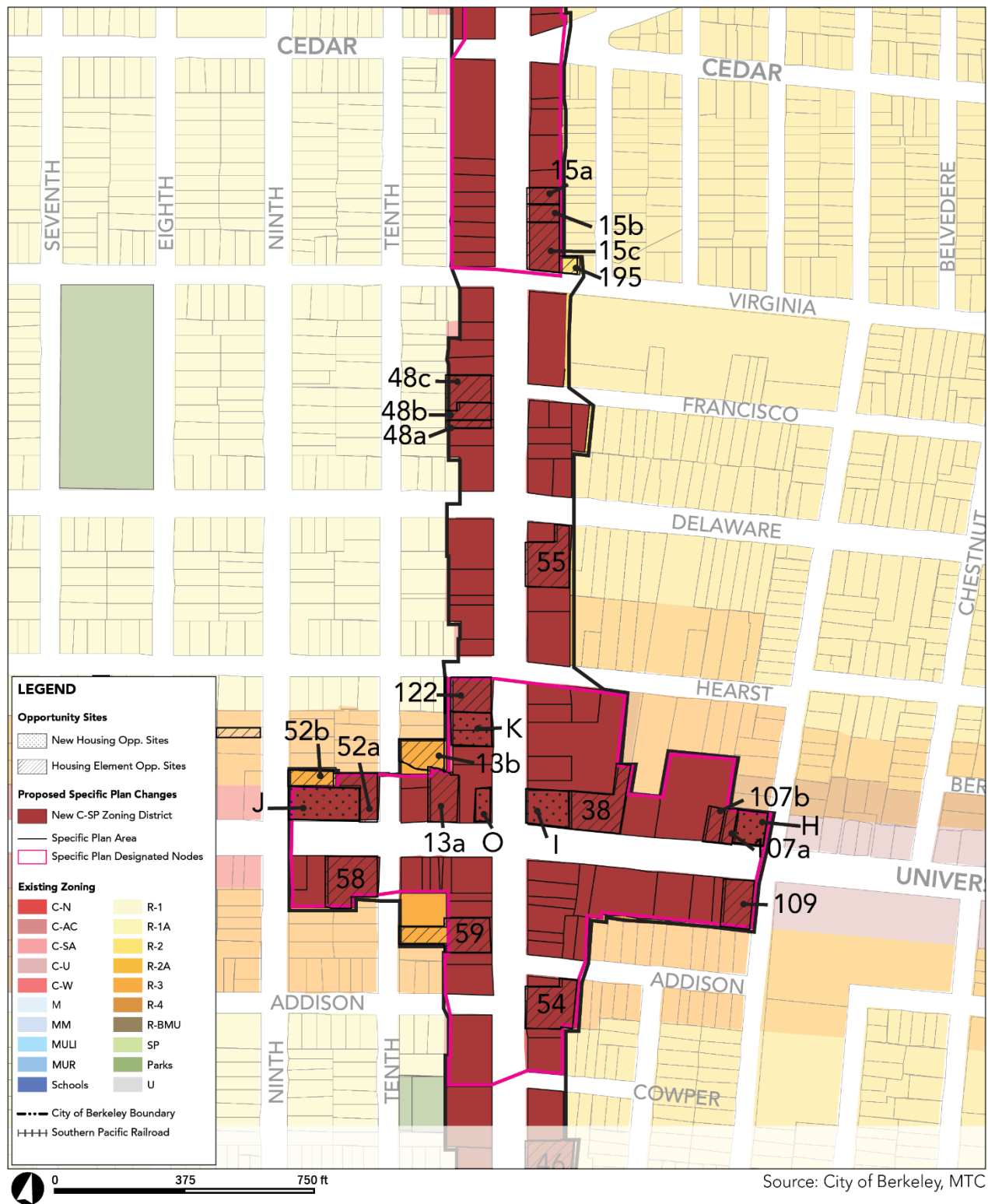


Figure B.2 Opportunity Sites Map – Part 2



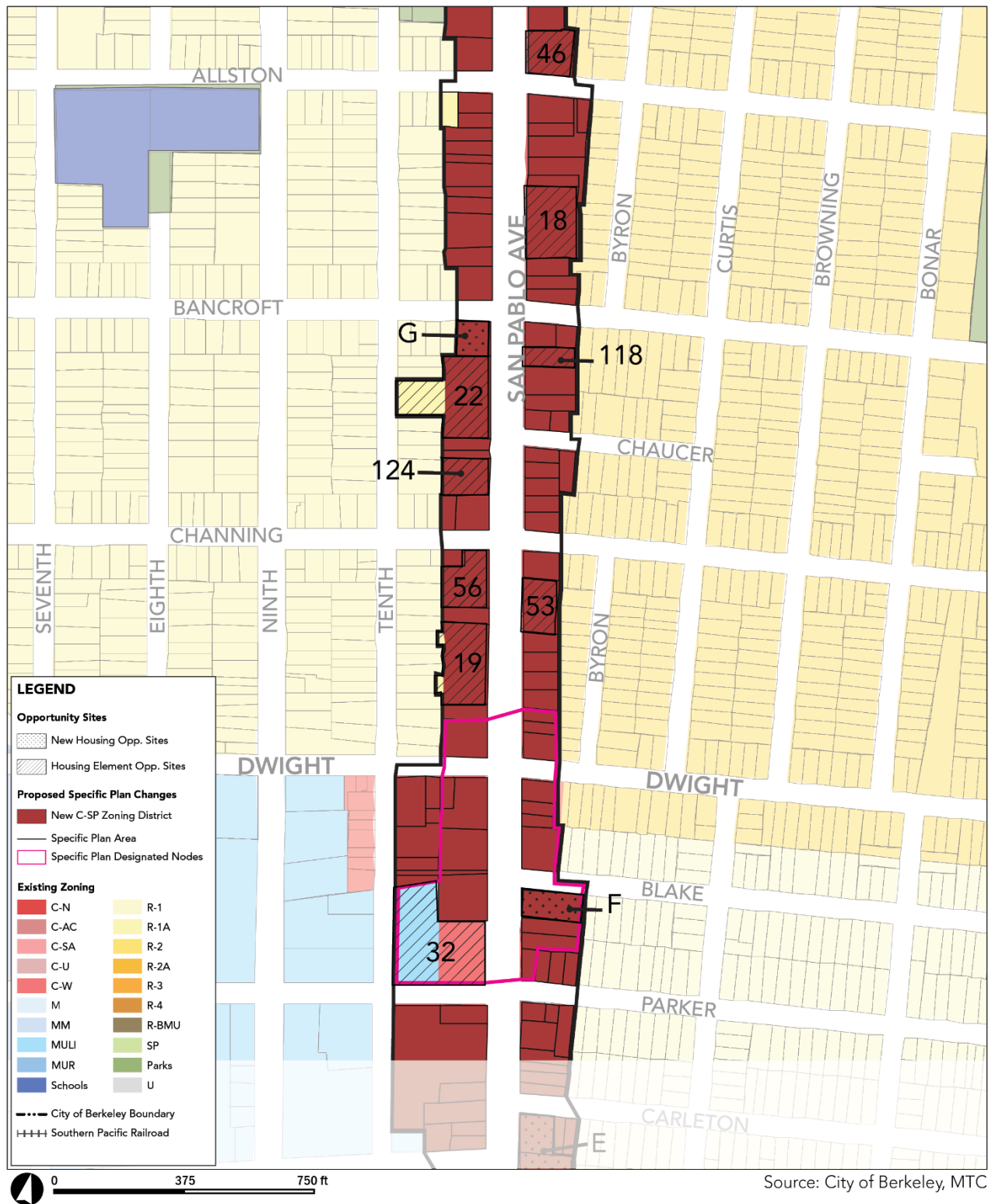


Figure B.3 Opportunity Sites Map – Part 3

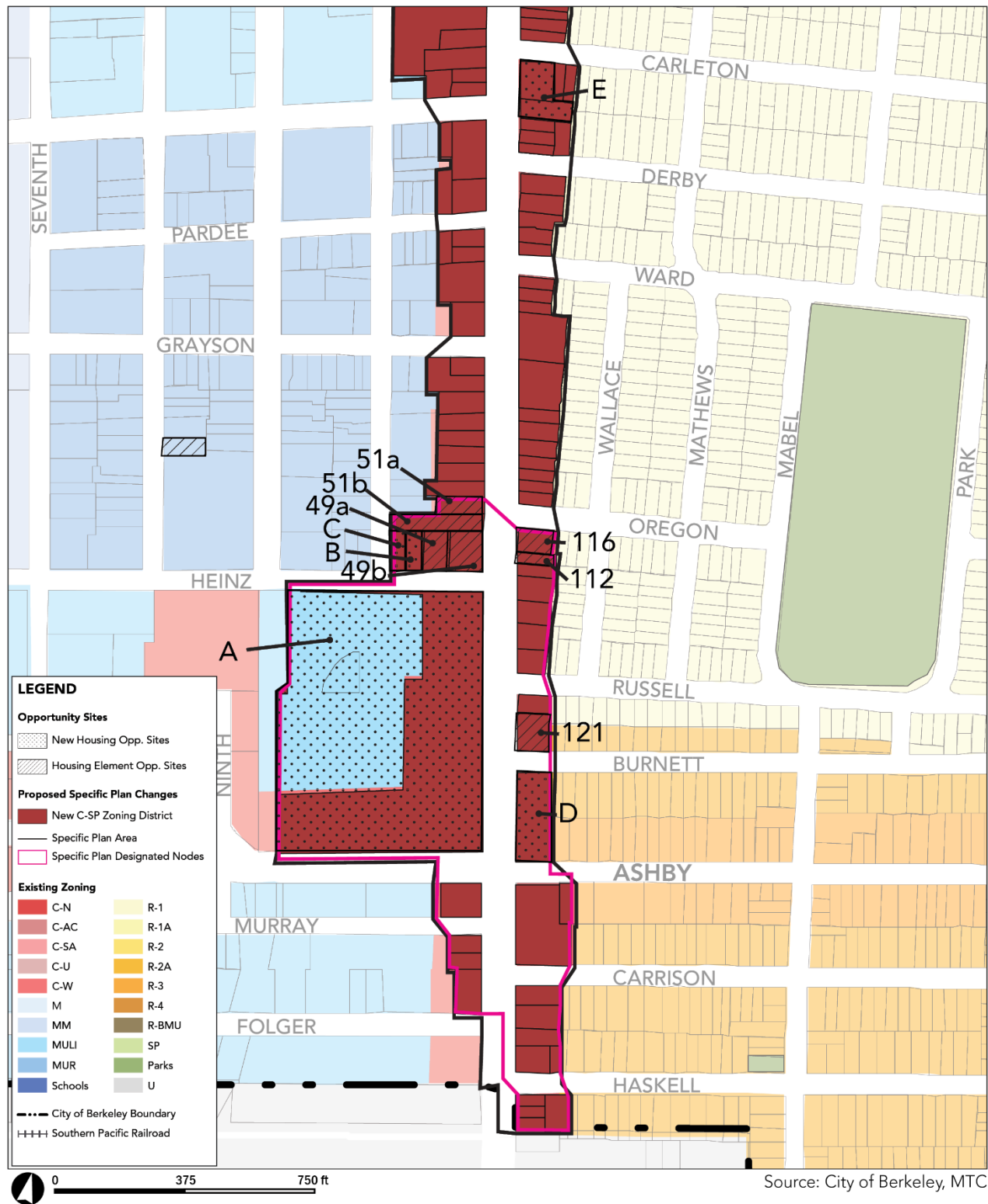


Figure B.4 Opportunity Sites Map – Part 4

# Appendix C: Buildout Summary Memorandum

## San Pablo Avenue Specific Plan

- Final Draft -

# San Pablo Avenue Specific Plan

**Date:** April 28, 2026

**To:** City of Berkeley

**From:** Community Design + Architecture  
Urban Planning Partners

**Re:** San Pablo Avenue Specific Plan (SPA SP) – Task 5.3 Build-out Summary Staff Memorandum

The planning process considered, with feedback from the Planning Commission and City Council in November 2025 and March 2026, alternative standards for allowable height and density for the Commercial San Pablo (C-SP) Zoning District based on land-use and location, and impacts on potential residential and commercial buildout, affordable housing production, and economic development policy. This appendix outlines the finalized building height and density standards within the Plan Area and the anticipated development buildout with these standards.

## *Height Standard*

**Comparison between C-W to C-SP for maximum height, across uses, and node and outside of node areas<sup>1</sup>:**

- Nonresidential-only: remains 3 stories
- Residential-only: increase from 3 to 7 stories
- Mixed-use: increase from 5 to 7 stories

## *Policy Implications*

Developers often treat **8 stories** as a practical feasibility threshold because it often represents the upper end of **cost-efficient mid-rise construction** (5 floors of wood-frame over three stories of concrete). Previous development proposals and approved, but yet unbuilt, projects along San Pablo Avenue have included a mix of six to eight story buildings, as going above six stories adds floor that must be concrete and the increase in construction cost can be difficult for market rents to support. As buildings push beyond a mid-rise envelope—exceeding the 85-foot mid-rise threshold—projects typically face more stringent life-safety and structural requirements (concrete and steel with no wood structure). This transition can significantly increase both hard and soft costs, and, as a result, many developers will choose to cap project heights between **6 to 8 stories** even when zoning allows eight or more and will not use the State Density Bonus Law (SDBL) to exceed eight stories. Still, future market conditions are unpredictable, especially in the longer-term life of the Plan, and it is possible that buildings up to 12 stories could be viable in the future. If condominium construction liability issues are addressed through state legislation, the value of condominiums could make taller buildings more feasible.

## *Summary of Implications*

**Use of State Density Bonus Law:** It is likely that the percentage of development projects using the SDBL will not significantly vary across the policy options outlined above. Currently developers use the SDBL for both increasing density and to remove

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<sup>1</sup> The C-SP zoning increase the floor area ratio (FAR) for uses that have increases in height.

standards and regulations to improve project feasibility. So, in the future it is likely that developers will still use the SDBL to remove these standards and regulations, while not using it to increase height **beyond 8 stories** and/or density.

**Affordable Units:** Increased heights and FARs have the potential to generate more affordable housing, because the Berkeley Inclusionary Affordable Housing requirements are calculated using the number of units in the base condition for a project using the State Density Bonus project.

### *Implications and Rationale*

**State Density Bonus Law and Berkeley Affordable Inclusionary Housing Requirement:** Permitting 7 stories by-right reduces the incentive to use SDBL to increase density, because many projects can reach their target unit yield within the base envelope. Developers may still elect to use SDBL, but more likely to obtain concessions and waivers that help project feasibility (e.g., relief from specific development standards, parking, setbacks, open space, design constraints) rather than to add units given anticipated market demand.

This dynamic matters because SDBL benefits (density and concessions) are tied to the level and depth of affordability provided. If a project can achieve its target unit count by-right, the developer may choose to provide only the minimum affordable set-aside necessary to unlock the number of concessions they want—rather than the larger or deeper affordability unit mix that might have been offered when SDBL was the primary pathway to unlock additional height and FAR. Berkeley’s Affordable Inclusionary Housing Requirement applies to all development projects, including those that use SDBL. The city requires that 20% of a project’s units be affordable and provides the option to pay a fee rather than providing the units within the project. For a project using SDBL, the city requirement applies to the number of units in the “base” project (the project based on existing zoning densities) and does not apply to any additional units resulting from use of SDBL waivers.

Most recent development proposals in Berkeley use SDBL to waive both height and FAR maximums in order to unlock the optimum density for development feasibility, and to concession out of requirements that would increase the cost of development. Typically, the number of affordable units needed for the number of concessions the developer wants is a lower percentage than the 20% required by the city’s affordable housing requirements. The affordable units used for SDBL are required to be in the project and typically developers choose to pay an in-lieu fee for the additional affordable units required by the City’s requirements.

As mentioned above, the increased height standards will reduce or eliminate the use of the SDBL for increasing density. Developers will provide SDBL inclusionary affordable units to gain the concessions for removing City requirements that increase their development cost. The increase of maximum allowed height and FAR potentially grows the number of units in the “base” project, and, therefore, increases the total number of affordable units required in the project, because the City’s affordable housing requirement applies to this higher number of base units. It is possible that the increase in affordable units could make a project that maximizes height and number of units less feasible compared to development under an option with a lower maximum zoning height that uses SDBL to increase height. This is difficult to predict, and typically the cost over the life of a project is less for the in-lieu fee compared to providing inclusionary units with the lower rents they provide.

### *Buildout Assumptions*

**Residential Density:** The starting point for the residential density assumptions and methodology used in this buildout analysis are the density assumptions and methodology used for the 2023 Berkeley Housing Element. The Housing Element states, “*The City estimated development potential for the sites by calculating the average baseline density (without density bonus) achieved for recently approved, under construction, or completed mixed-use and residential projects per zoning district.*”<sup>2</sup> For determining the buildout for the Plan Area, adjustments are made to the Baseline density assumptions in the Housing Element based the modifications to proposed zoning and development standards.

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<sup>2</sup> City of Berkeley Housing Element 2023-2031; as amended on February 17, 2023; page C-17.



**Commercial Density:** Commercial intensity refers to the net amount of commercial space anticipated in future mixed-use developments, calculated similar to how average residential density is assessed in the Housing Element.

The analysis calculates net commercial square footage by comparing existing commercial space as defined through the Assessor's Use Codes with the average new commercial area that recent development projects have proposed. The existing commercial space area (square feet) on the opportunity sites was estimated using data from the County Assessor's office with some adjustments made from review of aerial photographs and data included in staff reports for proposed development projects. The commercial space within new mixed-use developments was estimated based on recently constructed and proposed mixed-use projects in the Plan Area, applying an average FAR of 0.12 to the total site acreage of mixed-use projects in each development scenario. The net reduction in commercial space is derived by adding the estimate of new commercial space in mixed use developments to the estimated loss of existing commercial space due to the demolition of existing buildings on the opportunity sites.

**Development Buildout:** The development buildout (see Table C.1) applies the C-SP Zoning to the sites identified in the Baseline, the 15 additional housing opportunity sites identified through the Plan community assessment work (see Figure C.1), and expanded C-SP nodes compared to the existing C-W nodes. The buildout also includes the following assumptions:

- **Re-zonings:**
  - Rezone existing C-W zoned parcels within the Plan Area to C-SP.
  - Rezone existing C-U parcels within the Plan Area to C-SP.
  - Rezoning some parcels to eliminate existing split-zoned properties. These changes are limited to parcels fronting on either San Pablo Avenue or University Avenue. In cases where the split zoned portion of a parcel fronts on a side street, the split zone is maintained.
- **Housing Overlay:**
  - Assumes C-SP development standards for 100% affordable or family housing on MU-LI sites.
- **Density Outside the Nodes:** The Plan increases density for residential only and mixed-use buildings by adjusting the allowable heights from 50-feet to 75-feet, and allowable FAR from 3.0 to 4.25, which permits up to 7 stories while accounting for a taller ground floor and a roof parapet. The Plan adjusts the density assumption used for the HEU opportunity sites of 135 du/ac to 215 du/ac based on the assumption that 70% of development outside of the nodes will be residential only use developments.
- **Density in Nodes:** The Plan increases density for residential and mixed-use buildings by adjusting the allowable height from 50-feet to 75-feet and allowable FAR from 3.0 to 4.25, which permits up to 7 stories while accounting for a taller ground floor and a sloping roof parapet. The Plan increases the density assumptions from the HEU opportunity sites of 135 du/ac to 210 du/ac based on an assumption that accounts for commercial space on the ground floor which is required within nodes by the C-SP zoning.

**Table C.1. Height and Density in the C-SP Zoning District**

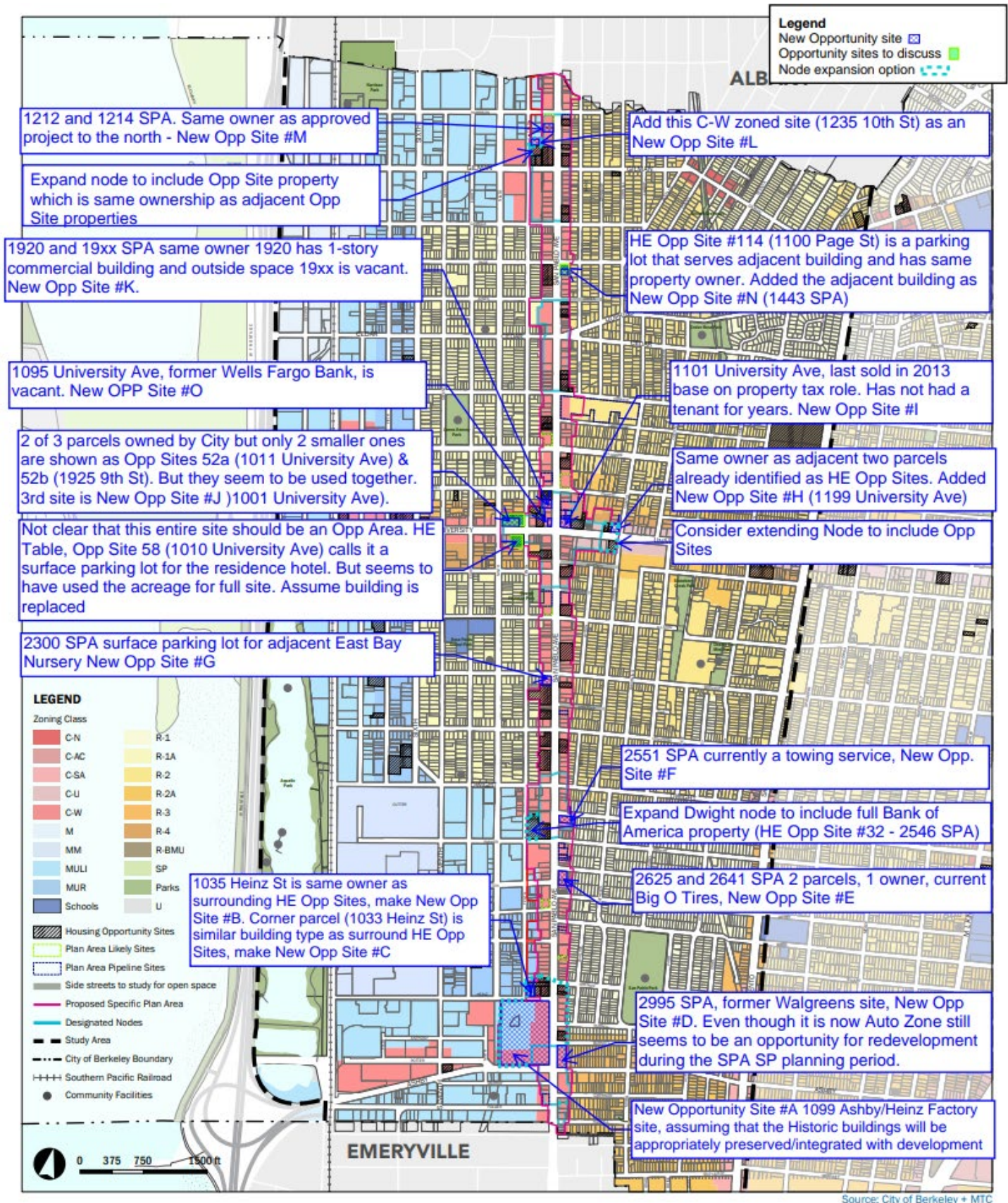
|                                                                 | Existing C-W                                | Proposed C-SP                                            |
|-----------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------|
| Non Res-only                                                    | 3 stories<br>40' max. height<br>3.0 max FAR | 3 stories<br>40' max. height<br>3.0 max FAR              |
| Res-only                                                        | 3 stories<br>40' max. height<br>3.0 max FAR | 7 stories<br>75' max height<br>4.25 max FAR<br>150 du/ac |
| Mixed-use                                                       | 4 stories<br>50' max. height<br>3.0 max FAR | 7 stories<br>75' max height<br>4.25 max FAR<br>145 du/ac |
| <b>Estimated Residential Buildout without SDBL (units)</b>      | <b>4,900<sup>3</sup></b>                    | <b>6,900</b>                                             |
| <b>Estimated Residential Buildout with SDBL (units)</b>         | <b>7,000-8,000</b>                          | <b>7,000-8,000</b>                                       |
| <b>Estimated Plan Area Commercial Space (sq. ft.)</b>           | <b>1,202,400</b>                            | <b>1,171,000</b>                                         |
| <b>Estimated Change in Plan Area Commercial Space (sq. ft.)</b> | <b>-288,200</b>                             | <b>-319,600</b>                                          |

---

<sup>3</sup> New Residential Buildout without SDBL for the opportunity sites identified in the 2023 Housing Element Update is 3,500 units.



Figure C.1. Addition Housing Opportunity Sites in the Plan Area



# Appendix D: Street Improvements

## San Pablo Avenue Specific Plan

- Final Draft -

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## Overview

This appendix provides an overview of transportation projects that are already underway at the time of the Specific Plan's publication, along with recommended improvements at key locations identified through the planning and community engagement process. Many of these projects are expected to be implemented in the coming years and will significantly reshape travel conditions in the area. The Specific Plan's proposed improvements are designed to build upon this ongoing work, treating these near-term changes as the new baseline for future transportation planning and investment.

## Comprehensive List of Existing Projects

### City of Berkeley Projects

#### Current Projects (2025)

##### **Parker-Addison Mobility and Safety Improvements Project<sup>1</sup>**

This project will provide a bike boulevard and associated improvements to connect the West Street multiuse pathway to San Pablo Park via Bonar and Mabel Streets. The project also includes a new bike boulevard on Parker Street from San Pablo Avenue to Mabel Street.

##### **Addison Street Bike Boulevard Connector Project<sup>2</sup>**

The Addison Bike Boulevard will provide an east-west connection between Milvia Street and Sacramento Street to connect West Berkeley to Downtown Berkeley. The Project proposes a Class III bike boulevard on Addison Street from the Aquatic Park eastward to Sacramento Street and from Martin Luther King Jr. Way through downtown to Oxford Street. It would connect to the previously-constructed (phase 1) portion of this project between Sacramento Street and Martin Luther King Jr. Way, thereby creating a continuous bike boulevard from the Aquatic Park to the western edge of the UC Berkeley campus. The project also includes construction of a Class IV separated bikeway connector across San Pablo Avenue to reduce future collision risk for vulnerable users crossing the street and will address a key barrier to east-west bicycle connectivity; this connector on San Pablo Avenue will be implemented as part of the Alameda CTC Safety Enhancements Project, described below.

##### **Street Rehabilitation - Hopkins Corridor Improvements<sup>3</sup>**

This project includes Hopkins Street from San Pablo Avenue to Sutter Street. The project began in 2020 and was put on hold in 2023. As of the fall of 2025 there is no definitive timeline has been established for restarting the effort.

#### Other Currently Planned Projects

**Ashby/San Pablo Traffic Improvements** – Design is currently underway for this intersection improvement project, which includes a dedicated left-turn lane with a signal phase and upgraded curbs to enhance safety and traffic flow. Construction is anticipated in Fiscal Year 2027.

<sup>1</sup> City of Berkeley. [Parker-Addison Mobility and Safety Improvements Project](#). City of Berkeley. Accessed 6 May 2025.

<sup>2</sup> City of Berkeley. [Addison Street Bike Boulevard Connector Project](#). City of Berkeley. Accessed 6 May 2025.

<sup>3</sup> City of Berkeley. [Street Rehabilitation – Hopkins Corridor Improvements](#). City of Berkeley. Accessed 6 May 2025.

## Alameda CTC Projects

The Specific Plan will not focus on making transportation improvements to San Pablo Avenue, because the Alameda Transportation Commission (Alameda CTC) has completed a multimodal planning study for San Pablo Avenue throughout Alameda County. The study has led to three improvement projects that will result in construction of safety improvements for all users, bus stop improvements, and parallel bicycle facility improvements, as well as a short segment of bicycle and bus lanes on the southern end of San Pablo Avenue in Berkeley:

### The Parallel Bike Improvement Project

This will construct bike safety and connectivity improvements and pedestrian, ADA upgrades along streets parallel to San Pablo Avenue, as well as creates safer bicycle crossings for existing or proposed bicycle routes as designated in the Berkeley Bike Plan (2017). Improvements on parallel streets will create or enhance bike boulevards consist of diverters, traffic circles, modifications to existing stop controls, speed humps, and wayfinding improvements for bicycles. This project is expected to start construction in 2026 and be completed in 2027. See **Chapter 5 – Streets**, Figure 5.8 *Connections Map*.

### The Safety Enhancements Project

This will construct improvements for pedestrians and cyclists to cross San Pablo Avenue more easily and improve transit speed and reliability along San Pablo Avenue. Pedestrian and bicycle crossing improvements on San Pablo Avenue include median islands, and crossing beacons; and the Class IV separated bikeway on San Pablo Avenue between the off-set intersections with Addison Street. This project will also include ADA upgrades to curb ramps. Transit improvements include bus stop bulb-outs for high-use stops, intersection lighting upgrades, and some bus stop relocations to improve safety and bus operations. Within Berkeley, improvements will extend between Heinz Avenue and the northern city limit. This project is expected to start construction in 2026 and be completed in 2027.

### The Bus and Bike Lanes Project

This project is located primarily within the Cities of Oakland and Emeryville, and will convert one travel lane in each direction on San Pablo Avenue to a bus-only lane and convert on-street parking lanes to separated bike lanes. In Berkeley, the Project's bicycle improvements will extend along San Pablo Avenue from the southern city limit to Heinz Avenue, approximately 0.25 miles, and the bus improvements will end at the Ashby Avenue intersection. This project will start the Project Approval and Environmental Document phase in summer or fall of 2026 and 2035 is estimated date for completion of construction.

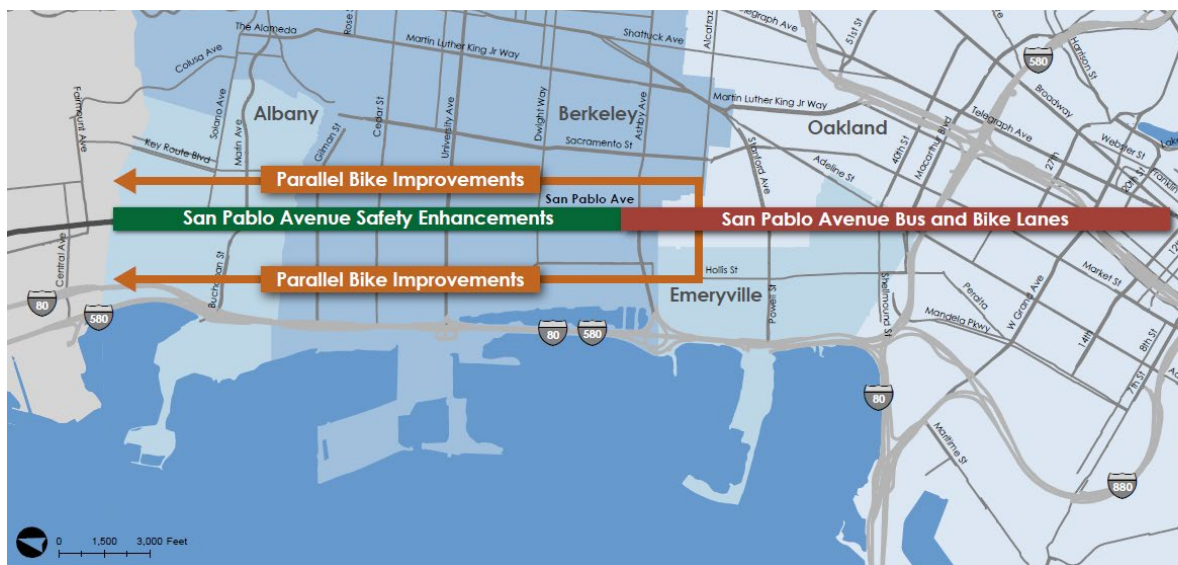


Figure D. 1 Alameda CTC. San Pablo Avenue Multimodal Corridor Overview Map

### Alameda Countywide Bikeways Network

In December 2022, the Commission adopted a resolution establishing an All Ages and Abilities (AAA) bikeways policy and standard. The policy directs that Countywide Bikeway Facilities incorporate AAA design principles, as defined by the [National Association of City Transportation Officials \(NACTO\) Contextual Guidance for Selecting All Ages and Abilities Bikeways](#). This policy aligns with the Metropolitan Transportation Commission's existing standards for the regional [Active Transportation Network](#), of which the Countywide Bikeways Network is a subset. As San Pablo Avenue is designated as a major bus and bikeway corridor within the Countywide Network, it is subject to these design expectations.

## Proposed Improvements

The Specific Plan summarizes a set of recommended improvements that are not currently addressed by existing or planned projects from the City of Berkeley and Alameda CTC. The methodology for summarizing these recommendations integrates proposals from the Pedestrian Plan (2020) and the Berkeley Bike Plan Update (2026), and was further refined through input from City of Berkeley staff and accident history. The **Table D.1 List of Intersection Improvements** providing an overview of these proposed improvements, listing strategies to address existing mobility gaps and plan for enhancements beyond currently planned projects. This list is intended to be a living document and updated periodically as conditions change, evolving safety needs, community input, and coordination with future planning and capital improvement efforts. For example, the city will likely be updating the Pedestrian Plan in the next couple of years. Many of intersection improvements listed below align with Policies and Standards presented in **Chapter 5 – Streets, Continue to improve Intersections** section of the Specific Plan.

**Figure D.2: Connections & D3 Mid-Block and Side-Street Plaza Options** presents a consolidated overview of potential pedestrian crossing locations based on *T-P.9 Pedestrian Crossing Frequency*. It also provides an overview of potential side-street plaza sites, policy *PR-P.15 Create Side-Street Plazas*.

Table D.1 List of Intersection Improvements

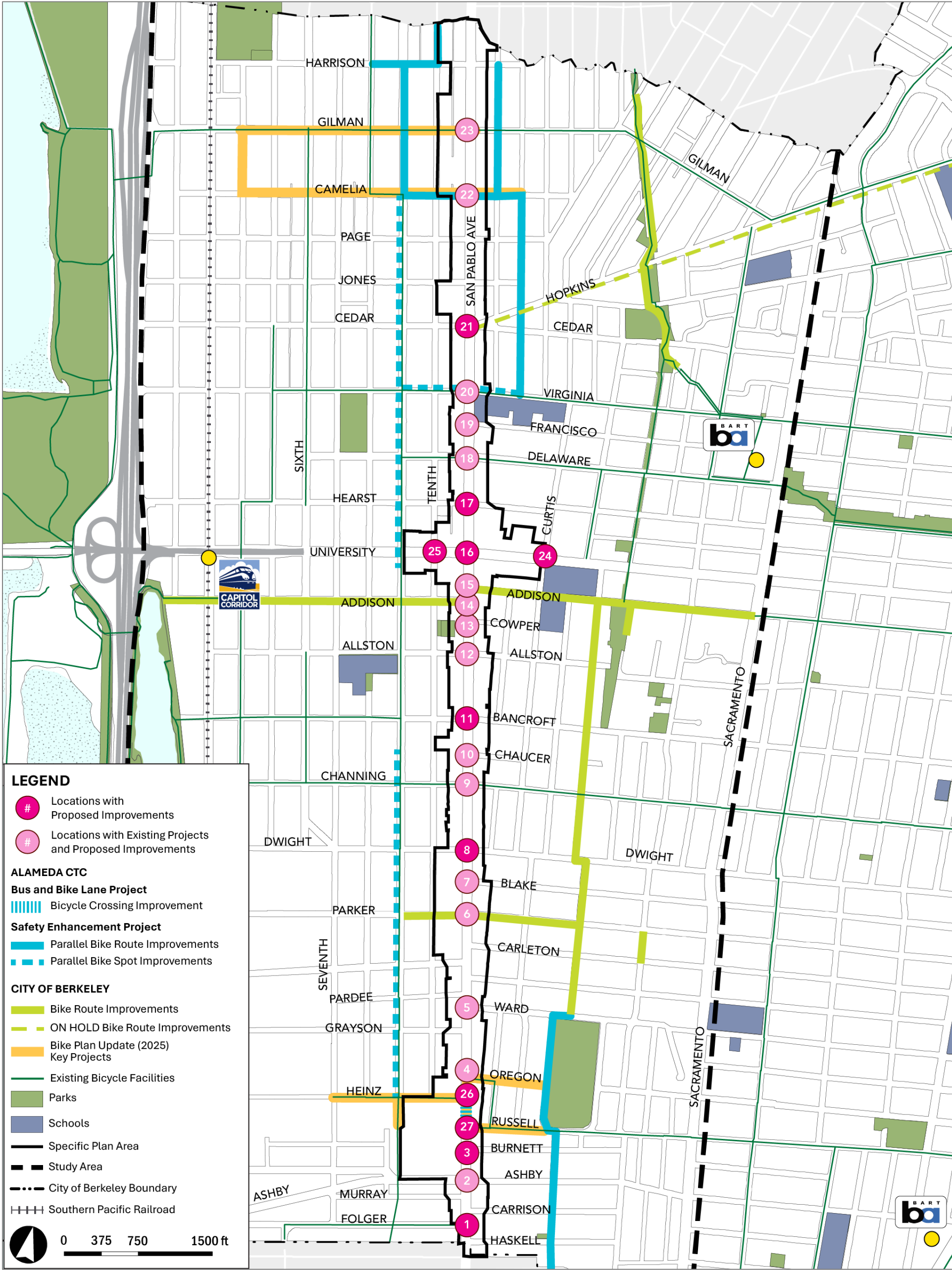
| No. | Existing Project not considered in Prop. Improvements | Proposed Improvement                                                                                                                                                                                                                                                                                                                                                           | Nearest Intersection                                                       | Source                                |
|-----|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------------------------|
| 0   |                                                       | Potential Improvement to study during update to the Pedestrian Plan: North bound bus stop is not proximate to a crosswalk and John Muir Car Center and a large sports club are on the east side of the street. Existing cross walks at the far north and south sides of intersections. Resulting in an over 380 foot distance between protected crossings of San Pablo Avenue. | 67 <sup>th</sup> Street and Folger Avenue intersections with San Pablo Ave | Public comment during SPA SP process  |
| 0   |                                                       | Potential Improvement to study during update to the Vision Zero Action Plan and/or Pedestrian Plan: Public comment was made regarding bicycle and pedestrian collisions and safety concern with vehicles making turns at this signalized intersection.                                                                                                                         | Grayson Street and San Pablo Ave                                           | Public comment during SPA SP process  |
| 1   |                                                       | RRFB and Ped Refuge Island                                                                                                                                                                                                                                                                                                                                                     | Folger Ave and San Pablo Ave                                               | City Staff                            |
| 2   | Others                                                | Restrict Right Turn on Red, Median Refuge Island, Curb Extension, Widen Sidewalk at Bus Stop<br>Pedestrian Plan (2020): High-Visibility Crosswalk, Hardened Centerline                                                                                                                                                                                                         | Ashby Ave and San Pablo Ave                                                | City Staff                            |
| 3   |                                                       | RRFB and Ped Refuge Island                                                                                                                                                                                                                                                                                                                                                     | Burnett St and San Pablo Ave                                               | City Staff                            |
| 4   | Alameda CTC And City of Berkeley                      | RRFB at South Leg (where Safety Enhancement Project is implementing a Pedestrian Refuge Island)<br>Potential Protected Intersection improvements connecting with Separated Bike Lanes on San Pablo Ave. to Heinz St. (see Intersection 26)                                                                                                                                     | Oregon St and San Pablo Ave                                                | City Staff<br>Bike Plan Update (2026) |
| 5   | Alameda CTC                                           | RRFB at North Leg                                                                                                                                                                                                                                                                                                                                                              | Ward St and San Pablo Ave                                                  | City Staff                            |
| 6   | City of Berkeley                                      | Bike Crossing                                                                                                                                                                                                                                                                                                                                                                  | Parker St and San Pablo Ave                                                | City Staff                            |
| 7   | Alameda CTC                                           | RRFB at South Leg                                                                                                                                                                                                                                                                                                                                                              | Blake St and San Pablo Ave                                                 | City Staff                            |



| No. | Existing Project not considered in Prop. Improvements | Proposed Improvement                                                                                                                                                                                                                                                                                              | Nearest Intersection                  | Source                                |
|-----|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|
| 8   |                                                       | Median Refuge Island                                                                                                                                                                                                                                                                                              | Dwight Way and San Pablo Ave          | City Staff<br>Bike Plan Update (2026) |
| 9   | Alameda CTC                                           | Raised Crosswalk<br>Diverter (with PHB)                                                                                                                                                                                                                                                                           | Channing Way and San Pablo Ave        | City Staff<br>Bike Plan Update (2026) |
| 10  | Alameda CTC                                           | RRFB                                                                                                                                                                                                                                                                                                              | Chaucer St and San Pablo Ave          | City Staff                            |
| 11  |                                                       | Widen Sidewalk at Bus Stop, High-Visibility Crosswalk, Curb Extension, Median Refuge Island                                                                                                                                                                                                                       | Bancroft Way and San Pablo Ave        | City Staff<br>Pedestrian Plan (2020)  |
| 12  | Alameda CTC                                           | High-Visibility Crosswalk, Consolidate Driveways, Curb Extension, Median Refuge Island, Widen Sidewalk at Bus Stop                                                                                                                                                                                                | Allston Way and San Pablo Ave         | Pedestrian Plan (2020)                |
| 13  | Alameda CTC                                           | RRFB, Curb Extension                                                                                                                                                                                                                                                                                              | Cowper St and San Pablo Ave           | City Staff<br>Pedestrian Plan (2020)  |
| 14  | City of Berkeley                                      | Median Refuge Island on Southern Addison<br>2-Way Cycle track Connector                                                                                                                                                                                                                                           | Southern Addison St and San Pablo Ave | City Staff<br>Bike Plan Update (2026) |
| 15  | City of Berkeley                                      | Bike Box for left-turning North bikes turning onto San Pablo.<br>Bike signal detection and RRFB/PHB for peds and bikes coming from the northern Addison who will then turn left going SB on San Pablo and then turning right to head WB on Addison. Raised Crossing for ped/ bikes<br>2-Way Cycle track Connector | Northern Addison St and San Pablo Ave | City Staff<br>Bike Plan Update (2026) |
| 16  |                                                       | Restrict Right Turn on Red, Median Refuge Island, Curb Extensions                                                                                                                                                                                                                                                 | University Ave and San Pablo Ave      | City Staff<br>Pedestrian Plan (2020)  |
| 17  |                                                       | Ped Refuge Islands                                                                                                                                                                                                                                                                                                | Hearst Ave and San Pablo Ave          | City Staff                            |
| 18  | Alameda CTC                                           | Ped Refuge Islands. Tighten Intersection                                                                                                                                                                                                                                                                          | Delaware St and San Pablo Ave         | City Staff                            |
| 19  | Alameda CTC                                           | RRFB                                                                                                                                                                                                                                                                                                              | Francisco St and San Pablo Ave        | City Staff                            |
| 20  | Alameda CTC                                           | Raised Intersection                                                                                                                                                                                                                                                                                               | Virginia St and San Pablo Ave         | City Staff                            |
| 21  |                                                       | Median Refuge Island, Widen Sidewalk at Bus Stop                                                                                                                                                                                                                                                                  | Cedar St and San Pablo Ave            | Bike Plan Update (2026)               |

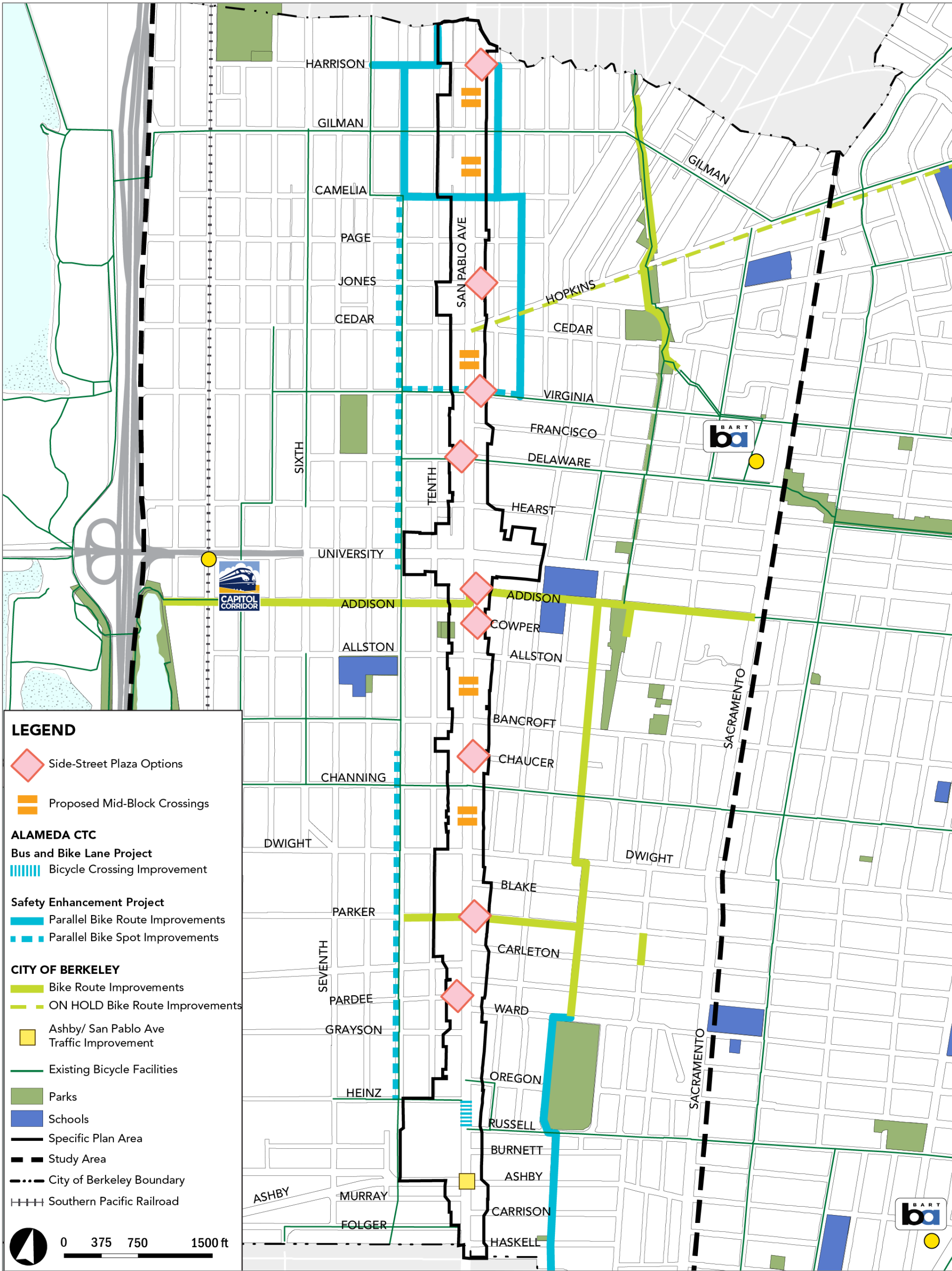
| No.                                                                                    | Existing Project not considered in Prop. Improvements | Proposed Improvement                                                                                                                                                      | Nearest Intersection                   | Source                                                |
|----------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------|
| 22                                                                                     | Alameda CTC                                           | Raised Intersection<br>PHB                                                                                                                                                | Camelia St and San Pablo Ave           | City Staff<br>Bike Plan Update (2026)                 |
| 23                                                                                     | Alameda CTC and City of Berkeley                      | Ped Refuge Islands<br>Potential Protected Intersection Treatments on west side and shortening of pedestrian crossing of Gilman St                                         | Gilman St and San Pablo Ave            | City Staff<br>Bike Plan Update (2026)                 |
| 24                                                                                     |                                                       | Curb Extension, Consolidate driveways, Median Refuge                                                                                                                      | Curtis St and University Ave           | City Staff                                            |
| 25                                                                                     |                                                       | Curb Extension, Median Refuge                                                                                                                                             | 10 <sup>th</sup> St and University Ave | City Staff                                            |
| 26                                                                                     | Alameda CTC or City of Berkeley                       | 2-Way Cycle track Connector either to Oregon St (Intersection 4) or Russell St (Intersection 27), Protected Intersection on west side, and Shortened Pedestrian Crossing. | Heinz St and San Pablo Ave             | Bike Plan Update (2026)                               |
| 27                                                                                     | Alameda CTC or City of Berkeley                       | 2-Way Cycle track Connector to Heinz St (Intersection 26), Protected Intersection on east and west sides, and Shortened Pedestrian Crossing of Russel St, Median Refuge   | Russell St and San Pablo Ave           | Bus and Bike Lanes Project<br>Bike Plan Update (2026) |
| Ped = Pedestrian; RRFB = Rectangular Flashing Beacons; PHB = Pedestrian Hybrid Beacons |                                                       |                                                                                                                                                                           |                                        |                                                       |

Figure D.2: Connections & Intersection Improvements



Source: City of Berkeley, Alameda CTC, CD+A. 2025.

Figure D.3: Connections & Mid-Block and Side Street Plaza Options



Source: City of Berkeley, Alameda CTC, CD+A. 2025.





# San Pablo Avenue Specific Plan Design Standards Document

- Final Draft -

# Plan Acknowledgments

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## Special Thanks

Marcel Pardo Ariza, Artist-in-Residence

*Please note: Photographs of buildings in this document do not imply full compliance with the standards herein.*

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# Introduction

## Purpose and Applicability

The vision of the San Pablo Avenue Specific Plan (Specific Plan) is to support diverse housing options, strengthen new and existing businesses, enhance public amenities, and improve connections between the Specific Plan Area and surrounding neighborhoods and destinations.

To work towards that vision, the Specific Plan establishes community-based, context-sensitive regulations and policies.

The intent of the San Pablo Avenue Design Standards (Design Standards Document) is to work in coordination with the policies of the Specific Plan to implement its vision. The Design Standards Document provides a clear set of objective standards while allowing flexibility and creativity in design. In addition to the standards contained in the *Zoning Ordinance*, projects must comply with the Design Standards Document.

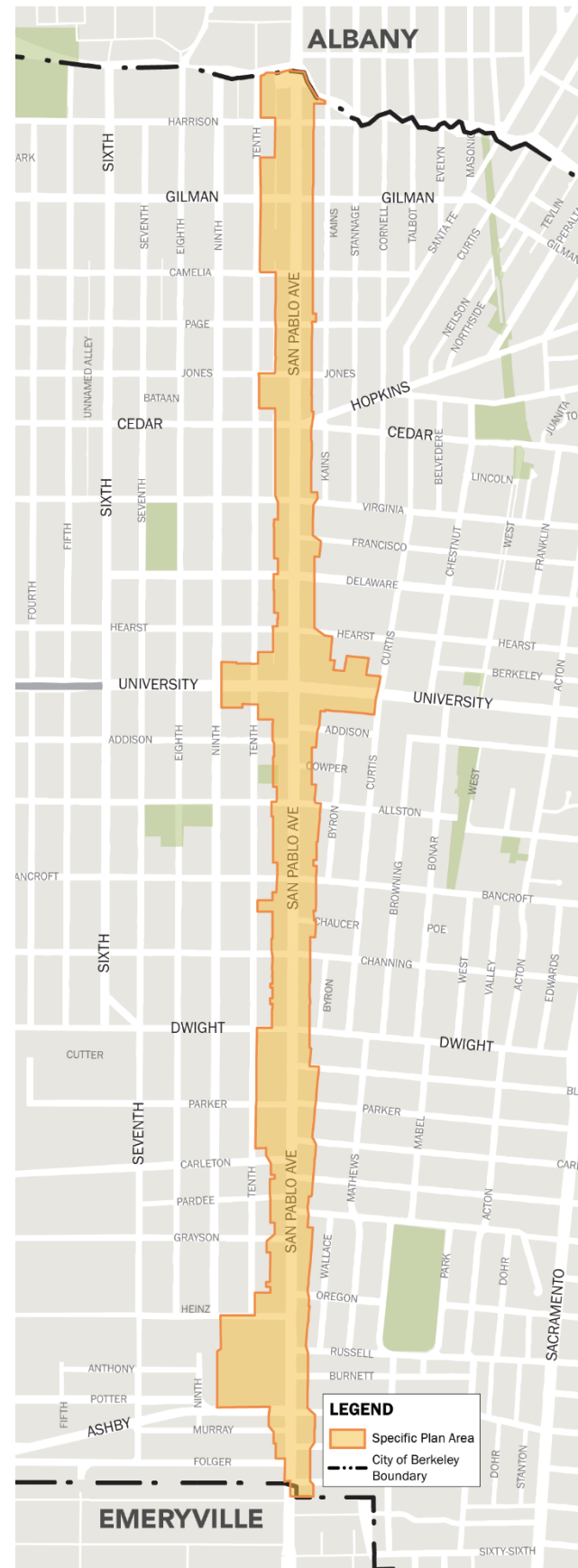
The Design Standards Document apply within the Specific Plan Area shown in Figure 1. The area is generally comprised of parcels fronting San Pablo Avenue within the city limits, as well as some adjacent parcels in areas that have the potential to support new mixed-use development.

The Design Standards Document applies to new construction and alterations to existing buildings, with the exception of automotive uses on automotive sites.

Projects subject to the Design Standards Document are exempt from Design Review.

## Revisions

The Planning Director may make minor clarification, corrections or technical changes to the text, figures and photos of the Design Standards Document.



**Figure 1. Map of Specific Plan Area**  
Data from City of Berkeley, Alameda CTC, 2025

## Guiding Principles

The design standards were developed based on the Specific Plan's vision of San Pablo Avenue as a mixed-use district that is integrated with the neighborhoods and employment areas that surround it, and that continues to serve Berkeley's broad range of community members and support citywide and regional needs. To achieve that vision, the Specific Plan provides several guiding principles that underpin the design standards in this document:



### Increase the Diversity and Supply of Housing

- ★ Revise Housing Development Regulations
- ★ Encourage Engaging Buildings and Site Frontages



### Increase Business Activity to Support a Thriving Community

- ★ Reduce Vacancy of Ground Floor Space
- ★ Create Identifiable Commercial Areas with Stronger Business Presence



### Enhance Interaction Between Public and Private Spaces

- ★ Increase Public Open Space and Community Gathering Spaces



### Enhance Local and Citywide Access

- ★ Enhance Pedestrian and Bicycle Safety and Access

## How to Use the Standards

The standards in this document are regulatory and compliance is mandatory. These standards are required in addition to the development standards in the *Zoning Ordinance* (BMC Title 23). This document refers to any related regulations in the *Zoning Ordinance*, such as development standards.

## Document Structure

The Design Standards Document are organized into five sections:

1. **Introduction.** Describes the purpose and applicability of the Design Standards Document, the guiding principles, and the administrative process to revise them.
2. **Site Design.** Provides standards for the arrangement of activities on the site, primarily in relation to the adjacent public space.
3. **Building Design.** Provides architectural standards, including façade modulation and articulation, windows, colors and materials, roofs, and parking garages.
4. **Pedestrian-Level Design.** Provides standards primarily at the ground-floor that relate to the building's interaction with sidewalks, adjacent buildings, and open space.
5. **Glossary.** Defines technical terms not otherwise included in the *Zoning Ordinance* (BMC Title 23).

## Standard Structure

Each standard is assigned a specific number and is organized into the following format:

- **Number and Title.** Topic area
- **Purpose Statement.** Ties standard to the guiding principles of the Specific Plan.
- **Applicability.** Describes project types that must comply with the standard.
- **Standard.** Describes the design requirement.
- **Specific Plan Policy Reference.** Connects the standard to the overall Specific Plan policy direction.
- **Recommendations.** Some standards include optional design recommendations.

## Exceptions to the Standards

A project applicant may request an exception to any design standard. The request must be made in writing as part of a Zoning Project Application for a proposed project. The application for an exception must contain a detailed description of the design standard that is requested to be waived; how the physical constraints or other unique situations of the project site make it infeasible to comply with the design standard; how the proposed project meets the design standard at issue to the extent feasible; and how the request meets each exception requirement.

The Design Review Committee shall consider the request and information submitted by the applicant and make a recommendation to the decision-maker (Zoning

Adjustments Board or City Council) regarding certain findings to approve or deny the request. The decision-maker may only grant an exception if all the following findings are made:

1. There is a physical constraint or unique situation that:
  - a. Is not created by the project applicant or property owner; and
  - b. Is not caused by financial or economic constraints.
2. Approving the exception will not create a safety hazard in which the subject property is located.
3. The proposed project meets the intent of the design standard to the extent physically feasible.



# Design Standards

There are three types of Design Standards described below: Site Design, Building Design, and Pedestrian-Level Design.

## 1. Site Design

### 1.1 Pedestrian Access

#### 1.1.1 Pedestrian Access: Through-Lots

**Purpose Statement:** To ensure pedestrian comfort, security, and safety within new development.

**Applicability:** This standard applies to any new development located on a site with street frontages on opposite sides of a block.

**Standard:** Building entries shall be located on both frontages of the site.

**Specific Plan Policy Reference:** LU-S.6 Design Standards.

#### Recommendations:

Projects that contain multiple buildings should provide a mid-block passage (see Standard 3.3.4 Mid-Block Passage) to serve as a form of pedestrian access between multiple buildings on the same site.

#### 1.1.2 Pedestrian Access: Multiple Buildings

**Purpose Statement:** To ensure pedestrian comfort, security, and safety.

**Applicability:** These standards are applicable to any new development site that contains multiple buildings.

#### Standards:

- A. **Internal Connections.** Provide a system of pedestrian walkways that connects all buildings on a site to all of the following: (1) each building on the site; (2) on-site bicycle parking areas; (3) on-site automobile parking areas; (4) on-site open space areas; (5) pedestrian amenities; and (6) the publicly accessible pedestrian circulation network outside of the development site. See example Figure 2.
- B. **Illumination.** Provide pedestrian-oriented lighting along onsite pathways at minimum intervals of every 40 feet.

**Specific Plan Policy Reference:** LU-S.6 Design Standards.

#### 1.1.3 On-Site Walkways

**Purpose Statement:** To ensure pedestrian comfort, security, and safety within new development.

**Applicability:** Any walkway that crosses private publicly accessible streets, parking areas, loading areas, or other vehicular routes within a development site. See example Figure 3.



**Figure 2. Pedestrian Access Paths**  
Between Buildings within the Lot . Photo  
by AWP



**Standard:** Walkways shall be clearly identifiable through the use of at least one or more of the following:

1. Grade change (raised); or
2. Change in at least one of the following: paving material, color, striping, or bollards.

**Specific Plan Policy Reference:** *LU-S.6 Design Standards.*

## 1.2 Parking and Vehicular Access

**Purpose Statement:** To support walking and sustain a diverse, active and safe public realm.

**Applicability:** These standards are applicable to any new development.

### Standards:

- A. **Parking Access Hierarchy.** Parking and service area access shall be located from the following list, in order of preference:
  1. From an alley;
  2. In the absence of an existing or proposed alley, access shall be from a driveway shared with a property abutting the development site;
  3. In the absence of a shared driveway, access shall be from a side-street; or
  4. In the absence of a side-street, access shall be from a curb cut/driveway along the primary street frontage.
- B. **Parking Location.**
  1. Parking areas shall be located behind, within, or underneath buildings, with the exception of curb-side pickup/drop-off areas and ADA-compliant spaces.
  2. On sites with more than one street frontage, parking areas located along the primary street frontage are prohibited.
  3. No more than 30 feet of the linear primary street frontage along San Pablo Avenue, Gilman Street, Cedar Street, Hopkins Street, University Avenue, Dwight Way, or Ashby Avenue shall be devoted to parking garages (see Figure 4) and openings, service, and loading entries.
- C. **Service Entries.** Service entries shall be located on the non-primary street frontage (unless all frontages are primary).

**Specific Plan Policy Reference:** *LU-S.6 Design Standards.*



**Figure 3. Elevated Walkway Crossing**  
Photo by AWP



**Figure 4. Parking Garage Entry**  
Photo by AWP

## 2. Building Design

### 2.1 Façade Modulation and Articulation

#### 2.1.1 All Buildings

**Purpose Statement:** Create cohesive and well-crafted building façades with human-scaled details and variations on façades that support a comfortable, engaging pedestrian experience. Balance predictability with creative flexibility to support high-quality and context-sensitive architecture within the Specific Plan Area.

**Applicability:** These standards are applicable to any new development.

**Standards:**

- A. **Blank Walls.** Along publicly accessible streets, sidewalks, pedestrian pathways, and open space areas, blank walls exceeding the following lengths are prohibited:
  1. **Storefront Ground Floor Frontage Type.** 20 feet in length.
  2. **Active, Residential, and Live-Work Ground Floor Frontage Types.** 30 feet in length.
- B. **Façade Treatments.**
  1. **All Façades.** All façades of a building on each block face shall be designed and detailed in a similar manner, except for interior courtyards and interior side façades of interior lots at the zero-lot line.
  2. **Interior Side Façades.** Interior side façades located at the zero-lot line shall be enhanced with either public art or landscaping.
  3. **Juliet Balconies.** If provided, Juliet balconies shall have a minimum depth of 12 inches and length of 3 feet. See Figure 6.
- C. **Façade Articulation.** All façades shall include at least **two** of the following façade articulation strategies:
  1. **Recesses.** Vertical and horizontal recesses, such as: (1) a pattern of recessed grouping of windows; (2) recessed panels; or (3) entryways. See example Figure 5.
  2. **Projections.** Vertical and horizontal projections, such as: (1) projecting entries; (2) bay windows; (3) shading and weather protection devices (for windows); or (4) decorative architectural details. If provided, shading and weather protection projections shall be a minimum of 2 feet in depth. Unless otherwise noted, architectural projections shall be a minimum of 4 inches in depth.
  3. **Datum Lines.** Horizontal lines that continue the full length of the building, such as cornices, with minimum height of 8 inches and minimum projection depth of 6 inches.
  4. **Screening Devices.** Screening devices such as lattices, louvers, shading devices, perforated metal screens, or similar strategies.
  5. **Ornamentation.** Ornamentation shall either vary and contrast in color or material from the wall surface or be constructed of high-quality materials (e.g., brick, stone, ceramic, metal, wood, tile, or fiber-cement board). Ornamentation may include the following: (1) cornices; (2) inlays; (3) reliefs; (4) decorative tile; or (5) window trim. Built-up stucco trim or molding (“plant-ons”) are prohibited.



**Figure 5. Building Façade with Modulation**  
Photo by AWP



**Figure 6. Building Façade with Balconies and Ornamentation**  
Photo by AWP

**Specific Plan Policy Reference:** *LU-S.6 Design Standards.*

## 2.1.2 Tall Buildings

**Purpose Statement:** Create cohesive and well-proportioned building façades with human-scaled details and variations on tall façades to reduce perceived building mass and potential wall-effect of a tall and wide façade, given the increased area and height of the façades. This supports a comfortable, engaging pedestrian experience.

**Applicability:** In addition to the standards in Section 2.1.1- All Buildings, these standards are applicable to any new development that is a minimum 4 stories in height.

**Standards:**

- A. **Vertical Rhythm.** Building façades facing publicly accessible streets, pathways, and/or private open space shall:
  1. Express a vertical rhythm and pattern that reflects the size and scale of a residential unit and/or individual rooms (see Figure 7); or
  2. Provide a change in plane through a combination of recesses and projections.
- B. **Façade Articulation.** Tall building façades shall include at least **three** of the following façade articulation strategies:
  1. **Recesses.** Vertical and horizontal recesses, such as: (1) a pattern of recessed grouping of windows; (2) recessed panels; or (3) entryways.
  2. **Projections.** Vertical and horizontal projections, such as: (1) projecting entries; (2) bay windows; (3) shading and weather protection devices (for windows); or (4) decorative architectural details. If provided, shading and weather protection projections shall be a minimum of 2 feet in depth. Unless otherwise noted, architectural projections shall be a minimum of 4 inches in depth.
  3. **Datum Lines.** Horizontal lines that continue the full length of the building, such as cornices, with minimum height of 8 inches and minimum projection depth of 6 inches.
  4. **Screening Devices.** Screening devices that serve to create a barrier or partition within the building façade design (e.g., lattices, louvers, shading devices, or perforated metal screens).
  5. **Ornamentation.** Ornamentation shall either vary and contrast in color or material from the wall surface or be constructed of high-quality materials (e.g., brick, stone, ceramic, metal, wood, tile, or fiber-cement board). Ornamentation may include the following: (1) cornices; (2) inlays; (3) reliefs; (4) decorative tile; or (5) window trim. Built-up stucco trim or molding (“plant-ons”) are prohibited.

**Specific Plan Policy Reference:** *LU-S.6 Design Standards.*



**Figure 7. Building Façade with Articulation and Vertical Rhythm**  
Photo by CD+A



### 2.1.3 Corner Buildings

**Purpose Statement:** Emphasize corner locations as prominent building elements, which require enhanced articulation to strengthen intersection identity and visibility.

**Applicability:** These standards are applicable to any new development that is both: (1) a minimum 4 stories in height; and (2) located at the corner of any of the following public streets: San Pablo Avenue and Dwight Way, Cedar Street, Ashby Avenue, University Avenue, or Gilman Street.

**Standard:** The corner of the building shall include at least one of the following features:

1. A different material application and/or fenestration pattern from the rest of the façade (see Figure 8); or
2. Height variation of at least 4 feet greater or less than the abutting primary façade; or
3. A rounded corner, chamfered corner, tower or cupola.

**Specific Plan Policy Reference:** LU-S.6 Design Standards.

### 2.1.4 Through-Lot Buildings

**Purpose Statement:** To ensure that new development supports walking and sustains a diverse, active and safe public realm.

**Applicability:** These standards are applicable to any new development that is all of the following: (1) 4 stories in height or taller; (2) located on a lot that exceeds 170 linear feet of site frontage along either San Pablo Avenue or University Avenue; and (3) has a frontage on opposite sides of a block.

**Standard:** Buildings exceeding 350 feet in length or width are prohibited.

**Specific Plan Policy Reference:** LU-S.6 Design Standards.

## 2.2 Windows

**Purpose Statement:** Encourage high-quality design that provides visual interest.

**Applicability:** These standards are applicable to any new development.

**Standard:** Windows shall meet at least **one** of the following requirements:

1. Recessed at least 3 inches from the plane of the surrounding exterior wall; or
2. Framed with a minimum projection of 4 inches from the façade (see Figure 9); or
3. Provide a combination of trim (at least 2 inches) and recess (at least 1 inch).
4. Built-up stucco trim or molding (“plant-ons”) are prohibited.

**Specific Plan Policy Reference:** LU-S.6 Design Standards.



**Figure 8. Building Corner with Façade Articulation**  
Photo by AWP



**Figure 9. Framed Windows**  
Photo by AWP

## 2.3 Colors and Materials

**Purpose Statement:** Encourage high-quality materials that provide visual interest.

**Applicability:** These standards are applicable to any new development.

**Standards:**

- A. **Variation in Materials and Colors.** Buildings shall include at least 3 variations in material type, material size, texture and pattern, and/or color (See Figure 10). Any one material must comprise at least 20 percent of the building frontage, excluding windows, railings, base bulkheads, and trim.
- B. **Material Changes at Corners.** A change in material shall be offset by a minimum of 2 inches in depth. Materials shall continue around corners for a minimum distance of 4 feet. The same material shall continue to the next change in the wall plane.
- C. **Building Component Colors.** All vents, flashing, electrical conduits, gutters and downspouts shall be painted the same color as the adjacent surface.

**Specific Plan Policy Reference:** LU-S.6 Design Standards.



**Figure 10. Building Frontage along San Pablo Avenue**  
Photo by CD+A

**Recommendation:**

Colors should be used to bring out contrast between walls, windows, and trim. Use of color is encouraged to make the area vibrant.

## 2.4 Rooftop Design Treatments

**Purpose Statement:** To minimize visual impact of rooftop elements needed for the function of the building such that they are not visible from any point at or below the roof level of the subject building.

**Applicability:** These standards are applicable to all new buildings.

**Standards:**

- A. **Roof Edge Treatment.** Buildings shall have at least **one** of the following roofline edge treatments:
  1. A decorative cornice treatment (other than just colored "stripes" or "bands"). Cornices shall project a minimum of 6 inches from the façade (see example Figure 11); or
  2. A sloped roof with overhangs and brackets; or
  3. A parapet, which shall include a cap and corner detail to create a shadow line to enhance the building.
- B. **Rooftop Elements.** Rooftop elements that are at least 2 feet in height, such as roof access and mechanical equipment, shall either be:
  - a. Set back minimum 10 feet from the roof edge; or
  - b. Screened with parapet walls, towers, or other architectural features.

**Specific Plan Policy Reference:** LU-S.6 Design Standards.



**Figure 11. Building Frontage Upper Stories and Roof Transition**  
Photo by AWP

**Recommendation:**

Rooftop equipment should be grouped together where practical.

## 2.5 Parking Garages

**Purpose Statement:** To minimize the visual impact of parking.

**Applicability:** These standards are applicable to new stand-alone parking structures and structured parking incorporated into a building.

**Standards:**

- A. **All Entries.** All entries to a structured parking garage shall be similar to the building façade. Architectural techniques can include matching façades, material treatments, or recessed garage entries.
- B. **Pedestrian Entries.** Pedestrian entrances shall be located at-grade, connecting directly to the public pedestrian circulation network, on each street-facing frontage.
- C. **Ground Level Design.** Except for vehicular entrances, the ground floor level, including any partially subgrade parking visible above grade, that faces a public right-of-way or publicly accessible open space or path, shall be concealed from public street view by:
  1. Lining with residential or non-residential use with a minimum depth of 20 feet on the ground floor, measured from the building façade; and
  2. Designing and treating the façade with the same level of detail, material quality, and façade articulation as other building façade areas; and/or
  3. Incorporating any of the following screening devices:
    - a. Landscaping (e.g., shrubs, landscaped trellises); or
    - b. Crafted ornamental metal screens (see Figure 12).
- D. **Upper-Level Design.** All parking levels above the ground level shall be designed and treated with the same level of detail, material quality, and façade articulation as other façade areas (e.g., façade articulation and modulation, use of real windows with glazing or false windows defined by frames, lintels, or sills); and/or
- E. **Light Screening.** Lighting shall be screened such that automobile headlamps are not visible from adjacent buildings, parcels, streets, public parks, or publicly accessible open spaces.

**Specific Plan Policy Reference:** *LU-S.6 Design Standards.*



**Figure 12. Ornamental Screening**  
Photo by AWP

## 3. Pedestrian-Level Design

### 3.1 Ground-Floor Design

As established in *LU-P.9 Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors*, all ground-floor frontages of new buildings constructed within the Specific Plan Area shall construct a ground-floor frontage that complies with the requirements and standards of this section. There are 4 allowable ground floor frontage types, each having distinct design standards for the interface of the building and the street. The BMC includes the figure *Ground-Floor Frontage Types in Nodes* showing the locations where certain frontage types are required within Designated Nodes. Outside of Designated Nodes, any ground floor frontage type is allowed. A single development project may combine any number of ground-floor frontage types that are allowed on the development site.

#### 3.1.1 Storefront

**Purpose Statement:** To provide a building form that is functional for mixed-use buildings, primarily to encourage a strong retail-oriented commercial frontage that allows for other active uses, such as residential lobbies or exercise facilities, and where residential units and other less active uses are allowed on the ground floor behind commercial frontages. The design of the building should provide visibility between the public realm of the sidewalk and the activities of the use inside the building.

**Applicability:** Storefront Ground Floor Design is required for all new buildings located within a Designated Node, generally along San Pablo Avenue and University Avenue, except where shown in the BMC Figure: *Ground-Floor Frontage Types in Nodes*.

**Standards:**

- A. **Frontage Zone and Landscaping.** Projects shall be consistent with the frontage zone dimension and landscaping standards in *PR-S.1 Sidewalk Zone Standards*.
- B. **Ground Floor Dimensions and Interior Requirements:**
  1. **Ground Floor Height.** Ground floors shall have a minimum floor to floor height of 15 feet.
  2. **Tenant Space Depth.** Ground floor tenant spaces shall be a minimum:
    - a. *Within Designated Nodes.* 40 feet in depth for a minimum of 50 percent of primary street building façades.
    - b. *Outside Designated Nodes.* 30 feet in depth. Sidewalk easements/outdoor dining may count towards the minimum depth.
- C. **Transparency.** Ground floor frontages shall be 60 percent transparent between 2.5 and 8 feet above finished grade. The following are prohibited: permanent covering of windows with frosted/opaque film, curtains, blinds, or tinted or reflective glass. See example Figure 13.
- D. **Entries.** Entries shall be weather protected to a minimum depth of 3 feet, by recessing the entry and/or constructing either an awning or canopy.

**Specific Plan Policy Reference:** *LU-P.9 Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors*.



**Figure 13. Storefront Frontage Design**  
Building fronting San Pablo Avenue.  
Photo by CD+A



### 3.1.2 Active

**Purpose Statement:** To provide a building form that is functional for a range of non-residential uses allowed in the Specific Plan Area, as well as residential amenity spaces.

**Applicability:** Active Ground Floor Design is a frontage type that is allowed in addition to Storefront Ground Floor Design for all new buildings located within the Designated Nodes, generally along streets intersecting San Pablo Avenue or University Avenue, as shown in the BMC Figure: *Ground-Floor Frontage Types in Nodes*.

**Standards:**

- A. **Frontage Zone and Landscaping.** Projects shall be consistent with the frontage zone dimension and landscaping standards in *PR-S.1 Sidewalk Zone Standards*.
- B. **Ground Floor Dimensions + Interior Requirements:**
  - 1. **Ground Floor Height.** Ground floors shall have a minimum floor to floor height of 15 feet.
  - 2. **Tenant Space Depth.** Ground floor tenant spaces shall be a minimum 30 feet in depth.
- C. **Transparency.** Ground floor frontages shall be 50 percent transparent between 2.5 and 8 feet above finished grade. The following are prohibited: permanent covering of windows with frosted/opaque film, curtains, blinds, or tinted or reflective glass.
- D. **Entries.** Entries shall be weather protected to a minimum depth of 3 feet, by recessing the entry and/or constructing either an awning or canopy. See example Figure 14.

**Specific Plan Policy Reference:** *LU-P.9 Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors.*



**Figure 14. Example of Active Frontage Design**

*Building fronting San Pablo Avenue.  
Photo by CD+A*

### 3.1.3 Residential

**Purpose Statement:** To provide a building form that fosters social interaction and street activation while providing appropriate transitions between public and private space.

**Applicability:** Residential Ground Floor Design is a frontage type that is allowed for all new buildings in locations within the Specific Plan Area where either Storefront or Active Ground Floor Design are not required. See the BMC Figure: *Ground-Floor Frontage Types in Nodes*.

**Standards:**

- A. **Frontage Zone and Landscaping.** Projects shall be consistent with the frontage zone dimension and landscaping standards in *PR-S.1 Sidewalk Zone Standards*.
- B. **Transparency.** Ground floor frontages shall be 30 percent transparent between 4 and 7 feet above finished grade.
- C. **Entries:**
  - 1. **Primary Shared Entries.** Primary entries shared by multiple residential units shall be:
    - a. Located at least once for each 200 feet of building frontage; and
    - b. Recessed by a minimum of 3 feet.
  - 2. **Primary Individual Entries.** Primary entries to an individual residential unit (see Figure 15) shall be:
    - a. Located facing the street; and
    - b. Weather protected to a minimum depth of 3 feet, by recessing the entry and/or constructing either an awning or canopy.

**Specific Plan Policy Reference:** *LU-P.19 Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors.*

**Recommendations:**

To create a semi-private transition between the sidewalk and residential units, raising the finished floor a minimum of 2 feet above finished grade and providing raised entries in form of either individual stoops or shared entry terraces is strongly encouraged.



**Figure 15. Elevated Individual Residential Entries**  
Photo by AWP

### 3.1.4 Live/Work

**Purpose Statement:** To support the unique needs of spaces that combine living and working on the ground floor and provide a storefront character to enhance the pedestrian environment within the Specific Plan Area.

**Applicability:** Live/Work Ground Floor Design is allowed outside of Designated Nodes.

**Standards:**

- A. **Frontage Zone and Landscaping.** Projects shall be consistent with the frontage zone dimension and landscaping standards in *PR-S.1 Sidewalk Zone Standards*.
- B. **Ground Floor Dimensions and Interior Requirements:**
  1. **Ground Floor Height.** Ground floors shall have a minimum floor to floor height of 15 feet.
  2. **Storefront Character.** A minimum of 50 percent of the live/work unit façade shall be designed as a storefront (see Figure 16), as follows:
    - a. Storefront areas shall be 60 percent transparent between 2.5 feet and 8 feet from finished grade.
    - b. Storefront areas shall be designed to include signage and lighting when being used for commercial use.
    - c. The following are prohibited within the commercial portion of a live/work unit: permanent covering of windows with frosted/opaque film, curtains, blinds, or tinted or reflective glass.
- C. **Entries:**
  1. Access to the non-residential portion of the unit shall be located on the street-facing façade.
  2. Access to the residential portion of the unit is not permitted on the street-facing façade.
  3. Primary ground floor entrances shall be weather protected to a minimum depth of 3 feet, by recessing the entry and/or constructing either an awning or canopy.

**Specific Plan Policy Reference:** *LU-P.9 Establish Ground Floor Form Types to Promote Pedestrian-Scaled and Flexible Ground Floors.*

**Recommendations:**

The following design strategies are encouraged to support a storefront character that enhances the pedestrian environment within the Specific Plan Area:

- Window display cases at least 4 feet in depth for a retail-oriented character.
- Roll-up doors compatible with the storefront design for artist studios or maker spaces.



**Figure 16. Street Facing Frontage of Live/Work Unit**  
Photo by AWP



## 3.2 Private Open Space Design

### 3.2.1 Common Private Open Space

**Purpose Statement:** To ensure that common private open space provided in new development supports social interaction while providing a suitable level of privacy for residents. See example Figure 17.

**Applicability:** These standards apply to all new development projects in the Specific Plan Area.

**Standards:**

**A. Dimensions, Placement and Access:**

1. Common private open spaces are shared and accessible only to the occupants of the building and their visitors.
2. Required common private open spaces may be located on the ground floor, parking or commercial podiums, or rooftops.
3. All common private open space must have a minimum width and length of 10 feet.

**B. Shading.** A maximum of 25 percent of the total common private open space area may be covered by an architectural element that provides shade. If provided, such elements shall be at least 8 feet above the grade of the open space.

**C. Seating.** Seating shall be provided that meets all of the following standards:

1. Seating may only be provided by at least one of the following: Moveable seating, fixed individual seats, fixed benches with and without backs, and design-feature seating such as seat walls, planter ledges, or seating steps.
2. Devices or forms affixed or incorporated into planter ledges, steps, sills or other horizontal surfaces that would otherwise be suitable for seating that are intended to prevent or inhibit seating (such as spikes, metal bars, or pointed, excessively rough, or deliberately uncomfortable materials or forms) shall be prohibited.
3. Seats that face building walls must be located a minimum of 6 feet from such wall.

**D. Landscaping:**

1. A minimum of 40 percent of the open space area shall be planted with trees, ground cover, shrubs, or be located within either movable or permanent planters, except for open space located on a rooftop.
2. A minimum of one tree per 600 square feet of the portion of the total common private open space in a development that is located outdoors shall be planted, except for podium-level courtyards.

**E. Screening:**

1. Residential units located on the same floor as a common private open space must be screened with a barrier to sufficiently screen the unit from view, such as landscaping, fencing, or decorative walls.
2. Bedroom windows located within 5 feet of an internal pathway or common private open space must be screened with a landscape barrier to screen the window from view.

**Specific Plan Policy Reference:** LU-S.6 *Design Standards*.



**Figure 17. Enclosed Courtyard with Common Amenities**  
Photo by AWP

### 3.2.2 Personal Private Open Space

**Purpose Statement:** To ensure that personal private open space provided in new development supports livable outdoor areas while maintaining a suitable level of privacy for residents.

**Applicability:** These standards apply to all new development projects in the Specific Plan Area.

**Standard:** Personal private open space shall meet all the following requirements:

1. All personal private open space must have a minimum clear height of 8 feet, measured from the ground floor or decking (see Figure 18);
2. Ground-floor personal private open space located outdoors must have a minimum dimension of 8 feet in at least one direction and 5 feet in all other directions; and
3. Balconies must have a minimum width and length of 5 feet.

**Specific Plan Policy Reference:** *LU-S.6 Design Standards.*



**Figure 18. Balconies**

*Photo by AWP*

## 3.3 Public Open Space Design

### 3.3.1 Sidewalk Expansion

**Purpose Statement:** To serve the range of uses and infrastructure located within each sidewalk zone along San Pablo Avenue, Gilman Street, Cedar Street, Hopkins Street, University Avenue, Dwight Way, and Ashby Avenue, consistent with the Pedestrian Plan (2020)<sup>1</sup> preferred widths for a Mixed-Use Residential Boulevard.

**Applicability:** These standards apply to all eligible projects seeking to provide a sidewalk expansion as a public open space incentive.

**Standards:** Sidewalk design and use shall comply with the objective design standards in *PR-S.1 Sidewalk Zone Standards*.

**Specific Plan Policy Reference:** *LU-P.7 Public Open Space Enhancements*, *LU-S.1 Sidewalk Expansion Incentive*, and *PR-P.1 Sidewalk Zones*.

### 3.3.2 Privately-Owned Public Open Space (POPOS)

**Purpose Statement:** To ensure the creation of high-quality POPOS within Designated Nodes to enhance placemaking and provide community open space within the Specific Plan Area. See example Figure 19.

**Applicability:** These standards apply to all eligible projects seeking to provide POPOS as a public open space enhancement consistent with *LU-P.7 Public Open Space Enhancements*.

**Standards:**

#### A. Dimensions, Placement and Access:

1. POPOS must have a minimum size of 5 percent of the site area, or 400 square feet, whichever is greater.
2. POPOS must have a minimum dimension of 20 feet in at least one direction.
3. POPOS must be clearly visible from the public right-of-way and have a direct publicly accessible connection to a sidewalk on one of the following public streets: San Pablo Avenue, Gilman Street, Cedar Street, Hopkins Street, University Avenue, Dwight Way, or Ashby Avenue and within a Designated Node. POPOS are prohibited on roofs.
4. Public access must be permitted daily at least during all hours that City parks are open pursuant to Section 6.32.020 of the Berkeley Municipal Code.
5. POPOS shall include signage that is located in a publicly conspicuous place stating that the open space is available for public use, hours of use, and identifies the party responsible for maintenance.

#### B. Shading:

1. Where provided, a maximum of 40 percent of the total area may be covered by permanent shade structures, such as awnings and trellises.



**Figure 19. POPOS Plaza in Front of Mixed-Use Development**  
Photo by CD+A

<sup>1</sup> Berkeley Pedestrian Plan. Appendix B: Engineering & Design Guidance, Sidewalks – Preferred Widths for Sidewalk Zones, page B-8.

<https://berkeleyca.gov/sites/default/files/documents/2020%20Pedestrian%20Plan%20Appendix%20B%20%28adopted%29.pdf>

2. POPOS with a clear vertical volume of at least 2 stories in height may be entirely covered by the floor area of the third story of the building and above.

**C. Landscaping:**

1. A minimum of one tree per 400 square feet of POPOS is required and trees may be located within a freestanding fixed planter.
2. A minimum of 20 percent of the POPOS must be landscaped. Landscaping shall include at least one of the following elements: (1) in-ground planting areas; (2) raised freestanding fixed or ballasted planters; or (3) integrated green infrastructure that treats stormwater.

**D. Screening.** Where provided to define the edge of a POPOS, screening material shall meet the following requirements:

1. Materials shall provide at least 75 percent transparency and be decorative, transparent and/or perforated; and
2. Materials may not exceed 36 inches in height from finished grade.

**E. Lighting.** Pedestrian-scale lighting that meets the standards in Table 5.2: Recommended Light Levels, *PR-P.3 Improve Street Lighting for the Safety and Comfort of All Users*, shall be provided.

**F. Seating:**

1. A minimum of one linear foot of seating for each 30 square feet of POPOS shall be provided.
2. Seating may only be provided by at least one of the following: Moveable seating, fixed individual seats, fixed benches with and without backs, and design-feature seating such as seat walls, planter ledges, or seating steps. See example Figure 20.
3. Devices or forms affixed or incorporated into planter ledges, steps, sills or other horizontal surfaces that would otherwise be suitable for seating that are intended to prevent or inhibit seating (such as spikes, metal bars, or pointed, excessively rough, or deliberately uncomfortable materials or forms) shall be prohibited.
4. Seating for the purpose of a sidewalk cafe shall not count towards meeting the seating requirement.
5. Seats that face building walls must be located a minimum of 6 feet from such wall.



**Figure 20. Quick-build POPOS plaza**  
Photo by CD+A

**Specific Plan Policy Reference:** *LU-P.7 Public Open Space Enhancements*.

### 3.3.3 Side Street Plaza

**Purpose Statement:** To encourage the enhancement of the pedestrian environment and support placemaking along San Pablo Avenue.

**Applicability:** These standards apply to all eligible projects seeking to provide a side street plaza as a public open space incentive.

**Standard:** Contribute to designing and building of a Side-Street Plaza, meeting the design and access standards described in *PR-P.15 Create Side-Street Plazas*.

**Specific Plan Policy Reference:** *LU-P.7 Public Open Space Enhancements* and *PR-P.15 Create Side-Street Plazas*.



### 3.3.4 Mid-Block Passage

**Purpose Statement:** To incentivize publicly accessible mid-block pathways in new through-lot developments. See example Figure 21.

**Applicability:** These standards apply to all eligible projects seeking to provide a side street plaza as a public open space incentive.

**Standards:**

**A. Dimensions, Placement and Access:**

1. Located at the ground level and be accessible from San Pablo Avenue and/or University Avenue.
2. A minimum 16-foot width and 16-foot height, allowing for built space above and/or below the surface of the passage.
3. Provide unobstructed visibility from one public space to another.
4. Provide signage that is located in a publicly conspicuous place stating that the open space is available for public use, hours of use, and identifies the party responsible for maintenance.

**B. Lighting.** Provide nighttime illumination pursuant to Ordinance N.S.-7424 and *PR-P.3 Improve Street Lighting for the Safety and Comfort of All Users*.

**C. Wayfinding.** Provide at least one wayfinding sign on each side of the passage.

**Specific Plan Policy Reference:** *LU-S.3 Mid-Block Passage Incentive and PR-P.7 Public Open Space Enhancements*.



**Figure 21. Mid-block Crossing**  
“The Dogpatch Artwalk” in San Francisco.  
Photo by Fletcher Studio

## 3.4 Service and Utility Design

**Purpose Statement:** To minimize visual impact on the pedestrian experience and neighboring properties to the extent feasible.

**Applicability:** These standards apply to all projects that provide any of the following service and utility elements within the Specific Plan Area, unless otherwise prohibited by the utility provider, building and/or fire codes:

- Utility Equipment (e.g., electric and gas meters, fire sprinkler valves).
- Service, storage areas and loading areas.
- Communal refuse, recycling, and compost collection

**Standards:**

**A. Design.** All above-ground utility equipment, service, storage, and communal refuse, recycling, and compost/green waste collection areas shall be similar to the project building and landscape design.

**B. Screening.** All above-ground utilities and equipment, service, storage, and outdoor loading areas or enclosures located outside shall be screened (see Figure 22).

**C. Backflow Preventors.** Backflow preventors shall be located within landscaped setback areas and painted black or green. If no landscaped setback areas exist on the site, then they shall be incorporated into the front of the building and concealed from public street view.

**D. Transformers.** All transformers should be undergrounded.

**Specific Plan Policy Reference:** *LU-S.6 Design Standards*.



**Figure 22. Utility Equipment Location**  
Photo by AWP

## 3.5 Private Parklets

**Purpose Statement:** To increase flexibility for temporary uses that support an active, pedestrian-oriented and economically resilient Specific Plan Area. See example Figure 23.

**Applicability:** These standards apply to any parklet constructed on private property within an existing off-street parking space(s).

**Standards:**

**A. Design:**

1. Any fixtures or temporary materials constructed for the purpose of creating a Private Parklet shall be removable.
2. A visible edge to the Private Parklet must be provided. Any railing, fencing, or landscaping material installed for the purpose of providing a visible edge shall be a maximum of 36 inches in height and decorative, transparent, and/or perforated with a minimum of 75 percent transparency.

**B. Access:**

1. The Private Parklet shall be accessible to customers during business hours.
2. Access and circulation from, to and within the remaining area of the off-street parking lot, driveway, and loading areas shall be maintained during operating hours as approved by the Public Works Department.

**Specific Plan Policy Reference:** *LU-P.8 Expand Allowed Primary and Temporary Uses* and *PR-P.16 Support Use and Creation of Parklets*.



**Figure 23. Parking Lot with Restaurant Seating**

Photo from Vik's Chaat, [vikschaatcafe.com](https://vikschaatcafe.com), accessed April 2025.

## 3.6 Public Art

### Purpose Statement:

- Create a sense of place along San Pablo Avenue and celebrate the neighborhood's identity through integrated, high-quality public art.
- Activate Designated Nodes, open spaces, and building frontages with artwork that enhances the visual experience of the Avenue.
- Encourage collaboration with local artists and inclusion of art that reflects community.

**Applicability:** These standards apply to all projects subject to the Percent for Art Ordinance (BMC Chapter 23.316, Percentage for Public Art on Private Projects).

### Standards:

- A. **Guidelines and Procedures.** All public art provided within the Specific Plan Area shall comply with the guidelines and procedures in BMC Chapter 23.316, Percentage for Public Art on Private Projects.
- B. **Location.**
  1. Public art shall be located in publicly visible areas (e.g., building entries, courtyards, plazas, side street plazas, POPOS, and pedestrian walkways).
  2. Public art shall be either freestanding or incorporated into building elements (e.g., façades, paving, railings, columns). See example Figure 24.
- C. **Visibility.** Public art shall be visible from at least one of the following public vantage points:
  1. Public right-of-way (preferably from San Pablo Avenue or University Avenue);
  2. Publicly accessible plaza; or
  3. Designated pedestrian pathway.
- D. **Access.** Public art shall be accessible without barriers or restricted access during daylight hours. Examples include building murals, fencing murals, art installations in parking lots, landscaped areas, or inside businesses with visibility from the public realm within the Specific Plan Area.

**Specific Plan Policy Reference:** *LU-S.6 Design Standards* and *PR-P.13 Facilitate Installation of Public Art that Benefits the Public Realm*.

### Recommendations:

Projects within the following Designated Nodes are strongly encouraged to provide on-site public art: Gilman Street, University Avenue, and Ashby Avenue.

Privately funded art installations located on buildings and other private properties that are visible from the public right-of-way are encouraged.



**Figure 24. Public Art on Walls and as Surface Treatment**

Top: Public art Wall Mosaic - 2352 Shattuck Avenue. Bottom: Painting on pavement in reuse of former parking lot - Broadway and 21<sup>st</sup> Street in Oakland. Photos by CD+A



## 4. Glossary

1. **Ballasted Planter.** A planter that is secured with heavy material to ensure that it is stable against wind or other factors.
2. **Blank Wall.** A building façade without doors, windows, landscaping treatments, or public art.
3. **Chamfer.** A transitional edge between two building façades, typically created by a 45-degree angle.
4. **Datum Lines.** Continuous horizontal architectural elements along a building façade that establish a consistent line of alignment.
5. **Freestanding Fixed Planter.** A planter that is self-supporting – it does not rely on another external structure for support.
6. **Through-lot.** A lot that has frontage on two opposite sides onto two or more public rights-of-way.
7. **Wall Plane.** Continuous wall surface.

**ATTACHMENT 1, EXHIBIT D**  
**DRAFT**  
**UNIVERSITY AVENUE STRATEGIC PLAN AMENDMENTS**

**Land Use Framework**

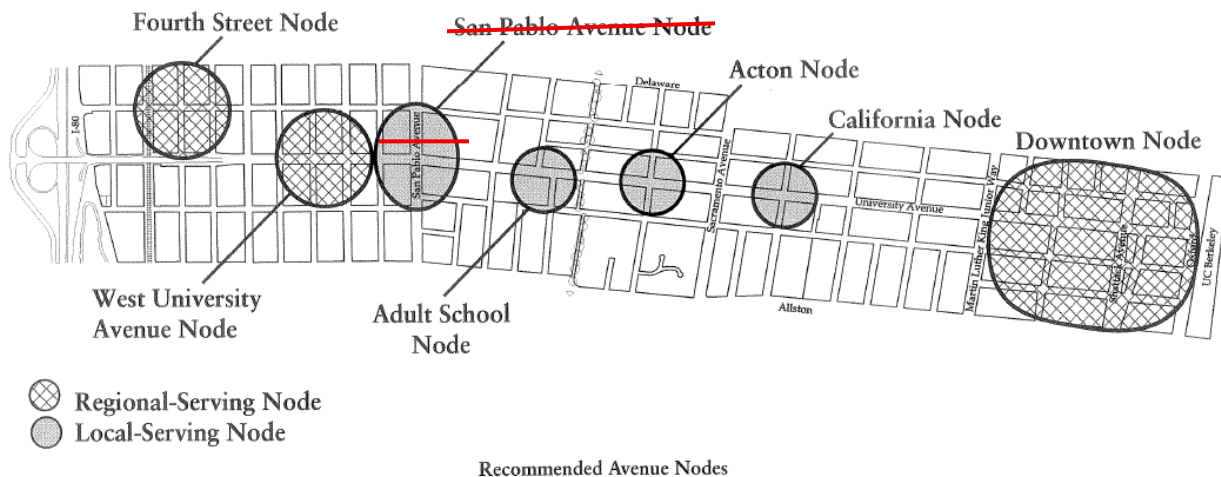
*Page 28*

The seven Avenue Nodes recommended by this plan are as follows: 1) Fourth Street in West Berkeley, 2) West University Avenue, ~~3) San Pablo Avenue, 34)~~ University Avenue at the Adult School, ~~45)~~ University at Acton Street, ~~56)~~ University at California Street and ~~67)~~ Downtown.

~~San Pablo Avenue—This street has recently experienced something of a renaissance. There is a wide variety of stores and businesses along San Pablo, including local-serving convenience shops, small restaurants and cafes, a bank, post office, discount households supplies, a drug store, liquor store, car repair, and other auto-related services. This tree-lined avenue is both pedestrian-oriented in its fine-grained scale and a major auto/transit thoroughfare. Most older buildings come to the street edge and create a strong pedestrian environment. New uses and buildings should protect and enhance the positive aspects of this area.~~

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Strategy 6A: Create a special Zoning Overlay Designation for University Avenue between ~~San Pablo Avenue~~ Curtis Street and Martin Luther King Jr. Way that:





LEGEND

-  Local-Serving Avenue Nodes
-  Region-Serving Avenue Nodes
-  Avenue Residential
-  Neighborhood Residential

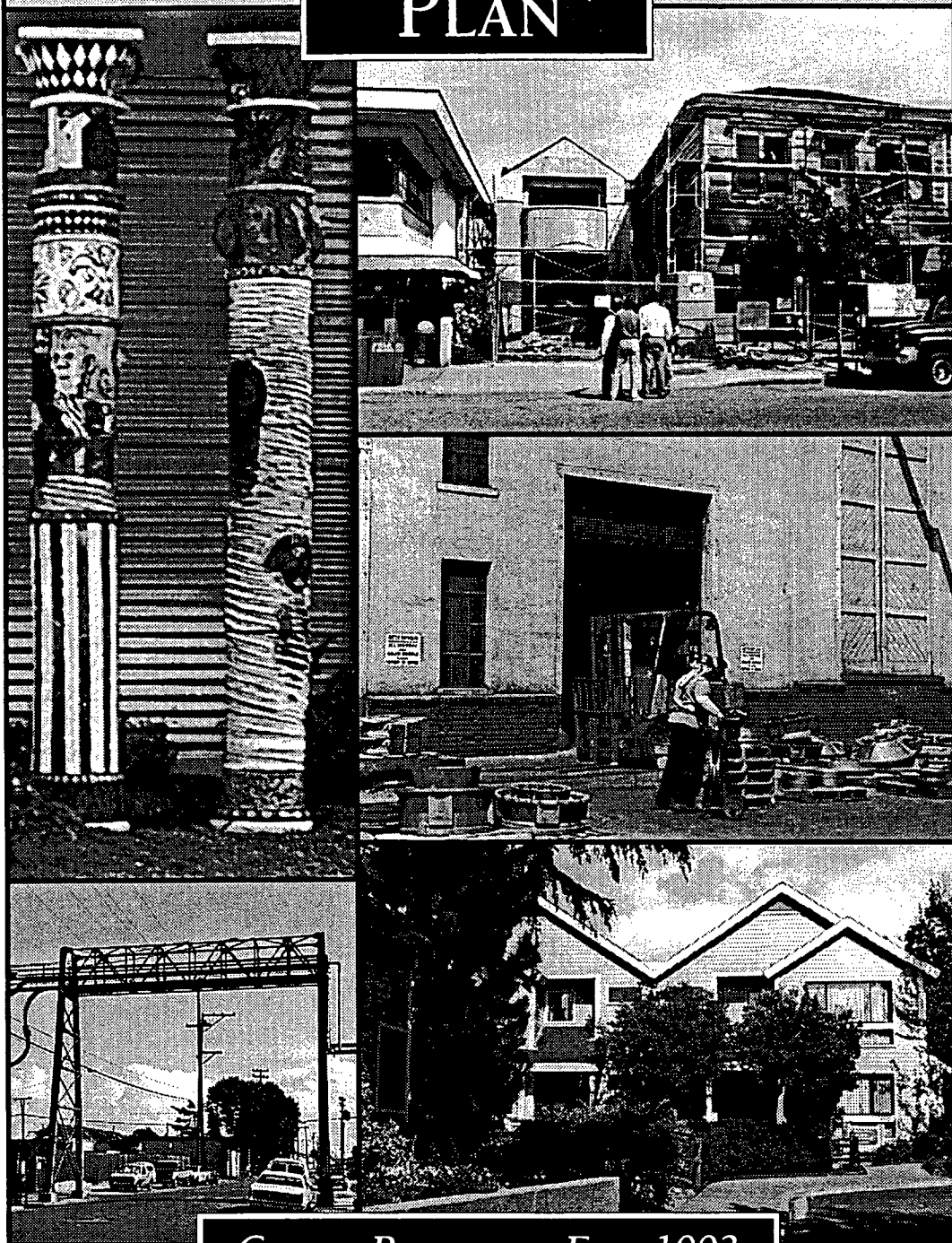
Recommended Zoning Overlay Designations

**ATTACHMENT 1, EXHIBIT E**  
**WEST BERKELEY PLAN AMENDMENTS**

The proposed amendment to the West Berkeley Plan would retire the Plan in its entirety. In legislative terms, this would involve deleting all text and images contained in the West Berkeley Plan.

# WEST BERKELEY

## PLAN



CITY OF BERKELEY • FALL 1993



# CITY COUNCIL MEMBERS

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Fred Collignon     Shirley Dean  
Linda Maio         Betty Olds  
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Mary Wainwright     Carla Woodworth  
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Clifford Fred       Jeff Horowitz  
Karen Latimer     Liz Resner  
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Photo Credits: Nathan Landau,  
Norma Hennessey, Carol Kamlarz, Jane Scheer,  
Planning Analysis and Development

The West Berkeley Plan Committee wishes to give  
special thanks to Luis Reyna, Waterfront Commissioner,  
who was an active participant in the West Berkeley Plan  
until his untimely death in 1988.

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Carl Duchart, Miles Inc. (Manufacturer)  
David Eiffler, Miles Inc. (Manufacturer)  
Travis Fretter (Vintner)  
Mark Friedman, Plant Closures Project  
John Greenbery, Ashby Plumbing Supply (Wholesaler)  
Mike Helm (Resident)  
Mike Henneberry, Alameda County Central Labor Council  
Eva Herzer (Resident)  
Ralph Hoover, Pacific Steel Castings (Manufacturer)  
Stan Huncilman, 5th/University/Dwight Neighborhood Assoc.  
Rudy Hurwich (Property Owner)  
Rich Jesch, Audobon Winery  
Kevin Jenkins, Argos Ltd. (Property Owner)  
Dave Kershner (Resident)  
Calvin King, Moulders Union (GMP) Local 164B  
Debra Kirschenbaum, Carleton Business Center (Property Owner)  
Dan Knapp, Urban Ore (Recycler)  
Dick Kraber, Peerless Lighting (Manufacturer)  
Kathy Labriola, Labor Commission  
Rev. A. L. McLain (Clergy)  
Curtis Manning (Resident)  
Owen Marron, Alameda County Central Labor Council  
Judith Mayer (Resident)  
Steven McLain, Flint Ink (Manufacturer)  
Frank Miranda, Macaulay Foundry (Manufacturer)  
Jon Norheim, Norheim & Yost (Realtor)  
Leanna Noble, Plant Closures Project  
Marvis Peoples, United Black Clergy  
Max Richley, Macbeath Hardwood (Wholesaler)  
Will Rodgers (Resident)  
M.D. Rosen, Columbus School Neighborhood Org. (CSNO)  
Bobby Rostampour, Oceanview Citizens for Cleanup Resolution (OCCUR)  
Tony Santangelo (Resident)  
John Stolurow (Developer)  
Terry Terteling, West Berkeley Project Area Committee  
Elisa Tierney, West Berkeley Neighborhood Development Corp.  
Christine Vida, Disaster Planning Task Force  
Margaret Vreeland (Resident)  
Cheryl Wade, OCCUR  
Vivian Warhentin, OCCUR  
Ron Wichmann, DeTienne & Associates (Architect)  
Duke Wicholey (Resident)  
Don Yost, Norheim & Yost (Realtor)  
M.G. Yourick, CSNO

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# INTRODUCTION

The West Berkeley Plan is an amendment to Berkeley's General Plan (often referred to as the Master Plan, its former title). It is a long range plan for West Berkeley—here defined as the area between San Pablo Avenue (incorporating both sides of the street) and the Eastshore Freeway. It is intended to guide the development of West Berkeley until at least the year 2005. It sets forth the City's key land use, environmental, economic development, transportation, housing and social services, and physical form (urban design, historic preservation, open space) policies for West Berkeley.

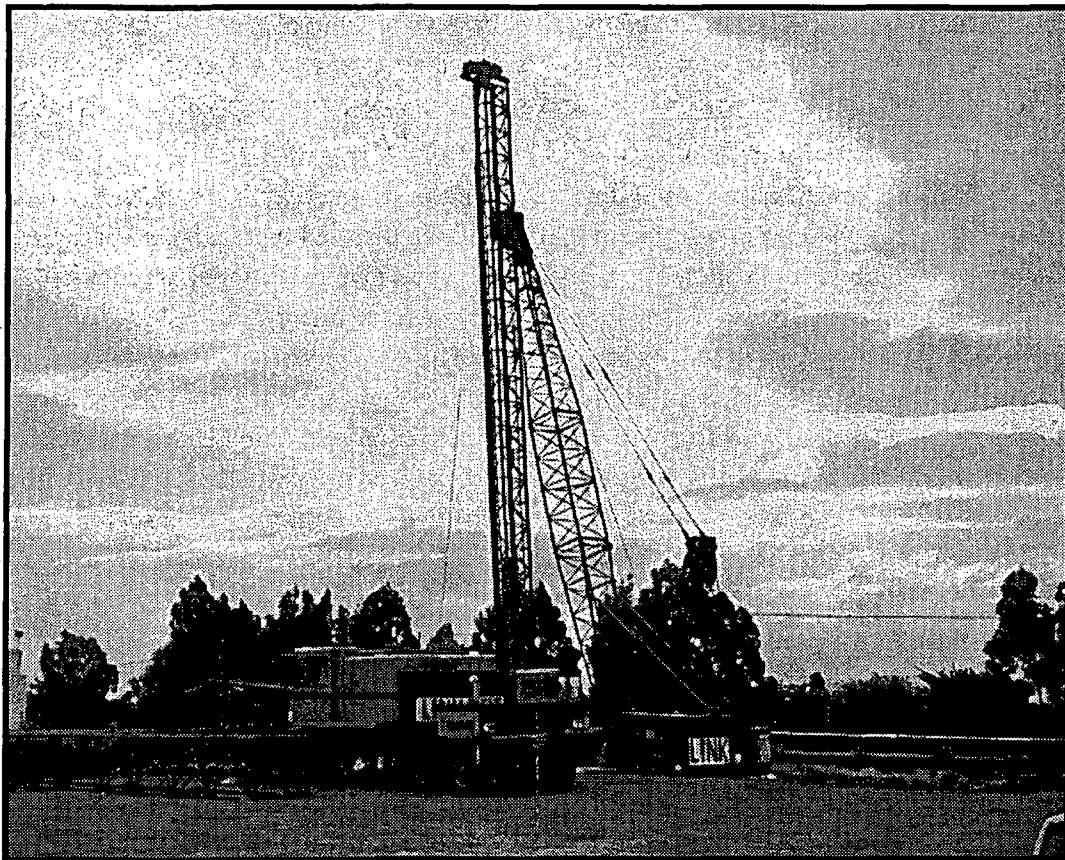
This document is proposed for final adoption as an area plan and Master Plan amendment. The Plan process began in 1985. Council directed that a Plan be prepared, as part of a program of area planning. This direction was given additional urgency by the controversy surrounding the reuse of the formerly manufacturing Durkee/Aquatic Park Center site primarily for offices and laboratories. This controversy extended to occupation of a historic smokestack to block its demolition. After wide ranging discussion of a great variety of issues a working document, the Preliminary Working Draft, was issued by the Planning & Community Development Department in 1989. In April, 1991, the City Council unanimously approved the Preferred Land Use Concept, which set forth the basic land use and environmental direction of the Plan. Further discussions refined that Concept into the Draft Plan, which was issued in November, 1992.

Since issuance of the Draft Plan, an Environmental Impact Report, assessing the probable environmental impacts of development under the Plan, has been prepared. That EIR must be certified by the City Council before the Plan can be adopted. After Plan adoption, rezoning—the Zoning Ordinance amendments that will bring West Berkeley's zoning into conformity with the Plan will be proposed. The West Berkeley Redevelopment Plan (for the Redevelopment Area bounded by University and Cedar, 6th St. and the Freeway) will also be brought into conformity with the West Berkeley Plan. An Implementation and Mitigation Monitoring Program will also be prepared—this document will serve as a more detailed outline of and timeline for the proposed and projected implementation of West Berkeley Plan concepts.

The West Berkeley Plan is the latest in a series of area plans—all formally incorporated into the City's General Plan—that the City and the community have developed. There is the Waterfront Plan, which guides and controls development on the Waterfront immediately west of the West Berkeley Plan Area. The Downtown Plan and the South Berkeley Area Plan have been adopted as guides to the preservation and revitalization of those areas. Another important plan affecting the city's future is the University of California's Long Range Development Plan, although that is not a City document and the City does not endorse all aspects of it. The City has also rewritten the zoning regulations controlling many of its most important neighborhood commercial districts—Elmwood, North Shattuck, Shattuck/Adeline, Solano Ave., and Telegraph Ave., although full area plans were not developed for these areas. A planning process is

~~currently beginning for the University Avenue area. Together these Plans and commercial district rezonings provide guidance for most of the economically active areas of the city; the General Plan revision which is now underway while tie them together into a cohesive citywide whole.~~

~~The extraordinary participatory process which created the West Berkeley Plan is discussed in the Process section.~~



# SUMMARY

## ***Plan Concept & Vision***

West Berkeley in 1993 is a successful part of the city. It is home to (among other things) many growing manufacturers, a booming retail trade, important laboratories, and the most ethnically diverse residential community in Berkeley. The mix of uses, building ages, and building styles gives West Berkeley a unique character within Berkeley and the East Bay. The West Berkeley Plan seeks to build on that success, maintain that character, and help extend them to the year 2005.

Because West Berkeley is a successful area, the Plan seeks to guide its evolution, rather than radically reshape it. The Plan envisions a West Berkeley in 2005 which remains a mixed use area, although with relatively more retail and office uses along with a vital manufacturing sector. It envisions a West Berkeley which maintains similar building forms to those which exist currently, with some major development on minimally used sites.

In one sense, the Plan seeks to save West Berkeley from the possible negative consequences of its own success. Successful mixed use areas such as West Berkeley can become so expensive and intensely developed that manufacturing and other uses which cannot pay maximum rents and land costs are forced out. These areas thus lose the very characteristics which initially made them attractive to many people. The SoHo district of New York City represents an advanced case of this process. The West Berkeley Plan by designating relatively small areas where certain use categories (e.g. light manufacturing, retail) are emphasized seeks to preserve the mix in West Berkeley as a whole. The Plan aims to guide and manage West Berkeley growth, so that growth does not overwhelm West Berkeley's character.

The Plan does recognize that there are conditions in West Berkeley which need improvement. The Plan calls for continuous improvement of environmental quality, so that industrial and other development does not mean environmental degradation. The Plan calls for strengthening the ties between Berkeley/West Berkeley residents and West Berkeley employers, so that the benefits of economic expansion can be enjoyed by those most in need. The Plan calls for improved sidewalks and bikeways, so that it is easier and more pleasant to move around in West Berkeley without driving.

The Plan envisions some major physical improvements. These improvements are those which would reinforce and strengthen important West Berkeley features. In the 4th and University/Hearst area, a new long distance rail station would help anchor the retail district. New stores along Addison Street would help entice people to a revitalized Aquatic Park, now shielded from freeway noise by a soundwall. A new bicycle/pedestrian bridge would cross the Freeway to the Waterfront from the University/Addison Street area. The 7th & Ashby area could gain new streets leading to Ashby Ave., making it easier to come into and out of the area. San Pablo Avenue should have a more urban(e) look and feel,



## WEST BERKELEY PLAN



with new mixed-use buildings anchoring key commercial corners, while the cleaned and repaired facades of older buildings emerge more sharply. Other possible improvements, such as a light rail line along San Pablo Ave., are more uncertain, and more dependent on the decisions of other agencies.

Although many of the Plan's Elements concern themselves with physical and economic development, the ultimate goal of the Plan is to improve the quality of life for West Berkeley residents and Berkeley residents generally. For example, the Plan's emphasis on maintaining manufacturing jobs is based on the recognition that these jobs generally provide the best combination of good pay and accessibility to the modestly skilled and educated (a combination which last year's events in Los Angeles have reinforced the importance of). A different example of the human importance of physical improvements is air quality—improvements in air quality deriving from implementation of Plan goals will benefit all West Berkeleyans and Berkeleyans generally. In yet a different way, new facilities in Aquatic Park will make it a more useful resource for area residents and workers.

The Plan's Elements and policies taken together form an integrated whole—a framework for steady, “incremental” improvement based on the physical, economic, and social foundation which is in West Berkeley today. Thus the Plan seeks to supplement, rather than supplant manufacturing, to build additional housing generally without demolition of existing housing. Yet the Plan also recognizes that there will be the need for constant balancing of interests and for occasional trade-offs between different interests and goals. Many Plan policies speak to the need for such balancing. The process of developing the Plan itself represented a major exercise in reconciling different interests and issues. The Plan takes a “both-and” approach, rather than an “either-or” approach wherever possible.

~~In particular, a central premise of this Plan is that West Berkeley can maintain and expand its manufacturing base, while maintaining and improving its environmental quality. These goals need not be inconsistent, although there may be tensions at times. In some cases, environmental quality can be improved through expansion of manufacturing, such as when manufacturers who use recycled materials expand. The Recycling Market Development Zone (RMDZ) which West Berkeley is a part of encourages this type of manufacturing. Similarly, there is no reason that an industrial environment cannot be an aesthetically pleasing one, although its appearance will be different from other types of areas.~~

### **~~Plan Purposes~~**

~~The broadest Purposes of the Plan are stated below. The Plan is a complex document, with 38 Goals—most of which have numerous Policies set forth under them. No small set of overarching purposes could capture them. Nonetheless, the Plan is centered on diversity and quality of life. The Plan celebrates and strives to maintain both the diversity of residents and of business activity in West Berkeley, in the face of forces which might sharply reduce that diversity. The Plan seeks to maintain and improve the quality of life in West Berkeley in a wide variety of ways—whether it be reducing pollutants in the air, minimizing traffic on the streets, or improving the appearance of buildings in West Berkeley. The Plan Purposes affirm that the West Berkeley Plan is not envisioned as a blueprint to transform an ailing neighborhood, but as a set of guidelines to further energize an already vital one.~~

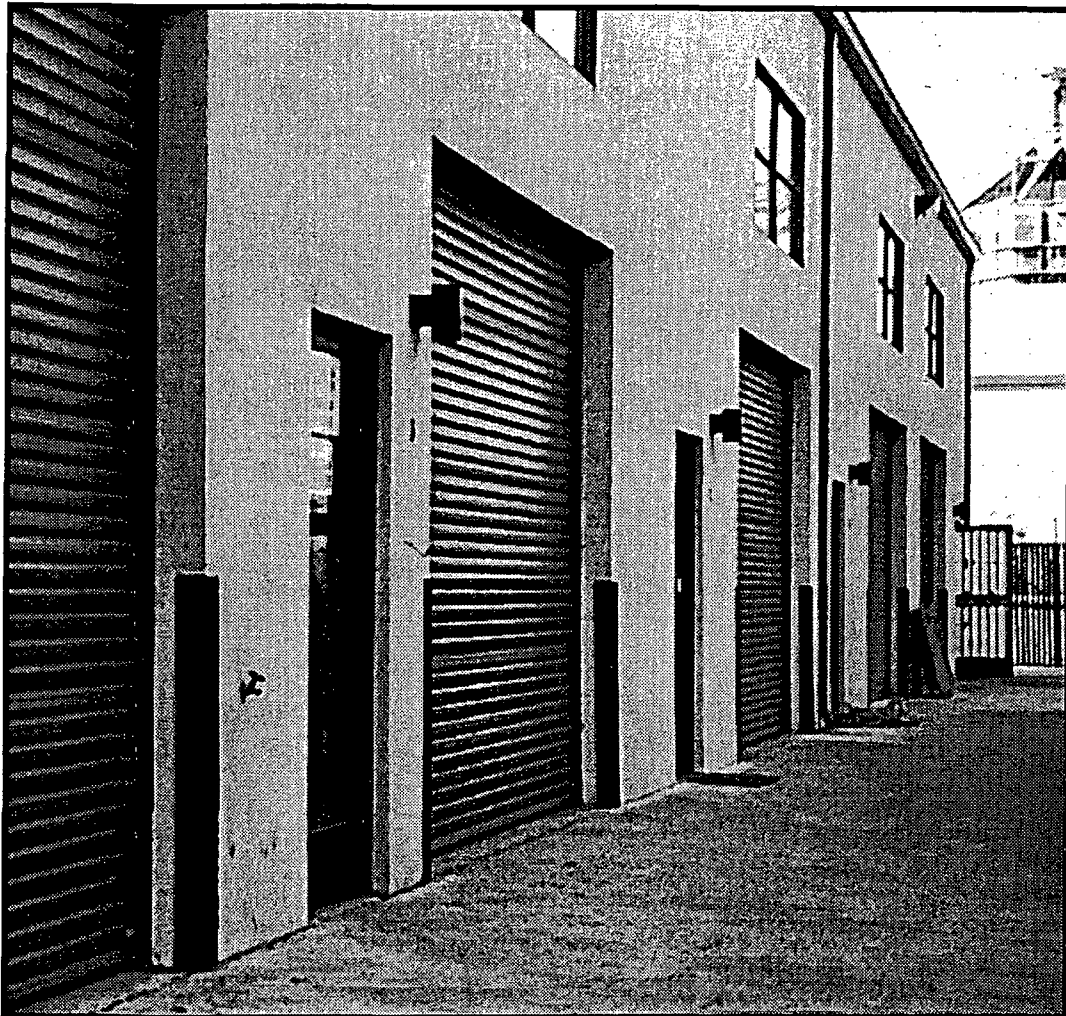
- ~~1. Maintain the full range of land uses and economic activities—residences, manufacturing, services, retailing, and other activities—in West Berkeley.~~
- ~~2. Maintain the ethnic and economic diversity of West Berkeley's resident population.~~
- ~~3. Maintain and improve the quality of urban life—including environmental quality, public and private service availability, transit and transportation, and esthetic and physical qualities—for West Berkeley residents and workers.~~

### **~~The Structure of the Plan Document~~**

~~This Introduction to the Plan outlines the Plan's history and its structure. This Summary section outlines the Plan's overall vision and purposes, and summarizes key features of the Plan. This is followed by a process section, which reviews the process of developing the Plan. Then there are 6 Elements which address the major issues in West Berkeley:~~

- ~~• Land Use~~
- ~~• Economic Development~~
- ~~• Environmental Quality~~
- ~~• Transportation~~
- ~~• Physical Form—Urban Design, Historic Preservation, and Open Space; and~~
- ~~• Housing and Social Services~~





~~Each Element of the Plan follows a similar structure, although some Elements have additional sections as well. The Element is introduced with a Strategic Statement—a succinct summary of the broad concepts, vision, and direction of the Element. This is followed by a Background section which discusses conditions, trends, and issues in the area the Element addresses. The Economic Development Element includes the Economic Development Rationale (an important section for the Plan as a whole). This background information lays the groundwork for the Goals and Policies section which follows it. Finally, each Element contains an Implementation section, laying out concrete actions that the City can take to realize the Element's policies. Some Elements (like Economic Development) also have additional sections addressing major strategic issues in more detail. Other Elements (such as Land Use) have sections laying out specific recommended development standards or regulations. The Land Use Element does follow the general format, but also is largely devoted to the proposed land use regulations—permitted and prohibited uses in each district, required development standards, etc.~~

## ***Highlights of the West Berkeley Plan (selected)***

### **Policies**

- ~~Creates districts designed to retain manufacturing;~~
- ~~Sets up concentrated retail "nodes";~~
- ~~Recognizes residential enclaves within the industrial/commercial area;~~
- ~~Focuses comprehensive environmental enforcement in West Berkeley on the 10 most important firms;~~
- ~~Supports creating a central, accessible location where the community can obtain environmental information;~~
- ~~Calls for reductions in the production, transport, and handling of hazardous materials;~~
- ~~Seeks to focus economic development efforts on retaining and attracting appropriate industries;~~
- ~~Supports West Berkeley's continuing role as an "incubator" of new businesses of all types;~~
- ~~Facilitates creation of space for expanding businesses by streamlining the permit process;~~
- ~~Proposes a variety of measures to reduce the use of single-occupant automobiles;~~
- ~~Demonstrates that West Berkeley is Berkeley's most ethnically diverse area, and supports efforts to maintain this diversity;~~
- ~~Supports creation of well-designed live work spaces in appropriate locations;~~
- ~~Makes widespread tree planting in West Berkeley an open space priority;~~
- ~~Stresses the need for urban, street focused development on all of West Berkeley's major streets with special emphasis on critical gateway streets such as University Avenue.~~

### **Physical Development Activities**

- ~~Prioritizes the reuse of large, vacant sites (such as Colgate and Utility Body) as an economic development activity;~~
- ~~Highlights an improved train station at 3rd & University as a planning and development priority;~~
- ~~Supports installation of historic signs in locations such as the oldest areas of Oceanview;~~
- ~~Initiates feasibility studies on parking needs around 4th & University, 7th & Ashby, and 7th & Parker;~~
- ~~Supports the development of light rail transit on San Pablo Ave. Plan~~
- ~~Recommends serious consideration on new street links to Ashby Ave. (in West Berkeley) from the north;~~



- Anticipates substantial development of the University's Harrison lands;
- Facilitates expansion by existing manufacturers and other businesses.

## **Summary of the Elements (Major Sections) of the West Berkeley Plan**

### **Land Use**

Perhaps more than in any other field, the West Berkeley Plan will change the regulation of land use in West Berkeley. The Plan creates a new set of land use/zoning districts for West Berkeley, the first areawide revision of districts since the Special Industrial zone was created in 1956. These new districts seek to better tailor allowable land uses to existing ones, and to provide better guidance to businesses and developers on what specific uses are desirable and what uses are not in specific West Berkeley locations. The Plan seeks to preserve the mix of uses in West Berkeley as a whole by reserving some areas for uses like manufacturing which might otherwise disappear.

The land use concept and districts are discussed in detail in the Land Use Element. A new set of zoning districts in the Zoning Ordinance will have to be created to implement the Plan. In general, the districts provide a gradation of districts from purely residential to several types of mixed use districts to strictly manufacturing/industrial. Given the greater clarity of the new districts on which uses are desired and permitted, and which ones are not, the permit process is generally eased for conforming projects.

### **Economic Development**

The Economic Development Element proposes policies to maintain and enhance West Berkeley's multi-sectoral economic dynamism, and to channel the benefits of economic activity to West Berkeley and Berkeley residents (through both employment and business opportunities). The Element recognizes and prioritizes West Berkeley's historic role as Berkeley's manufacturing and industrial sectors, particularly because of the higher quality, better paying jobs they create. Yet in the framework of a multi-sectoral strategy, the Element also supports West Berkeley's growing role in fields such as retailing and advanced services. The Element also calls for the improvement of neighborhood serving retail stores such as grocery stores in West Berkeley.

### **Environmental Quality**

Maintenance and improvement of environmental quality is a central concern of the West Berkeley Plan. Environmentally oriented strategies are found throughout the Plan from buffers between incompatible uses in the Land Use Element to (automobile) trip reduction in the Transportation Element. The Environmental Quality Element is the focus of this concern, and incorporates goals, policies, and strategies on topics ranging from air quality to hazardous materials to noise. The restructuring of the hazardous materials program that has already occurred begins to address many of the concerns of the West Berkeley Plan.



### Physical Form

~~West Berkeley's urban environment is a uniquely rich one within the East Bay. The sections of the Physical Form Element—discussing Urban Design, Historic Preservation, and Open Space respectively—propose policies and strategies to maintain and enhance this environment's urbanistic richness. This Element develops a policy framework for physical form which will support and enhance the implementation of the Plan's land use and other policies.~~

### Urban Design

~~West Berkeley will continue to be rebuilt and renewed over the next 15 years. The Plan's Urban Design policies seek to assure that this rebuilding will occur in a pedestrian-friendly, street-oriented, urban manner, rather than an automobile-oriented suburban one. Concentrations of retail stores at major intersections and transit hubs—which the Plan calls "commercial nodes"—are particularly important locations for creating urban activity. Commercial and industrial corridors along major streets can also begin to take on a more urbane appearance. In addition, sensitive design can help ease transitions where different types of uses—such as industrial and residential—come together in this mixed-use area.~~

### Historic Preservation

~~The mixture of buildings from many historic periods over the last century (and more) is an important part of what makes West Berkeley's urban richness. The Plan's historic preservation policies seek to highlight historic buildings and sites, educate the West Berkeley and general public about them, and preserve them to the greatest degree possible in an evolving area. New approaches, such as the designation of "Heritage Areas"—where residents and property owners would work together voluntarily for~~

~~preservation and historic education can help highlight areas of West Berkeley with special historic significance. The Plan also discusses and supports broader publicity for the rich ethnic and industrial history of West Berkeley, as well as architectural history.~~

### **Open Space**

~~The West Berkeley Plan's open space approach seeks to link West Berkeley's open spaces into a network of green spaces and corridors. The Plan emphasizes an areawide effort at tree planting which can soften and humanize West Berkeley, and bring neighbors together for a common goal. The Plan also supports improvements to neighborhood parks. The Plan incorporates by reference the draft Aquatic Park Master Plan, placing special emphasis on improving access to this underutilized open space resource. The Plan recognizes the importance of improving the pedestrian and bicycle linkage between West Berkeley and Waterfront.~~

### **Transportation**

~~Reducing the dependency of the West Berkeley transportation system on single occupant automobiles is the primary thrust of the West Berkeley Plan Transportation Element. The Element also seeks to improve circulation within and into West Berkeley (especially around 7th & Ashby, where new streets may be developed), and to reduce traffic congestion on West Berkeley arterials. There is also a need to make West Berkeley an easier place for pedestrians and bicycles to get to and through an area where action is already being taken. An expanded rail station at University Ave. could serve as a centerpiece for West Berkeley transit/transportation efforts. Reinstallation of light rail on San Pablo Ave. is an uncertain but exciting possibility.~~

### **Housing & Social Services**

~~The Housing and Social Services Element celebrates West Berkeley's role as the most ethnically diverse area in Berkeley, and proposes policies which will help maintain that diversity. To maintain this, it will be necessary to maintain a stock of lower cost housing—especially rental housing, but owner occupied housing as well. The social environment of this affordable housing, including safety, supportive social services, and other services continues to require improvement. The Element also supports the continued development of live-work spaces for those who want this housing form, in appropriate locations under appropriate standards.~~

# PLAN PROCESS

## ~~The Nature of the West Berkeley Planning Process~~

~~Planning processes in Berkeley (and many other cities) are typically complex, contentious, and protracted. These processes often become battlegrounds for people and groups with radically divergent visions of how an area should (or should not) develop and change. The West Berkeley Plan process, which has (to date) stretched over 8 years, has certainly been complex and contentious. There were many important issues—ranging from arts and crafts protection to zoning for industry—over which participants strongly disagreed. Yet ultimately the West Berkeley Plan Committee (working with City staff) was able to fashion documents that won consensus approval. This section of the Plan will briefly describe how this agreement was achieved, how the West Berkeley Plan process developed, and try to give some of the “flavor” of the process.~~

~~The West Berkeley Plan went far beyond “citizen participation,” because it is a document fundamentally from the “citizens,” the “stakeholders” of West Berkeley. The term “citizen participation” suggests to many periodic citizen input into a process controlled by others. In the West Berkeley Plan process, various types of citizens—artists, developers, landowners, manufacturers, residents, unionists and others—were continuously involved and drove the process. The City Council sponsored the process, and at one important point gave specific direction for the Plan. City staff from multiple departments provided technical and logistical information, and worked to keep the process moving forward. Yet in the final analysis, the Plan is the community’s document. The listing of Plan participants on the inside front cover of this documents symbolizes that community “ownership” of the Plan.~~

~~The “process” for a complex project like developing the West Berkeley Plan has many components. There were the formal steps taken by the West Berkeley Plan Committee, the Planning Commission, and the City Council. There were the documents for the Plan (generally, but by no means always, prepared by staff)—both for action and for information—that are reviewed and modified by Plan participants. Perhaps most importantly, there are the interactions between the participants in developing the Plan, which lead them to new understandings about the Plan and about West Berkeley. It was this process of people meeting and talking, often arguing vociferously and even sometimes slamming the other’s position, which finally allowed a consensus plan to emerge. Indeed, this contentious process would lead to the development of a core of what might be called “plankeepers.” These plankeepers had been immersed in the process to the point where they could—and sometimes would—articulate the viewpoint of someone who had been directly opposed to them. This section will seek to briefly characterize all of these aspects of the Plan process.~~



## *The Nature of West Berkeley as an area to plan*

The subject of this process — West Berkeley — is the largest and most complex area Berkeley has ever planned for (the other Area Plans are for Downtown, South Berkeley, and the Waterfront). West Berkeley is Berkeley's manufacturing center, as well as a residential community of some 7,000 people. When the Plan was initiated, West Berkeley was clearly changing, with historically unprecedented retail and office uses replacing some industrial uses. With the freeway and the close proximity of industrial and residential uses, West Berkeley has some of the city's most challenging environmental problems. As the first settled part of Berkeley, West Berkeley has important historic resources. All of this makes planning for West Berkeley even more complex than usual.

## *1985-1989: Handling the Issues of West Berkeley*

The reuse project at the Durkee Foods factory led to the initiation of the West Berkeley Plan process. Durkee Foods had primarily been a canning plant, proposed in 1984 for conversion to office and laboratory use. Many West Berkeley residents and businesses saw Durkee as a harbinger of dramatic change that was likely to occur throughout the neighborhood — from fairly low intensity industrial use to much higher intensity commercial use. Residents feared rivers of traffic flowing their way. Artists and craftspeople could be priced out by this development process. Some activists were personally being displaced by the reuse project. One person dramatically demonstrated his opposition to the demolition of an old factory smokestack by sitting atop it. From a public policy standpoint, the M (Manufacturing) zone regulations allowed every type of use — from single family homes to "heavy" manufacturing — and thus provided no guidance on what the City wished to see on the site. To provide that guidance, the City Council authorized the development of an area plan for West Berkeley.

The early years of the Plan process — roughly from 1985 to 1989 — focused on initiating the Plan process, developing background data on the area, and handling specific issues in West Berkeley. The responsibility for Plan development was given to the West Berkeley Plan Committee — a committee with open membership, led by Planning Commissioners, one of whom served as committee Chair. Despite its open membership, Plan Committee participation tended to be fairly stable, with residents, artists and craftspeople, and property owners well represented in this period, while manufacturers and unions representing their workers were not.

These years saw important reforms to land use regulation in West Berkeley. Arts and crafts zoning protecting the spaces occupied by these uses from changes to other uses was sponsored by the committee. Interim changes to the M (Manufacturing) zone regulations which instituted a parking requirement for the first time and modified change of use requirements. The Committee kept a close watch on the progress of its initiating project at Durkee. It also began the process of defining its goals, policies, and implementation strategies for the area.

Equally important were decisions not to make changes. The Committee also recommended — after bitter debate — that the then proposed expansion of the West Berkeley Redevelopment Area be deferred until the completion of the West Berkeley Plan.

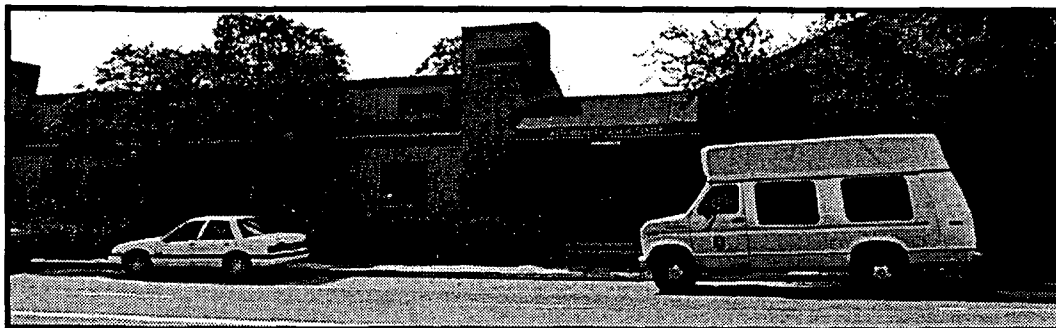
If there was to be a new Redevelopment Plan, it should occur in the framework of the West Berkeley Plan rather than preceding and possibly reshaping it. The Committee also rejected proposals for upzoning allowing greater density of housing in the residential core areas. The Plan would leave zoning in strictly residential areas essentially unchanged.

### **1989-1991: Forging a Land Use Concept**

Between 1989 and 1991 the Preferred Land Use Concept which is at the heart of the West Berkeley Plan was forged. Although the Concept was ultimately approved by Consensus, developing it took a great deal of work, argument, and compromise. The Concept was the ultimate result of what amounted to a restructuring of the process with new participants, new information, and new Council direction.

In early 1989, the Planning Division staff was moving towards the development of alternative development scenarios for West Berkeley. These alternative development scenarios would lay out different possible future paths for the area, and would serve as the working documents for discussing what the Plan's land use proposal would be. The City's Office of Economic Development (OED) strongly supported the emerging idea that at least one of these scenarios would emphasize the retention of manufacturing uses. OED had (in conjunction with the Chamber of Commerce) surveyed large West Berkeley firms mostly manufacturers and acquired a new picture of the economic landscape. Far from being in unmitigated decline, many manufacturers had expanded and planned to expand in the future. This information was a key intellectual input into the Plan.

At roughly the same time, several important new participants entered the process. The Alameda County Central Labor Council (the coordinating body for unions in Alameda County) announced its interest in a Plan which could affect thousands of its members' jobs. Such participation by a trade union in a land use planning process was virtually unheard of, and initially some earlier Plan participants questioned the legitimacy of their involvement. The United Black Clergy reentered the Plan process, to support the prospects for well-paid jobs at manufacturing firms for Black Berkeleyans. The Plant Closures Project (a community organization which works to prevent closing of plants) worked closely with these groups and worked to develop support for pro-manufacturing policies in the Plan process. West Berkeley industrial firms were (with City encouragement) reviving their long dormant Manufacturers' Association, in part so that they could participate in the Plan and other City processes. The entry of these groups in turn sparked stronger participation of environmental groups, such as Citizens Opposed to a Polluted Environment (COPE) who were very suspicious that a pro-manufacturing policy would





lead to increased environmental degradation. By late 1989 the cast of characters was far different from what it was earlier in the year.

Meanwhile, in October, 1989, the City Council also reasserted its interest in the Plan. The Council's discussions of overall City economic policy for Berkeley reaffirmed the importance of maintaining the manufacturing base. Therefore, the Council directed that "The Planning Commission, Labor Commission, and West Berkeley Area Plan Committee are to review the concept of industrial sanctuaries as a way of retaining manufacturing and trade jobs and forward comments to the Council." Council also told the Planning Commission to consider interim protections such as requiring a Use Permit before any change of use from manufacturing to non-manufacturing use, and to develop appropriate standards for live-work to assure that it did not encroach on manufacturing areas. The Planning Commission would ultimately decide that interim controls were not needed.

At the very end of 1989, three growth scenarios—one focusing on office growth, one on retail growth, and one on manufacturing retention—were published by the Planning Department. The scenarios each contained office, retail, and manufacturing-oriented areas, but in different amounts. The scenarios document allowed participants to evaluate the impacts and tradeoffs of choosing one scenario or another. The now very diverse committee struggled about how it might bring the three together. Several proposals for a "synthesis" scenario were put forth by the pro-manufacturing coalition, by environmentalists, and by a group of manufacturers. The Committee did unite in August, 1990 on a wide-ranging set of "Objectives for Designing a Preferred Land Use Concept" which set both quantitative (e.g. number of jobs to be added in a given sector) and qualitative (e.g. regulating building scale) goals for the Plan. Working from this base, staff released a draft Land Use Concept in September, 1990.

### ***The Subcommittee Process of 1990/91—Hand to Hand Planning***

The 6 months of intense activity which followed release of that document are now viewed as the heart of the process by many Plan participants. To develop a Land Use Concept which incorporated both land use and environmental direction, the Committee decided to split into two subcommittees—one for each subject. This was by no means a self-evident decision—many feared that splitting into subcommittees would delay, rather than advance the process. In addition, there was great concern as to how the two groups' actions would be coordinated. Also worrisome was the Committee's rejection of a formal structure for representing the different affected interest groups on the land use subcommittee (informally, representatives of interest groups affected by a provision were consulted during the process).

The subcommittee process was citizen based planning at its most intense. The subcommittees met as often as once a week over a 5-month period. In the Land Use Subcommittee, questions both great and small were argued. For example, should the proposed Mixed Use district allow residences? After much arguing, committee members realized that 2 mixed-use districts (with logical borders between them) could be created—one with, one without houses. At the same time, the subcommittee members argued knowledgeably and passionately over how a block should be characterized and thus what



district it should be put in. A map of proposed districts was colored in block by block. Sometimes the staff person's hand was poised to color in a new block where there was apparently consensus, when the cry "Wait!" would come up from a dissenter. Ultimately the subcommittee would produce a consensus land use districting map literally signed by all its participants. While the map emerged from this unavoidably political process, it also reflected a coherent overall vision of West Berkeley with logically defined areas for heavy industry, light industry, mixed use, retail commercial development, and residences.

The Environmental Subcommittee was equally intense. Some environmentalists entered the process convinced that retaining industry and environmental protection were incompatible. Their fears were somewhat assuaged by the participation of manufacturers such as Peerless Lighting, who demonstrated how their company devoted substantial resources to meeting environmental mandates. All members of the committee made a commitment that they wanted to retain jobs so long as the environment could be maintained or improved. In a meeting called by environmentalist Councilwoman Nancy Skinner (who represented part of West Berkeley), Berkeley based environmentalists were also exposed to their regional cohorts who had experience in cities such as Richmond. These groups outlined strategies for fighting polluting industries without losing jobs. Planning Commission Chair Carl Anthony had strong credentials with both labor and environmental groups, and personally embodied the idea that environmentally sound industrial development was possible and necessary. Meanwhile, the City had initiated an evaluation and restructuring of its hazardous materials program, which helped build community confidence that the City would enforce regulations. This subcommittee wrote a broad set of possible environmental strategies and implementation measures, most of which were incorporated into the Plan.

The emergence of consensus documents from the subcommittees was greeted with exhausted relief, even joy, by Plan Committee participants. Yet despite their exhaustion, participants in the spirit of keeping the plan had grown scrupulously respectful of each other's viewpoint. It came to be understood that if people opposing your viewpoint were absent in a meeting, you should not seize that advantage, but should wait until they returned and a full discussion could be had. The two documents were broadly

~~compatible, if differing in emphasis. Planning, economic development and environmental health staff—all of whom staffed the subcommittees—felt that the proposals met the previously stated objectives and were generally implementable. The Planning Commission unanimously endorsed the Concept in February, 1991. So did the Council (giving the Plan a standing ovation) in April, 1991, even though some were surprised at the lack of divisiveness when the Concept was brought to them. The Council at the same time created the Citizens Environmental Advisory Commission to oversee the hazardous material program, and other issues involving hazardous materials.~~

### **~~1991-1993: From Concept to Plan~~**

~~To many, the West Berkeley Plan process seemed to be "over" in April, 1991, when the City Council approved the Preferred Land Use Concept. Indeed, at that point the Concept began serving as a policy guideline for development decisions in West Berkeley, and it had already begun to reshape the City's hazardous materials and environmental enforcement. But the Plan had to be transformed from an essentially two subject Concept to a multi-subject Plan, which could be adopted as an amendment for West Berkeley to the Berkeley General (or Master) Plan.~~

~~The work over the next year had two thrusts: to develop Elements on various subjects (e.g. transportation) for the West Berkeley Plan, and to resolve issues that were noted as unresolved in the Preferred Land Use Concept. Staff developed draft Plan elements and the West Berkeley Plan Committee critiqued them in great detail, staff redrafted sound Elements which were more satisfactory to the Committee—each Element went to them at least twice, usually more often. Short term subcommittees with groupings of interested/knowledgeable people on specific issues—such as urban design and economic development—met, but there was no repeat of the intensive subcommittee process. In August, 1992, the Committee celebrated the publication of complete draft of the Plan.~~

~~Completing a Plan draft provided a document which could be the subject of environmental review—in this case the Environmental Impact Report (EIR) process. The Planning Commission (which also voiced strong endorsement of the Plan) and the City Council approved the draft Plan as the Preferred Alternative for environmental review.~~

~~A Draft EIR was released in April, 1993, and comments on it accepted through July, 1993. Those comments and responses have been released along with this version of the Plan. The EIR found that there were no environmental impacts arising out of implementation of the Plan (as opposed to region-wide problems) which could not be mitigated.~~

~~This description of the process is being presented before the end of the process. To approve the Plan, the Planning Commission must first certify that the EIR adequately assesses and responds to potential environmental impacts. Then it would need to approve the Plan, recommending approval to Council. Should Council approve the Plan, the Plan process itself would be done, but a crucial rezoning of all of West Berkeley to bring zoning into conformity with the Plan must follow, as should other implementing steps. We hope and trust that the plankeepers of West Berkeley will actively participate in the Plan's implementation. The planning of West Berkeley continues.~~

# 1

## LAND USE

### I. STRATEGIC STATEMENT

West Berkeley's uniqueness and dynamism grow largely out of its wide variety of land uses. Preserving and supporting all of the elements of this vital mix of land uses is the central policy of the West Berkeley Plan. The Preferred Land Use Concept therefore designates sites for light manufacturing, general manufacturing, retailing, offices, residences, arts and crafts, and other uses. Each of these uses provides something important to the city — whether it be to residents, to workers, to shoppers, to tax collectors, or to others. The West Berkeley Plan should maintain this mix while minimizing physical and economic incompatibilities and improving environmental quality.

The land use concept of the Plan is designed to support the economic, environmental, transportation, urban design/historic preservation, and housing goals of the Plan. It was developed in conjunction with — not in isolation from — these goals.

The Plan restructures West Berkeley's land use/zoning districts to support appropriate economic development. The Plan's land use concept is designed to support its multisectoral, balanced economic development approach, by clearly targeting different locations for different uses. The Plan designates two (relatively small) portions of West Berkeley as locales where large scale, materials processing "heavy" manufacturers are accepted as legitimate, important, long term uses. It designates a large area primarily for the "light" manufacturing and other light industrial activities which are currently dominant in West Berkeley and which are key to its economic future. Yet the Plan also designates areas for office development — the worksites for many of the professional and technical specialists Berkeley is so rich in. And the Plan also highlights retail "nodes" which provide goods and services and needed tax revenue to the city.

The land use concept supports other goals of the Plan. Environmental quality is central to the Plan — the land use concept supports it by shielding residential areas from uses with high potential for impact. It provides additional environmental buffering along those sensitive edges where residential and heavy industrial uses meet. The clustering of retail uses in the Plan makes improved transit service possible, and also makes possible a more pedestrian oriented, compact urban form. The Plan encourages additional housing development in commercial areas, and in mixed residential/industrial areas.

## II. BACKGROUND—EXISTING LAND USE

### A. Introduction—West Berkeley's Mosaic of Uses

Land use in West Berkeley is characterized by a wider range of activities than in any other section of Berkeley. Like most economically active parts of the city (though often on a larger scale), there are retailers and offices in West Berkeley, as well as houses and apartment buildings. But unlike other sections of the City, West Berkeley is home to steel foundries, scientific instrument makers, book distributors, and other manufacturing, wholesale trade, and industrial type uses. West Berkeley is also unique in that sites under one ownership range from 2,500 square feet to 25 acres. Thus West Berkeley plays a unique role in Berkeley, as it has since its founding as Oceanview in the mid-19th Century.

This background discussion will first situate West Berkeley in its regional and citywide context. It will then briefly discuss the major types of land uses in West Berkeley—industrial uses, commercial uses, and residential uses, noting where they are typically found. It will then note the relative and absolute intensity of West Berkeley land usage.

### B. West Berkeley in Context

#### 1. West Berkeley in the Region

On a regional level, West Berkeley lies in the center of the vast East Bay industrial belt, which stretches from Hayward through Oakland and Berkeley to Richmond and on as far as Crockett. ABAG estimates that there are almost exactly 100,000 manufacturing and wholesaling employees in this area. Virtually every type of manufacturer is (or was) found within this "district"—e.g., oil refining in Richmond, steelmaking in Berkeley, canneries in Oakland and Hayward. The first manufacturers came to this area in the late 19th Century, and there was major development through the first third of the 20th Century, but new companies arrived for decades thereafter. Until the rise of Silicon Valley, this East Bay shore was the largest industrial district in the Bay Area.

The overwhelmingly industrial (sometimes with associated residential) character of the area has been at least partially transformed in much of its length. The area is now often considered more neutrally as the "I-80/I-880 corridor." The transformation of uses is most evident in the redevelopment of Emeryville, but has also occurred in San Leandro, Hayward, Richmond, and even in parts of Oakland (especially near Downtown). Nonetheless, all these cities (including Emeryville) continue to have high levels of industrial employment, and the degree of mix varies substantially from area to area. Manufacturing and wholesaling employment in the East Bay has been expanding and is projected to continue doing so.

#### 2. West Berkeley in Berkeley

The West Berkeley Plan area represents some 1/6 of Berkeley's land area. Running the length of the city in a strip near its western edge (see map), West Berkeley is bordered



on the north by Albany, on the West (west of I-80) by the Waterfront and the Berkeley Marina, on the south by Emeryville and Oakland, and on the east (east of San Pablo Ave.) by South Berkeley (south of Dwight Way) and Central Berkeley. Emeryville is in the process of revising its General Plan, while the University of California is engaged in a master planning process for its Albany Village lands which adjoin West Berkeley.

West Berkeley plays several important roles within the city, which are discussed more fully in the Housing and Economic Development Elements. West Berkeley has some 1/3 of the private sector jobs and 1/4 of the total jobs in Berkeley. West Berkeley is Berkeley's manufacturing and wholesaling district, its strongest regional retailing area, and an emerging office/laboratory center. West Berkeley's residential community is relatively small (some 7% of City population), but houses disproportionately high percentages of low income, non-Anglo, and artist households. West Berkeley is clearly a distinct area within Berkeley.

Adjacent to West Berkeley, the City and citizens have developed Area Plans for the Waterfront and South Berkeley. The Waterfront plan calls for the maintenance of the waterfront as primarily open space, with modest hotel, recreation, and conference center uses. The South Berkeley plan (which covers the area between the Oakland line and Dwight Way) does not anticipate major land use changes, but it does seek to revitalize the southern portion of San Pablo Avenue—an area and objective shared with the West Berkeley Plan. There is no specific Area Plan for the Central Berkeley area north of Dwight, which is typically zoned R-2 or R-3, and characterized by a mix of single family houses and apartments.

### **C. Types of Land Use**

#### **1. Industrial Uses—The Heavy Lifters**

We begin with industrial uses<sup>1</sup>, because, despite significant changes in West Berkeley, they remain the biggest land users. Historically, West Berkeley developed around a set of factories. Indeed some of today's West Berkeley manufacturers can trace their origins to the 1890's, though this is exceptional. Thus, West Berkeley's most characteristic built form is the low, large, utilitarian "industrial" building.

Industrial uses dominate in the Manufacturing and Mixed Manufacturing zone, make up 2/3 of employment in the "Mixed Green" zone, are a strong presence in the Mixed Residential zone, and even appear in the Commercial zone (particularly along San Pablo Ave. south of Dwight Way). In 1992, City staff estimates that between "heavy" manufacturing, "light" manufacturing and "warehousing" uses, there were 5.9 million square feet of built space in West Berkeley, accounting for 64% of total built space. Although the analysis probably exaggerated the extent of industrial use, and although there have been major conversions of industrial space to other uses since then, industrial uses still occupy a majority of built space.

<sup>1</sup>Following the Preferred Land Use Concept, this report includes manufacturing, wholesale trade, and "other industrial" uses such as transportation, public utilities, construction, and auto repair in discussing industrial uses overall.



### ~~"Heavy" manufacturing<sup>1</sup>~~

~~There are only a few "heavy" manufacturers in West Berkeley, but they play a disproportionately important role. 1992 data indicates that there is roughly 1,000,000 square feet of heavy industrial space. Business License data indicates only 31 heavy manufacturers, 3% of area businesses, but they employ a reported 1,685 workers, 16% of stated employment.<sup>2</sup> While individual company circumstances vary, the heavy manufacturers tend to have the largest sites, to have been in place the longest, and to have the largest and most heavily unionized workforces. On the physical level, some heavy manufacturers occupy distinctive high-ceilinged yet 1-story buildings, to house large scale machinery.~~

~~Heavy manufacturers are generally located in either of 2 clusters. There is a cluster in northwestern West Berkeley, where the Manufacturing zone is located. Here is Pacific Steel Castings (with @300 employees), Flint Ink (formerly Cal Ink, a pre-1900 company), Berkeley Forge and Tool, and others. The other cluster is in southwestern West Berkeley, in the Mixed Manufacturing zone. Miles Labs—founded as Cutter shortly after the turn of the century, Macaulay Foundry, and National Starch and Chemical are among the heavy manufacturers here. Almost all the heavy manufacturers in this area are on large scale, multi-acre sites, while in the northwestern area some are wedged onto smaller sites with a more "urban" feel to them. As an illustration, in the northwest area, forklifts sometimes fill the streets, while in the southwest area material movement is likely to be internal to a site, off streets.~~

### ~~Light Manufacturing~~

~~"Light" manufacturing—meaning all manufacturing not designated "heavy", as well as wholesale trade—is the dominant land use in West Berkeley. These uses occupy some 4.8 million square feet of space in West Berkeley.<sup>3</sup> It is found in significant numbers in the Manufacturing, Mixed Manufacturing, Mixed Green, Mixed Residential, and even the Commercial zones. These 266 businesses are spread from Bryant Labs (a chemicals wholesaler) on the Albany border to Berkeley Sheet Metal, which straddles the Emeryville line. Just over half of the light manufacturers (and a full 70% of light manufacturing employees) are located in the Mixed Green zone, with 4th St. south of Addison, Folger St., and Camelia St. east of 6th being particularly strong areas.~~

~~Because of the diversity of light manufacturers, it is difficult to generalize about their land use characteristics. Light manufacturers range from companies with hundreds of employees to 1 and 2 person shops often thought of as "crafts." They may be bakers, printers, metal fabricators, makers of machinery, scientific instrument makers, or engaged in other activities. A prototypical Berkeley light manufacturer would be found in one or more single story buildings (with some parking adjacent), which it does not~~

<sup>1</sup>Heavy" manufacturing—not an economic term of art—is defined here to include chemicals, including pharmaceuticals, and primary metals.

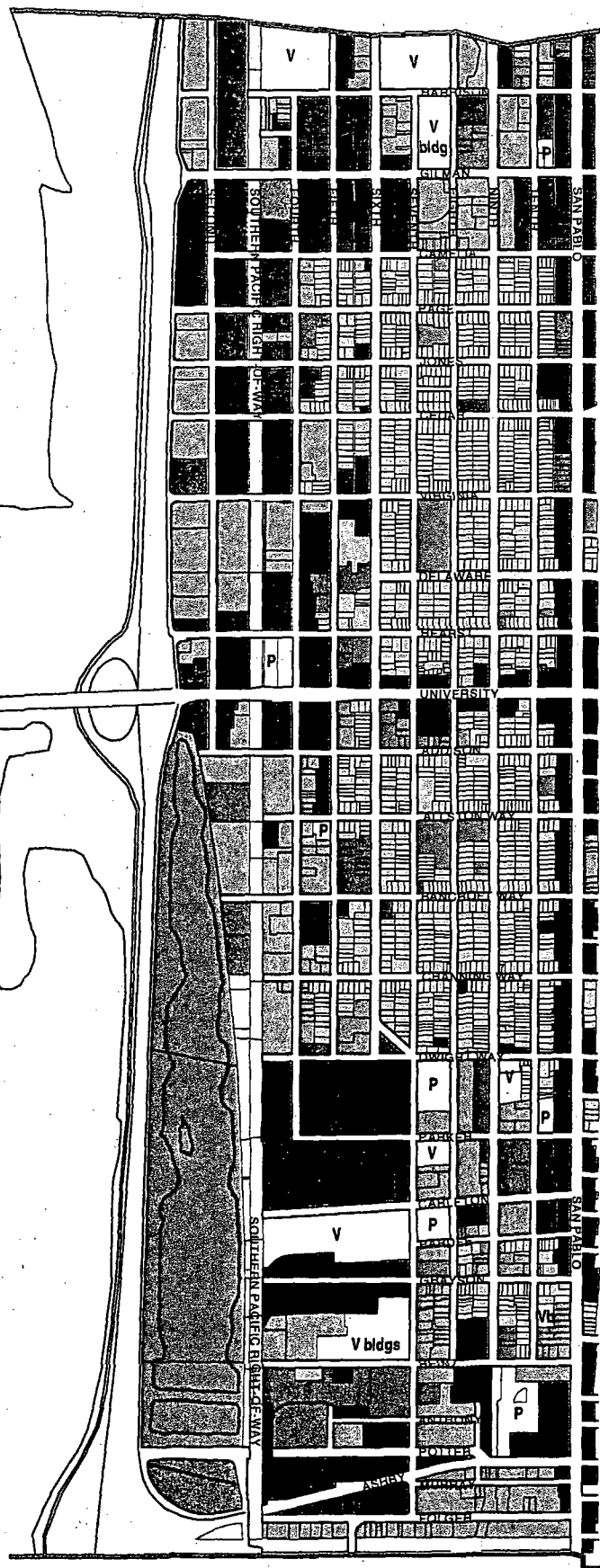
<sup>2</sup>1990 Business License data will be used in this report because more recent business license data bases are incomplete. Updated information will be provided when available, either in the Plan document or in a supplementary report. County Business Patterns data is available through 1991.

<sup>3</sup>Because the space inventory was by building type rather than use type, this total probably includes some construction firms and some firms in transportation and public utilities, but these are clearly a small part of the total.

**West Berkeley\***  
**Existing Land Use (Generalized)**

-  Heavy Manufacturing
-  Light Mfrg. & Wholesaling
-  Other Industrial
-  Retail & Commercial
-  Office Based
-  Residential
-  Public Space, Institutional
- V** = Vacant land
- P** = Parking

\*dominant uses of portions of blocks;  
 not parcel by parcel



share with any other company.<sup>1</sup> It would probably be found on a block with 1 or more other light manufacturers, which might also contain other industrial, office, or (in the Mixed Residential zone) residential uses. It is more likely to rent its space, but a larger firm could own at least some of the space. Light manufacturers present today mostly were begun (in Berkeley) since 1960. In general, light manufacturers pay lower wages than heavy manufacturers, but this varies greatly with the unionization of the company and other factors.



### Other Industrial Uses

"Other industrial" uses are a broad category of uses which, while not involving manufacturing or wholesale trade, nonetheless have an "industrial" character because of their processes, materials used, and/or land use. Construction, auto repair, and transportation and public utilities are key West Berkeley other industrial uses. The West Berkeley Plan area has 232 of these businesses, but they report only 1,304 employees, less than 6 employees per workplace. "Skilled blue collar" work with relatively high average wages dominate these fields, but there is great company to company variation, and construction is subject to great seasonality.

The 104 auto repair businesses dominate this category. 58 of these line San Pablo Avenue from Harrison to Carrison, forming one of the dominant uses on this street. The others are scattered throughout non-residential West Berkeley, but are most likely to be found in the Mixed Green zone. All but 7 of these businesses report 10 or fewer employees.

Construction firms based in West Berkeley make up the other key part of this use group. These firms favor locations in the Light Industrial zone, but can also be found in

<sup>1</sup>But the smallest companies would be in multi-tenant buildings (e.g. Kawneer, Folger-Murray) while some companies (e.g. Andros) are using 2 story buildings.

the Mixed Use Residential, or, less frequently, in the Commercial or Residential zone. The firms tend to be small, but 10 report employing 10 or more employees (and construction employment is highly cyclical). The actual sites that construction companies use vary from simple offices to yards of several acres where vehicles and materials are stored.

Agricultural uses, moving and trucking, and repair of items other than cars round out the category. Some notable sites are Pacific Bell's vehicle yard near 4th & Harrison and Macy Movers at 7th & Heinz.

#### ***D. Commercial Uses - The Fastest Growing Presence***

##### ***Office and Laboratory Uses***

Freestanding offices and laboratories (that is, ones which are not simply part of an industrial operation) are a relatively new (on a large scale) activity in West Berkeley, but they have grown to almost 20% of its private employment. They occupy some 850,000 square feet of space. West Berkeley's office-based firms operate in business services, graphic design, software, architecture and engineering, and many other fields. With 1,923 employees, these firms report only 7 employees per business. Average wages for these firms tend to be high, as they are made up of generally well-paid professionals and less well-paid clerical staff.

The majority of office-based firms are found in the Mixed Use/Light Industrial, where they make up roughly 1/3 of total private employment. Major concentration points for these uses are Parker Plaza at 9th & Parker (and the Fantasy Records building diagonally across the street) and the Durkee complex west of 7th & Heinz, where Xoma Corporation has over 200 employees in its labs. This complex also houses the state Department of Health Services labs, with its public employees not included in these totals. A major Kaiser medical lab is located on Eastshore between Virginia and Hearst. 68 firms are found in scattered small buildings in the Mixed Use Residential zone, in locations such as a small cluster of graphic design firms around 5th & Delaware. A smattering of health care offices are found along San Pablo Ave. and other major streets.

##### ***Retail Uses***

Retail trade has expanded dramatically in West Berkeley in the 1980's. Retail space now occupies over 1,000,000 square feet in West Berkeley—the equivalent of 2 large regional shopping centers. Employment more than doubled to 2,385, while the number of businesses (including personal services such as barber shops) grew to 310. West Berkeley is the main "regional" retail area in Berkeley. While the bulk of retailers are small, a disproportionate percentage of sales was garnered by such larger firms as Whole Earth Access, Weatherford BMW, Truitt and White, and REI. West Berkeley is represented in all retail categories, perhaps most strongly in specialty retail. While auto dealers are an exception, most West Berkeley retailers are non-union and low paying relative to other sectors.

Almost 3/4 of West Berkeley retail employment (and 2/3 of businesses) is in the commercial zone. This includes the major businesses along the north side of Ashby Ave. and the fashionable complex centered on 4th and Hearst. These areas have seen strong sales growth in their former industrial and newly constructed buildings. Less spectacular,



## WEST-BERKELEY PLAN



but still healthy, are the smaller businesses along University and San Pablo Avenues. Along these streets, food stores (many with an ethnic focus), liquor stores, restaurants, and auto parts stores dominate. However, specialty retailers such as REI and Amsterdam Art can also be found on these streets, while the mini-mall at Cedar & San Pablo represents an upscale version of the street's traditional food and liquor orientation.

Virtually all of the retail space outside the commercial zone is in the Mixed Green zone, where the growing Building Materials sector is the key use. Such establishments can be found along Ashby, near the foot of Hearst, and to a lesser extent off Gilman St. These businesses have a different land use and sales pattern than other retailers—much of their stock is stored outside. These stores also sell some 1/3 of their wares to contractors.

### **E. Residential Uses**

While most of West Berkeley is devoted to economic activity, there are also some 3,000 dwelling units—roughly 7% of the Citywide total. Almost half of West Berkeley's units (44%) are in single family houses, with the addition of 2 unit structures (19% more units) almost 2/3 of units are accounted for. Only 8% of units are in larger apartment buildings of 10 units or more. Small homes on small lots—often less than the “standard” 5,000 sq. ft. are the West Berkeley norm.

Most of West Berkeley's housing—over 2,000 units—is found in the “residential core” areas—between Dwight and Camelia, from 6th St. to just west of San Pablo Ave. The residential core areas north and south of University Ave. are broadly similar, although houses in the northern area are slightly smaller (averaging 4.9 rooms per owner-occupied unit, compared to 5.2 in the southern area, and 5.9 in Berkeley as a whole). The northernmost residential area, between roughly Delaware and Camelia has many “bungalow” style houses, reflecting a somewhat more recent style than residential streets

further south. Detailed information about the residents of West Berkeley is provided in the Housing Element.

Residences, however, are not limited to quiet local-serving streets. A 1986 land use survey indicated 239 units along San Pablo Ave. and 34 units along University Ave., often (although not always) above retail. Additionally, there is the 75 room UA Homes residential hotel at 10th & University, which is being restored to occupancy as a non-



profit residential hotel. West Berkeley's highest density zoning and largest apartment complexes are found on or near University Ave. There is also an important residential community intermixed with some light manufacturing (and similar) uses. This housing is concentrated along 5th St. and in the Grayson St. area in the newly designated Mixed Use/Residential district.

Live-work uses account for a small proportion (perhaps 2%) of West Berkeley's housing, but have gained prominence and posed challenges for City regulation. Originally pioneered by artists and craftspeople converting industrial spaces themselves, live-work has now attracted developers seeking more upscale residents. Because many live-work units do not have City permits there is no comprehensive inventory, but major sites include the Durkee building (Heinz St. w. of 7th), The Tannery (4th St. btwn. Gilman & Camelia), 1450 4th (constructed on 4th btwn. Page & Jones), and 947 Pardee (constructed at 9th & Pardee).

The Element now discusses the characteristics of the areas in each land use designation.



Table 1-1: West Berkeley Employment by Broad Sector in Proposed Zoning Districts

| Use Category            | Zoning District |            |                     |            |                       |              |                            |              |            |              |                 |               |
|-------------------------|-----------------|------------|---------------------|------------|-----------------------|--------------|----------------------------|--------------|------------|--------------|-----------------|---------------|
|                         | Manufacturing   |            | Mixed-Manufacturing |            | Mixed Use/Residential |              | Mixed Use/Light Industrial |              | Commercial |              | Total Plan Area |               |
|                         | Firms           | Employees  | Firms               | Employees  | Firms                 | Employees    | Firms                      | Employees    | Firms      | Employees    | Firms           | Employees     |
| "Heavy" Manufacturing*  | 9               | 537        | 4                   | 770        | 10                    | 257          | 7                          | 106          | 1          | 14           | 31              | 1,684         |
| "Light" Manufacturing** | 16              | 187        | 12                  | 87         | 140                   | 2,180        | 53                         | 400          | 39         | 212          | 266             | 3,097         |
| Other Industrial***     | 3               | 118        | 3                   | 16         | 72                    | 471          | 39                         | 279          | 97         | 357          | 232             | 1,304         |
| Retail Trade****        | 3               | 10         | 4                   | 12         | 49                    | 545          | 15                         | 46           | 219        | 1,746        | 310             | 2,385         |
| Office-Based*****       | 4               | 10         | 4                   | 30         | 100                   | 1,099        | 68                         | 386          | 56         | 257          | 272             | 1,923         |
| <b>TOTAL</b>            | <b>35</b>       | <b>862</b> | <b>27</b>           | <b>915</b> | <b>371</b>            | <b>4,552</b> | <b>182</b>                 | <b>1,217</b> | <b>412</b> | <b>2,586</b> | <b>1,111</b>    | <b>10,393</b> |

\*"Heavy" Manufacturing is chemicals, including pharmaceuticals, primary metals, and asphalt products.

\*\*"Light" Manufacturing is all other manufacturing, wholesale trade, and warehousing.

\*\*\*Other Industrial is agriculture, construction, transportation and public utilities, auto repair, and miscellaneous repair services.

\*\*\*\*Retail Trade is retail trade and personal services.

\*\*\*\*\*Office-Based is finance, insurance, and real estate; travel agencies; and services not listed above including business services, engineering and management.

Source: Business Licenses, 1990, City of Berkeley

Note: Plan Area totals include 84 firms with 262 employees located in residential areas and Aquatic Park and not reflected in columns.

Note: Business License data tends to understate employment somewhat, due to underreporting.

## F. Land Use in Plan Districts

### Mixed Use/ Light Industrial District

This description begins with the Mixed Use/ Light Industrial district because it is the largest one (outside of the purely residential areas), covering roughly 300 acres. This district in many ways represents the linchpin of the West Berkeley Plan. It contains the most employment of any district—4,552 jobs or 44% of the total reported jobs (on Business Licenses) for the Plan area. The area's broad importance is indicated by the fact that it is home to 51% of the manufacturing and wholesaling employment, and 57% of office-based services. Manufacturing and wholesaling make up over half—54%—of the jobs in the district (2,437 jobs). There are 77 manufacturers in the district, virtually as many as in the Manufacturing, Mixed Manufacturing, and Mixed Use/Residential districts combined, which have a total of 79 manufacturers. 6 of the 10 largest manufacturers in West Berkeley are located in this district.

In the Mixed Use/ Light Industrial office-based services account for almost another quarter of district jobs (1,099 jobs or 24%). The district does not incorporate the centers and retail employment is modest—477 jobs, or 12% of the area total, with the bulk of these coming in the rather atypical Building Materials and Garden Supplies sector.

### Manufacturing District

The manufacturing district is a "gritty" territory of metal "shed" buildings, tall cranes, and forklifts in the street. The district is generally west of 4th St. and north of Virginia St., though its borders are irregular. About 900 workers (862) in 35 firms labor here, with 84% of them in manufacturing and wholesaling. Flint Ink (formerly Cal Ink), Pacific Steel Castings, and billboard builder Gannett Outdoor Advertising are the largest employers here, along with other smaller "heavy" manufacturers.

Table 1-2: Percentage of Each Sector's Employment in Each Zone (totals across)

| Sector                   | ZONING DISTRICT |                         |                           |                                |            | Total       |
|--------------------------|-----------------|-------------------------|---------------------------|--------------------------------|------------|-------------|
|                          | Manufacturing   | Mixed-<br>Manufacturing | Mixed Use/<br>Residential | Mixed Use/<br>Light Industrial | Commercial |             |
| "Heavy"<br>Manufacturing | 32%             | 46%                     | 15%                       | 6%                             | 1%         | 100%        |
| "Light"<br>Manufacturing | 6%              | 3%                      | 70%                       | 13%                            | 7%         | 100%        |
| Other Industrial         | 9%              | 1%                      | 36%                       | 21%                            | 27%        | 100%        |
| Retail Trade             | 0%              | 1%                      | 23%                       | 2%                             | 73%        | 100%        |
| Office Based             | 1%              | 2%                      | 57%                       | 20%                            | 13%        | 100%        |
| <b>Total</b>             | <b>8%</b>       | <b>9%</b>               | <b>44%</b>                | <b>12%</b>                     | <b>25%</b> | <b>100%</b> |

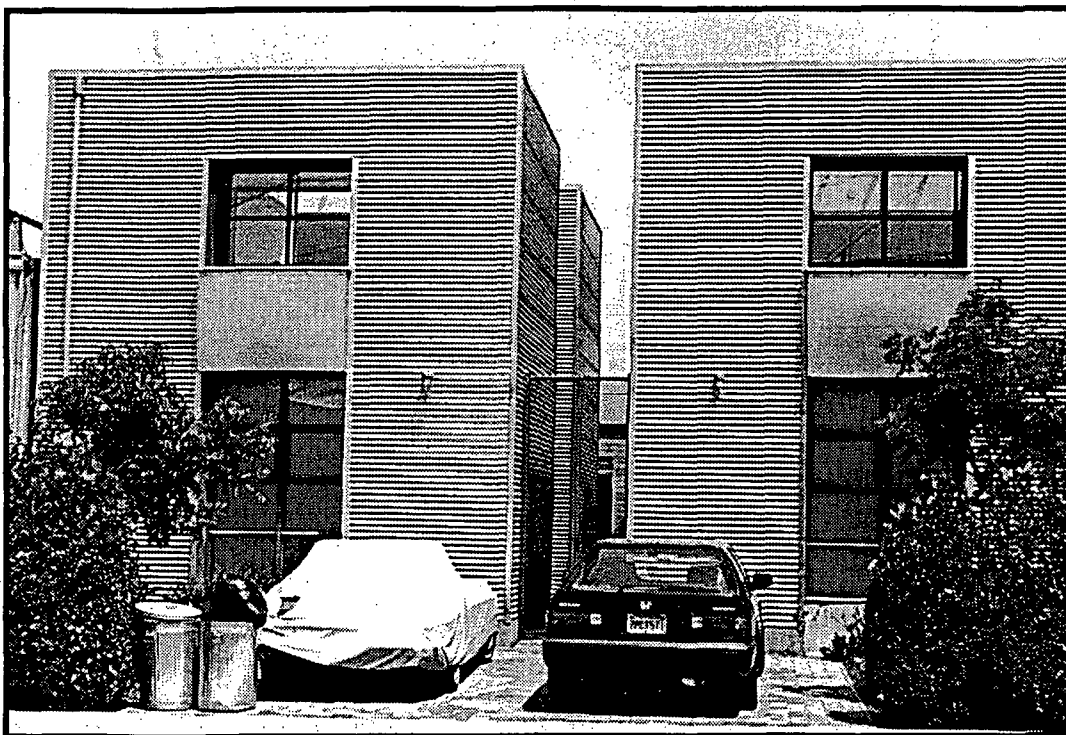
Note: Rows do not always add to 100% because of employment in Aquatic Park and in the residential zones.

Table 1-3: Percentage of Each Zone's Employment in Each Sector (totals down)

| Sector                   | ZONING DISTRICT |                         |                           |                                |             | Total       |
|--------------------------|-----------------|-------------------------|---------------------------|--------------------------------|-------------|-------------|
|                          | Manufacturing   | Mixed-<br>Manufacturing | Mixed Use/<br>Residential | Mixed Use/<br>Light Industrial | Commercial  |             |
| "Heavy"<br>Manufacturing | 62%             | 84%                     | 6%                        | 9%                             | 0%          | 16%         |
| "Light"<br>Manufacturing | 22%             | 10%                     | 48%                       | 33%                            | 9%          | 30%         |
| Other Industrial         | 14%             | 2%                      | 10%                       | 23%                            | 24%         | 13%         |
| Retail Trade             | 1%              | 1%                      | 12%                       | 4%                             | 53%         | 23%         |
| Office Based             | 1%              | 3%                      | 24%                       | 32%                            | 14%         | 19%         |
| <b>Total</b>             | <b>100%</b>     | <b>100%</b>             | <b>100%</b>               | <b>100%</b>                    | <b>100%</b> | <b>100%</b> |

### Mixed Manufacturing District

The Mixed Manufacturing district is made up of the "superblocks" between 7th St. and the railroad track, Dwight Way and Heinz St. These blocks were laid out as the early 20th Century version of an "industrial park." The area is dominated by large sites—Miles' almost 25 acres, Some 10 acres at the former Colgate plant, and other similarly large sites. Some 900 employees work here (915) although for a mere 27 businesses. Recent employment increases at Miles have raised the employment total. Employment in the district is 90% manufacturing and wholesaling, with Miles, Macaulay Foundry, and Artworks Foundry leading employers.



### ~~The Mixed Use/Residential District~~

~~The Mixed Use/Residential district's non-residential uses are divided among manufacturing and wholesaling, with 506 employees (42% of the district total), with 386 (32%) in office-based and non-repair services, and 279 (23%) in other industrial uses such as construction and auto repair. The district is not insignificant economically, with 12% of total West Berkeley jobs, 21% of West Berkeley light manufacturing jobs, and 20% of West Berkeley office-based jobs. However, businesses in the district tend to be smaller than in other districts, with the largest employer here reporting only 60 jobs. But among the 200+ businesses in the district, there are over a dozen construction companies, a similar number of printers and publishers, almost 20 small wholesalers, and a large cluster of business service firms. Residentially, the district contains 373 units (according to the 1990 Census), 90 of which (or 25%) are concentrated at the Oceanview Gardens/Delaware St. Historic District site. One unit houses predominate in the area, but there are many duplexes, and some 3 and 4 unit structures. The Oceanview Gardens development is composed primarily of 6 unit structures.~~

### ~~Commercial District~~

~~Most of the district's employment—1,746 jobs or 73% of its total is in retail and personal service uses. Similarly, the district represents 73% of West Berkeley retail/personal service jobs. 8 of West Berkeley's 10 largest retail employers are in this district. Whole Earth Excess, Spenger's, and REI are among these leading employers. The district also has a substantial residential population, with approximately 300 units. Areas with substantial numbers of residents include University Ave. from 8th to 10th, and San Pablo Ave. from University to Cedar, San Pablo Ave. from Addison to Parker, and 10th St. south of Dwight Way. In all of these areas, however, residential and commercial uses are mixed, either on the same property, or on the same block.~~



Figure 1-2: West Berkeley Plan Conforming and Non-Conforming Uses\*

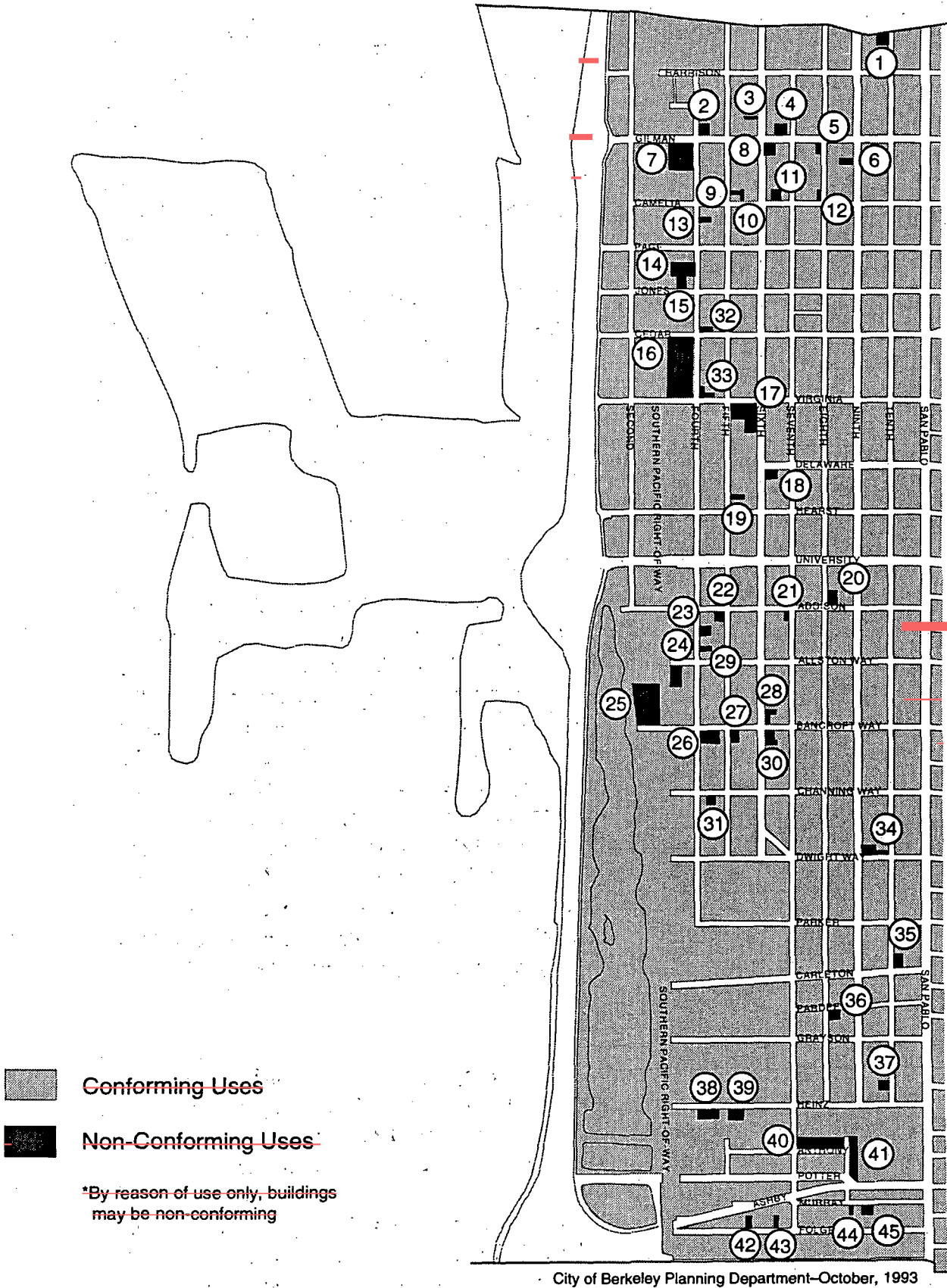
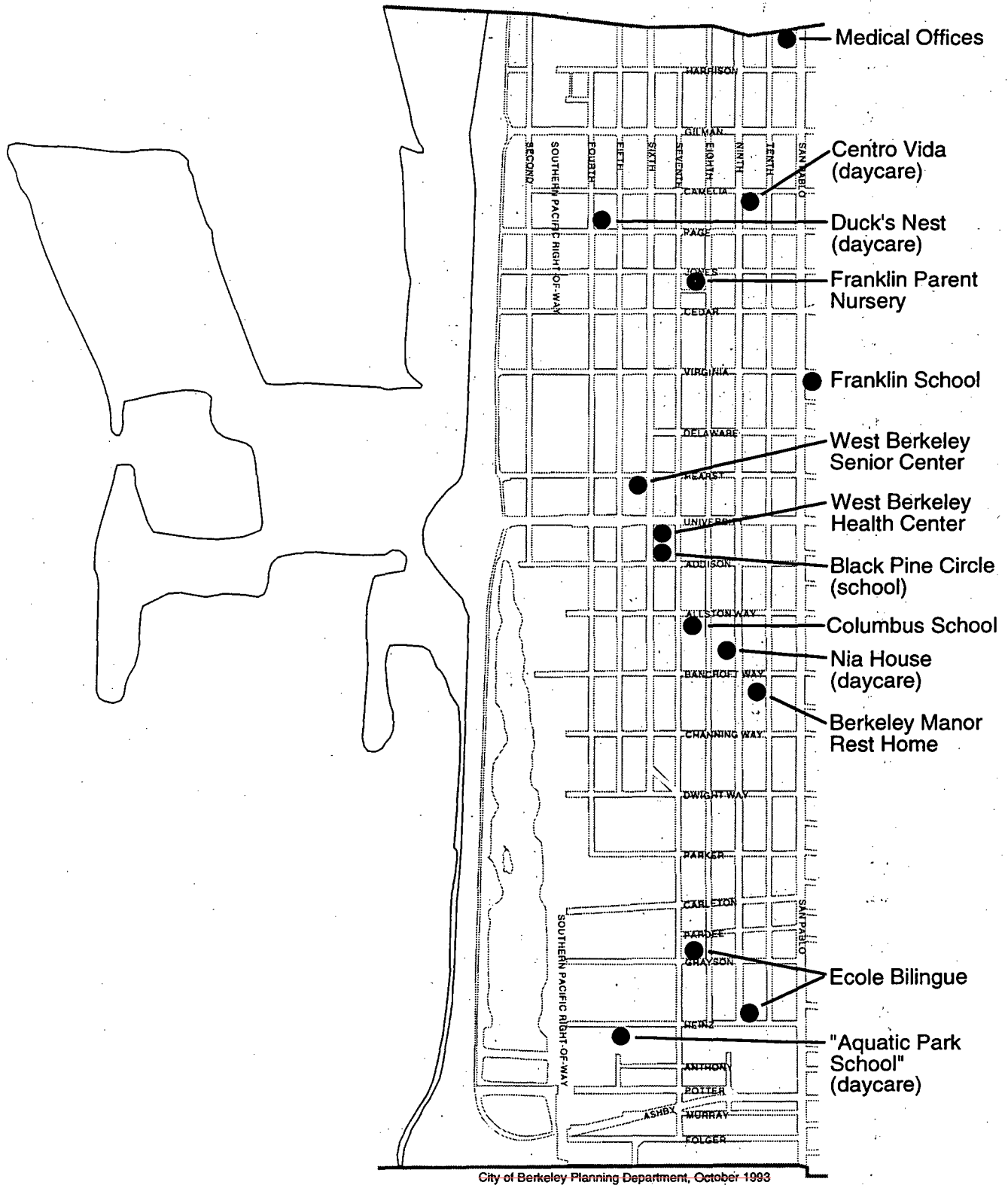


Figure 1-2: Legend

| Number | District              | Use                 |
|--------|-----------------------|---------------------|
| 1.     | Light Industrial      | Residence           |
| 2.     | Light Industrial      | Retail              |
| 3.     | Light Industrial      | Residence           |
| 4.     | Light Industrial      | Retail              |
| 5.     | Light Industrial      | Retail              |
| 6.     | Light Industrial      | Retail              |
| 7.     | Manufacturing         | Office/Live-work    |
| 8.     | Light Industrial      | Retail              |
| 9.     | Light Industrial      | Residence           |
| 10.    | Light Industrial      | Residence           |
| 11.    | Light Industrial      | Residence           |
| 12.    | Light Industrial      | Residence           |
| 13.    | Manufacturing         | Day Care            |
| 14.    | Light Industrial      | Live-work           |
| 15.    | Light Industrial      | Residence           |
| 16.    | Light Industrial      | Heavy Manufacturing |
| 17.    | Mixed Use/Residential | Manufacturing       |
| 18.    | Residential           | Office*             |
| 19.    | Mixed Use/Residential | Retail              |
| 20.    | Residential           | Manufacturing*      |
| 21.    | Residential           | Manufacturing*      |
| 22.    | Mixed Use/Residential | Retail*             |
| 23.    | Light Industrial      | Bathhouse           |
| 24.    | Light Industrial      | Heavy Manufacturing |
| 25.    | Light Industrial      | Soil Blending       |
| 26.    | Light Industrial      | Retail              |
| 27.    | Mixed Use/Residential | Heavy Manufacturing |
| 28.    | Residential           | Manufacturing*      |
| 29.    | Light Industrial      | Residence           |
| 30.    | Residential           | Manufacturing*      |
| 31.    | Light Industrial      | Residence           |
| 32.    | Light Industrial      | 3 Residences        |
| 33.    | Light Industrial      | 3 Residences        |
| 34.    | Residential           | Nursery*            |
| 35.    | Light Industrial      | 2 Residences        |
| 36.    | Mixed Use/Residential | Manufacturing       |
| 37.    | Mixed Use/Residential | Retail              |
| 38.    | Light Industrial      | Retail              |
| 39.    | Light Industrial      | Live-work           |
| 40.    | Light Industrial      | Retail              |
| 41.    | Commercial            | Heavy Manufacturing |
| 42.    | Light Industrial      | Residence           |
| 43.    | Light Industrial      | Residence           |
| 44.    | Light Industrial      | Residence           |
| 45.    | Light Industrial      | Retail              |

\*(non-conforming under current zoning)

Figure 1-3: Sensitive Receptors





### **Residential Districts**

The residential districts of West Berkeley overwhelmingly zoned R1(A), with small amounts of R3, and R4, are virtually unmodified by the Plan. The 2 residential Census tracts (which cover the area from Dwight to Camelia, 6th to San Pablo) total 256 acres, but this figure includes some commercially zoned frontage on University and San Pablo. City records indicated (as of 1989) 2,356 housing units in the 2 tracts. Somewhat less than half of the units (43%) were in 1 unit structures. An additional fifth of the units (21%) are in structures with 5 or more units. Almost all of these apartment buildings are non-conforming uses because they were built before the area was downzoned. There is also employment in the district in existing non-conforming commercial structures, and in home occupations, which are counted as employment in Berkeley's business licenses.

### **G. The Intensity of West Berkeley Land Use**

The modest scale of West Berkeley housing is noted above. Other types of West Berkeley land use also reflect modest intensity of development. Only 1 small area of West Berkeley—the portion incorporating Parker Plaza and Fantasy Records—has an overall Floor Area Ratio (FAR) of greater than 1. This means that only in this area is there on average more than 1 square foot of building for each square foot of land, although there are other individual sites with an FAR of greater than 1 (e.g. Colgate). FARs of 2 or more are rare. By contrast, FARs of 3 or 4 or more are found in Downtown Berkeley.

Permitted Floor Area Ratios (FAR) it should be noted, are greater. The existing M district has no maximum permitted FAR, but the 3 story height limit would theoretically allow FARs as high as about 2.7. The need to provide parking is the constraint in this case. The Special Industrial (SI) district has a permitted FAR of 1.0 for non-residential structures. The distinction between the permitted FARs and the existing stems from the fact that while a single lot or 2 on a block may be developed to the maximum FAR, it is unusual that the entire block is built to that level. In many cases property owners—particularly manufacturers seeking the most efficient goods movement—do not wish to build to a maximum FAR. Thus the permitted FAR serves more as a maximum than as a predictor of likely level of development.

The scale of West Berkeley development indicates its character as an industrial district of intermediate age. The Bay Area's oldest remaining industrial district—South of Market in San Francisco—is characterized by multi-story buildings which have become increasingly difficult to use. Newer industrial areas (e.g. industrial parks in South San Francisco) are almost exclusively single story buildings and provide greater amounts of parking and loading space than in West Berkeley.

### III. ANTICIPATED DEVELOPMENT IN WEST BERKELEY

#### *Assumptions for Projection*

Future development in an area can only be projected, with no claim to "scientific" accuracy. The land use regulations embodied in this Plan set the maximum permitted development levels, but market conditions will generally dictate whether private developers will take advantage of these opportunities. The City itself does not plan to undertake major development projects in the area, with the possible exception of relocating its Corporation Yard.

The analysis in this document uses the same assumptions used in the Environmental Impact Report on the Plan. City staff, with the assistance of development professionals, have identified the major development opportunities that exist in West Berkeley. These include both vacant sites, and sites where expansions or changes of uses are likely. In addition, the EIR builds in allowances for expansion of existing smaller scale development. The projections were developed by reviewing 1) Projects now approved (including under construction as of Fall, 1992); 2) Projects proposed; and 3) Potential projects in each zone, for each use. The Plan and EIR assume that the available sites will be fully developed by 2005. Such "buildout" may not occur, but assuming that it will is conservative in terms of traffic which will have to be handled and other issues.

This document provides a summary of projected development in West Berkeley through 2005. Further detail is available in the West Berkeley Plan Draft Environmental Impact Report.

#### *Overall Level of Development*

Development under the West Berkeley Plan is projected to be significant, but in scale with existing development. The Plan projects that West Berkeley will add some 1,535,000 of non-residential development, including laboratory, manufacturing, office, and retail space. If realized, this would represent a 16% addition to the existing stock (as of 1992) of some 9,300,000 square feet (see Table 1-4). 400,000 square feet of new manufacturing space are projected, as are 680,000 square feet of new office/"R and D" space, and 525,000 square feet of retail space. Under the Plan at least 200 residential and live-work units<sup>1</sup> will be added to the existing stock of 2,970 housing units (including live-work). Thus the Plan projects at least a 7% increase in residential space.

As the EIR discusses, the great bulk (1,340,000 square feet) of the projected development is in 8 major projects. These are development at the University's Harrison Properties; re-occupancy of Utility Body; commercial development at the Spenger's parking lot; the approved Miles Development Agreement; reuse of the Colgate site; development at the "Colgate East" parking lot across 7th St.; Live-work development on the Husted's Towing site, and expansion of Whole Earth Access. As of September, 1993,

<sup>1</sup>These projections include live-work space with their projection of housing development. Strictly speaking, live-work is not housing, because it incorporates both a living space and workspace. The proposed live-work ordinance treats live-work space as more "commercial" than "residential". However, regardless of how this issue is viewed, since live-work will provide living space for households, it is appropriate to include it in the housing totals. The Housing and Social Services Element provides further discussion of West Berkeley's recent levels of housing development.

## WEST BERKELEY PLAN

only the Miles project and demolition of buildings at the Colgate site (but no new buildings) have been approved by the City, so none of the other projects are certain.

Table 1-4: Existing Non-Residential Space and Projected Development by Use\*

|                      | Manufacturing<br>& Wholesaling | Office<br>"P and D" | Retail           | Other**          |
|----------------------|--------------------------------|---------------------|------------------|------------------|
| Existing Space, 1992 | 5,930,000                      | 855,000             | 1,350,000        | 1,140,000        |
| Projected, 1992-2005 | +400,000                       | +680,000            | +325,000         | +135,000         |
| % Change, 1992-2005  | +7%                            | +79%                | +24%             | +12%             |
| <b>Total, 2005</b>   | <b>6,330,000</b>               | <b>1,535,000</b>    | <b>1,675,000</b> | <b>1,275,000</b> |

\*rounded to nearest 5,000 sq.ft.

\*\*Other includes auto repair shops, banks, motels, schools, churches, and other institutional uses. The expected increase in space assumes development of a Corporation Yard for the City and School District.

### Development Projections and Development Objectives

In its effort to balance various types of development, the West Berkeley Plan Preferred Land Use Concept (the predecessor document to this one) adopted objectives for growth over the 15 year Plan period in various uses—Manufacturing (and wholesaling), Office and Laboratory, and Retail. The Committee set objectives of adding 350,000 square feet of manufacturing space, 400,000 square feet of office and laboratory space, and 300,000 square feet of retail space. Clearly, projected growth of space meets or exceeds these targets in each area. This added space was targeted to add 700 manufacturing jobs, 1,200 office and laboratory jobs, and 1,200 retail jobs. These objectives were arrived at by using ABAG's projections for economic growth in Berkeley as a whole as benchmarks.

### Housing Development Potential

In addition to providing space for jobs, the West Berkeley Area Plan must provide space for additional housing. An assessment of potential housing development sites in the Plan Concept suggests that West Berkeley can meet a reasonable target of 200 units development over the next 15 years. Housing development potential exceeds a reasonable housing goal by 95-120 units, possibly more.

#### Summary of Potential

|                       |                   |
|-----------------------|-------------------|
| Commercial corridors  | 152 units         |
| Mixed Use residential | 108 units         |
| Second units          | 13 units          |
| Live-work conversions | Unquantified      |
| <b>Total</b>          | <b>273 units*</b> |

\*Total units plus live-work conversions

#### Development Opportunities:

The West Berkeley Plan provides 3 types of housing development opportunities—Commercial corridors (especially San Pablo Ave.); the Mixed Use Residential zone; and second units with single-family houses.

The projection assumes 8 housing development sites with 152 units in 3 story mixed use buildings on San Pablo Avenue (feasible only under relaxed parking standards); 6 housing development sites with 108 units in the Mixed Use/Residential district (not including possible additional conversions of industrial space to live-work use), and 13 second units with single family houses (added to 1% of the existing single family house stock).

## IV. GOALS AND POLICIES

The West Berkeley Plan Preferred Land Use Concept developed a substantial list of land use goals and policies. Taken together, they provide a broad statement of the many activities the Plan seeks to provide for and balance. They provide important points of reference in both developing zoning rules and making land use decisions on specific projects, but of course do not directly answer what should be done on a given site.

The key land use goals and policies are listed and explained below. It should be noted that many goals and policies with an important bearing on land use are found in the Economic Development, Design, and Housing Elements.

### Goal 1:

Over the economically active area of West Berkeley, provide for a continued economic and land use mix, incorporating manufacturing, other industrial, retail and office/laboratory uses, to benefit Berkeley residents and businesses economically, benefit the City government fiscally, and promotes the varied and interest character of the area.

#### Rationale:

Maintaining a mix of uses within West Berkeley is the overriding goal of the West Berkeley Plan. This mix is the key feature which distinguishes West Berkeley from other areas of Berkeley and the region — if it disappeared, so would West Berkeley's uniqueness. Even those policies which specify certain areas for certain uses (e.g. manufacturing) do so in the service of assuring that those uses will remain part of the overall West Berkeley mix, and not simply disappear. The mix assures that a variety of businesses, some of which best meet job needs, others of which provide the City the most tax revenue, and still others of which provide important goods and services, can remain and flourish.

#### Policies:

A. Retaining, through planning, zoning and land use policies which shield manufactures from economic and physical incompatibilities with other uses, sufficient land and buildings to maintain the current level of manufacturing employment at a minimum.

B. Providing, through zoning districts, development standards, and other tools, space and incentives for expansion of manufacturing firms, particularly the growing light manufacturing sector.

C. Providing space for, and designating appropriate locations for — in planning and zoning policies — both neighborhood and regional serving retail businesses.

D. Providing space for, and designating appropriate locations for, office, service, and laboratory businesses, particularly growing Berkeley based businesses which are particularly suited to West Berkeley's physical environment.

**Goal 2:**

~~Channel development both new businesses and residences and the expansion of existing businesses to districts various which are appropriate for the various existing elements of the West Berkeley land use mix.~~

**Rationale:**

~~The Preferred Land Use Concept was based on the concept of channeling different types of uses to different parts of West Berkeley, within the context of its overall mix. It therefore developed a new zoning districting plan for West Berkeley. This Goal and its associated policies set forth the rationales for creating each of the districts.~~

**Policies:**

~~A. Create a Manufacturing district as a general industrial district, where the full range of existing manufacturers both "heavy" and "light" can function without interference from other types of uses.~~

~~B. Create a Mixed Manufacturing district as a general industrial district, where both heavy and light manufacturers can function, along with "biotech" industries and office users which can recycle the upper stories of buildings.~~

~~C. Create a Light Manufacturing district which allows a wide range of light manufacturers to continue to operate and expand and limits loss of their spaces to other uses, while providing an opportunity for office development where it will not unduly interfere with light manufacturing uses, and for laboratory development in appropriate locations.~~

~~D. Create a Mixed Residential district as a special mixed use district which will recognize and support the continued evolution of a unique mix of residential, light industrial, and arts and crafts uses, with a particular effort to strengthen residential concentrations existing there.~~

~~E. Create a Commercial district which will foster the continued vitality of West Berkeley's neighborhood and regional serving retail trade, in as pedestrian friendly a manner as possible.~~

~~F. Maintain Residential districts which will provide decent, safe, and sanitary living environments for a wide range of types of household.~~

**Goal 3:**

~~Protect residential core neighborhoods from adverse impacts of economic growth—especially traffic and parking congestion and noise.~~

**Rationale:**

~~The residential core neighborhoods are made up primarily of houses and apartments, much like other residential Berkeley neighborhoods. A safe and pleasant residential environment is important there. These neighborhoods should enjoy the same~~



~~protection from through traffic on non-arterial (and non-collector) streets and from commercial parking spill-over that other residential neighborhoods enjoy. The facts that these neighborhoods are adjacent to industrial and other economically active areas, and that they are occupied in large part by low income people do not diminish their need for these protections.~~

#### ~~Policies:~~

~~A. Protect residential streets which are not arterials or collectors from through traffic, both from trucks and commuters.~~

~~B. Protect the residential core neighborhoods from parking spill-over generated by nearby office and residential uses.~~

#### ~~Goal 4:~~

~~Assure that new development in any sector is of a scale and design that is appropriate to its surroundings, while respecting the genuine economic and physical needs of the development.~~

##### ~~Rationale:~~

~~The modest scale of many West Berkeley areas, both residential and economically active, is an important aspect of their character. As development occurs in these areas, the City must balance the economic and physical needs of the development itself with the scale of the area, should these come in conflict.~~

#### ~~Goal 5:~~

~~Clarify and rationalize the development review process, so that clearer guidance is given to applicants and people affected by projects, and so that decisions on projects may occur more rapidly, while providing appropriate opportunities for citizen input.~~

##### ~~Rationale:~~

~~Many businesses and developers have argued that Berkeley's project review process is unduly long and complex. The West Berkeley Plan seeks to provide both greater certainty of outcome to applicants and affected parties, and more rapid permit processing.~~



~~The Plan achieves both seemingly contradictory goals by providing more detail on permitted and prohibited uses than the previous zoning, while allowing a greater number of projects which meet zoning standards to proceed without cumbersome and time-consuming public hearings.~~



## V. THE LAND USE DISTRICTING CONCEPT OF THE PLAN

One of the most important parts of the West Berkeley Plan is its land use concept. The land use concept is designed to guide West Berkeley's evolution through at least the year 2005. The concept lays out a completely revised set of land use districts for West Berkeley (see the following color district map). These districts are designed to become new zoning districts once the final Plan is adopted.

The concept represents a balance between a strong emphasis on the need to conserve desirable existing uses and the need to allow reasonable evolution and development. It seeks to balance the legitimate, yet sometimes conflicting interests of the many "stakeholders" in West Berkeley—residents, manufacturers, workers and their unions, retailers, property owners, the University, the City itself, and many others. The Plan land use concept seeks to give clear guidance on what activities are desired where within Berkeley, yet allow the continued development of a creative, exciting mixed use area. For the first time in West Berkeley, the land use concept provides a clear gradation of uses and development intensity from the residential areas, through mixed use areas to the manufacturing areas.

### Overview of the Districting Concept

While the concept was developed through an intensely participatory process, which required numerous trade-offs and compromises from all participants (see the Process section), there is nonetheless an underlying logic to the concept. The concept recognizes that, although West Berkeley is, on the whole, an area with very mixed uses, individual areas within it do have certain predominant uses. Other areas have a mix of uses, but they do not generally have the full range of uses from "heavy" manufacturing to single family detached residential (see Figure 1-4 for a diagrammatic depiction of the varying mix of uses in the Plan's land use districts). There are 6 land use designations (types of zoning) for the whole of West Berkeley.

Some areas have a use mix dominated by "heavy" and "light" manufacturing, these are designated as the Manufacturing and Mixed Manufacturing districts. In much of West Berkeley, light manufacturing and other light industrial uses (e.g. auto repair) are the primary land use, these areas are designated as Mixed Use/Light Industrial district. Retail commercial concentrations have developed, not only along San Pablo and University Aves., but around 4th & University and 7th & Ashby as well. These areas were designated Commercial. Some areas mix industrial and residential uses closely together—these areas have been designated Mixed Use/Residential. The remaining areas are overwhelmingly residential, and remain in their existing residential zoning (whether it be R-1A, R3, or R4). This pattern is described in more detail in the following section.

In addition to this overall concept, there were a number of principles which guided the development of the land use concept. Most important among these were:

- New land use districts/zones should recognize the existing character of an area, and create as few non-conformities as possible;

- The zoning should allow desired development in an area (e.g. residential infill, expansion of existing manufacturers), but generally not permit a radical change of area character;
- Although they are not the only consideration, the desires of businesses, property owners, and residents in a particular area are especially important in developing districting/zoning for that area;
- Zoning should specify, as clearly as possible, permitted and prohibited uses in an area, to give guidance to applicants (for permits) and to reduce permit processing time;
- Manufacturing, wholesaling, and warehousing space should be maintained in those uses as much as possible, to meet the Council/Planning Commission mandate to maintain manufacturing jobs;
- All uses, even those permitted in a zone, are subject to review for environmental impacts. However, whether an Environmental Impact Report (EIR), an Initial Study, or other environmental document is needed will be determined by the nature and scale of an application;
- Existing residential clusters within mixed use areas should be strengthened and legitimized;
- Residents should be buffered from the effects of heavy industrial uses as much as possible;
- Retail uses should be clustered, to strengthen existing retail areas, to make them for walkable, and to prevent retail sprawl.

Figure 1-4: The Spectrum of Permitted Uses

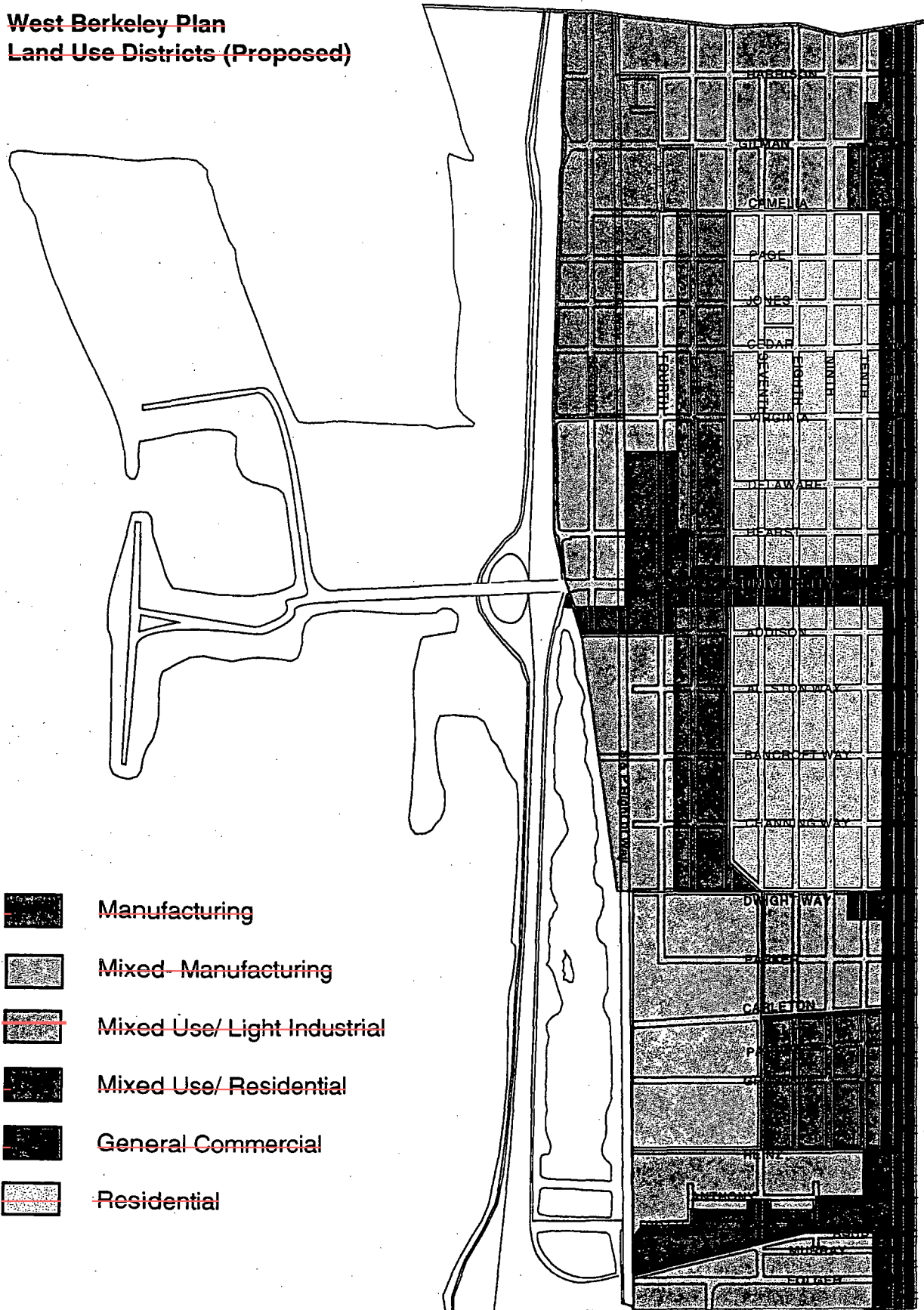
West Berkeley Plan Districts Generally Permitted Uses by District

|                            | Use Categories                                             |                                                            |                                                            |         |           |        |             |
|----------------------------|------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|---------|-----------|--------|-------------|
|                            | "Heavy"<br>Manufacturing                                   | Light<br>Manufacturing                                     | Other<br>Industrial                                        | Offices | Live-Work | Retail | Residential |
| Districts                  |                                                            |                                                            |                                                            |         |           |        |             |
| Manufacturing              | 4000-4500 Sq. Ft. or more, manufacturing or industrial use |                                                            |                                                            |         |           |        |             |
| Mixed Manufacturing        | 3000-3999 Sq. Ft. or more, manufacturing or industrial use |                                                            |                                                            |         |           |        |             |
| Mixed Use/Light Industrial |                                                            | 1000-2999 Sq. Ft. or more, manufacturing or industrial use |                                                            |         |           |        |             |
| Mixed Use/Residential      |                                                            |                                                            | 1000-2999 Sq. Ft. or more, manufacturing or industrial use |         |           |        |             |
| Commercial                 |                                                            |                                                            |                                                            |         |           |        |             |
| Residential                |                                                            |                                                            |                                                            |         |           |        |             |

## Legend:

- Use generally permitted in district
- Use permitted to more limited extent in district
- Uses not indicated are generally prohibited in district

**West Berkeley Plan  
Land Use Districts (Proposed)**



## ***Specific Districts in the Concept***

### ***General Manufacturing Districts***

There are 2 small districts in the Plan which allow process intensive, "heavier" manufacturing uses, as well as light industrial uses. These are the Manufacturing District in northwestern West Berkeley (largely west of the railroad tracks), and the Mixed Manufacturing District in southwestern West Berkeley (around the Colgate and Miles sites). These areas are the present home to most West Berkeley "heavy" industries such as steelmaking and ink production. These districts are closely targeted to industrial uses, and generally do not allow residential, live work, retail, or office uses (except on upper stories in the Mixed Manufacturing District). Office, laboratory, and retail uses which are integral to a manufacturing operation (e.g. a store selling products made on site) are permitted in the district. These small areas—some 94 acres in the Manufacturing zone and 79 acres in the Mixed Manufacturing zone—most closely follow the model of "Protected Manufacturing Districts" that manufacturing advocates sought for West Berkeley. While industrially oriented, the Mixed Manufacturing district is somewhat less tightly targeted than the Manufacturing District, allowing freestanding laboratories and office uses on upper stories, so that multi-story buildings in the district can be more easily used.

### ***Mixed Use/Light Industrial District***

The district is proposed for most of the areas where light manufacturing and industrial uses predominate in West Berkeley. These include the northern area, north of Camelia St. (home to such companies as Hopkins Screen Printing, Clear Com, and Mousefeathers). There is also the western area—west of 4th between Camelia and Dwight—(location of A&B Die Casting, De Soto, Peerless Lighting, and Andros Analyzers among others). There is the Parker St. area east of 7th (site of Ion Systems, Nolo Press, and Consolidated Printing). South of Heinz most areas are in the district, except for the north of Ashby commercial corridor (taking in Xoma sites and the "Durkee" project, as well as East Bay Steel).

Permitted uses in the district are broadly light industrial in character, with various types of light manufacturing being allowed but not "heavy" manufacturing. Freestanding laboratories (i.e. those not associated with a manufacturing use) would be permitted only in the areas between the railroad track and Aquatic Park, and north of Gilman St, to limit potential exposure to residential neighborhoods. Office uses are permitted in the zone, but not most types of retail. However, office development is limited by the stipulation that only 25% of the area of a manufacturing facility not already used for offices could be converted to office use. Thus the district allows limited office development on current manufacturing sites, and on currently undeveloped sites. Residential uses are not permitted in the district (although "heavier" live work uses are). There are only a very small number of residential uses in the district, because the Mixed-Use Residential district was drawn to include all of the major residential enclaves.



## WEST BERKELEY PLAN

**Mixed Use/Residential District**

The Mixed Use/Residential zone is the fourth new land use/zoning district developed by the West Berkeley Plan. While the Mixed Use/Light Industrial zone incorporates those areas dominated by a light industrial/office mix without residential uses, the Mixed Use/Residential focuses on those areas where the typical mix is residential and light industrial. The district encompasses the current SI (Special Industrial) district between the 4th/5th midblock line and 6th St., along with an area (currently zoned M) between Carleton and Heinz, 7th St. and the San Pablo commercial strip where there are substantial numbers of residences. The district totals some 120 acres. The district's proposed uses permit residential, live-work, light industrial, and office uses, but only limited, generally neighborhood serving retail. To maintain the district's smaller scale of development, it has a lower height limit and lower allowed Floor Area Ratio (amount of development per square foot of land) than do the manufacturing and light industrial districts.

**Commercial District**

The commercial district is not a new one in West Berkeley, currently covering almost all of San Pablo Ave. and University Ave. east of 6th St. The West Berkeley Plan extends the commercial designation to other areas which have in fact become commercial—4th St. between Addison and (vacated) Delaware, a corridor along the north side of Ashby Ave., and pockets (sometimes described as “nodes”) off San Pablo at Dwight and Gilman. The Plan seeks to foster concentrated, walkable commercial areas, and to prevent commercial sprawl which will both interfere with industry and attenuate commercial areas. A new commercial “loop” from 4th & Addison to Aquatic Park is created, in the hope that retail uses here will help lure more people into Aquatic Park. The zoning for the district will vary somewhat between concentrated commercial nodes (where non-commercial uses will not be permitted on the ground floor) and along commercial strips such as San Pablo.

**Residential Districts**

Within the residential districts, the Plan does not propose to change the zoning borders. The only proposed change to permitted uses is to allow small neighborhood-serving retail and service uses (e.g. groceries, laundromats) within the R districts.

One change which has been suggested for study is the possible revision of zoning to allow multi-family structures a greater depth of lot back from San Pablo Ave. This was suggested for those areas which although zoned residential are currently not in residential use. This change could be incorporated into zoning revisions, but before doing so careful study and consultation with the residents would be required. This issue may be most appropriate for the General Plan.

## VI. IMPLEMENTATION MEASURES

### **Ordinances and Regulatory Changes**

~~A. Rezoning—Implement the rezoning envisioned by the Preferred Land Use Concept and the West Berkeley Plan—including permitted and prohibited uses, development standards, performance standards and project review procedures—by amending the Zoning Ordinance and zoning map.~~

~~Goals and Policies Implemented: Goal 1, Policies 1A, 1B, 1C, 1D; Goal 2, Policies 2A, 2B, 2C, 2D, 2E, 2F, Goal 4, Goal 5~~

~~Responsibility: City Planning Department~~

~~Funding: Major project within regular staff and operating funding~~

~~B. Redevelopment Plan—Amend the West Berkeley Redevelopment Plan to conform with West Berkeley Plan~~

~~Goals and Policies Implemented: Goal 1, Policies 1A, 1B, 1C, 1D; Goal 2, Policies 2A, 2C, 2D, 2E, Goal 4, Goal 5~~

~~Responsibility: Community Development Department~~

~~Funding: Redevelopment Agency~~

~~C. Truck Weight Ordinance—Amend the City's truck weight Ordinance to prevent through traffic on residential streets. The City's actions to limit the transportation~~

~~Goals and Policies Implemented: Goal 3, Policy 3A~~

~~Responsibility: Traffic Engineer's Office~~

~~Funding: Regular staff and operating funding~~

### **Projects**

~~A. Consolidated Parking—Study the feasibility of, and if feasible and desirable, construct parking garages or other consolidated parking facilities in the area of 4th & University and 7th & Ashby (and other locations if warranted). The garages would be intended to provide parking for area merchants, the Amtrak station, and to relieve overspill parking pressure on nearby neighborhoods.~~

~~Goals and Policies Implemented: Goal 1, Policy 1C~~

~~Responsibility: Community Services Division initially~~

~~Funding: Study funds provided in 1991-92 Budget, study currently underway.~~

### **Studies**

~~A. Inventory of Industrial Space—Create a comprehensive inventory of industrial space in West Berkeley, particularly industrial space subject to conversion regulation in the Mixed Use/Light Industrial and Mixed Use/Residential districts. This will support effective enforcement of these conversion rules.~~

~~Goals and Policies Implemented: Goal 1, Policies 1A & 1B; Goal 2~~



## ~~VII. LAND USE REGULATIONS OF THE WEST BERKELEY PLAN - for adoption in principle~~

### ~~Status of the Regulations~~

~~The land use regulations below are central to the West Berkeley Plan. They spell out generally what uses are permitted and prohibited in each of the districts created by the Plan, what allowable height and bulk standards would be, and set forth a series of regulatory concepts for special situations. These include limits on changes of use of manufacturing facilities, on buffers between residential and heavy manufacturing sites, and other issues. They are much of what the framers of the West Berkeley Plan understand to be the content of the Plan.~~

~~Nevertheless, these regulations are proposed for adoption in principle only, rather than adoption as an amendment to Berkeley's General Plan (as the rest of the document is). They are proposed for technical reasons. Development regulations such as these should ultimately reside in the Zoning Ordinance, and will be found there once West Berkeley's zoning is brought into conformity with the Plan. City staff anticipates that the zoning will be drafted and approved next year. The procedure for adopting the zoning changes should be relatively streamlined, as it will be relying on the West Berkeley Plan Environmental Impact Report as environmental documentation. If these regulations were adopted as part of the General Plan, any change to them, however minor, would require a General Plan amendment. Such amendments are because of state planning law procedurally complex, and limited in number.~~

~~For these reasons, adoption of this section in principle is recommended. Such adoption will make clear that zoning provisions should closely follow the Plan, while assuring the most appropriate and expeditious procedure for enacting and amending that zoning.~~

### ~~District permitted and prohibited uses (See also Special Situations section)~~

#### ~~Generally Permitted and Prohibited Uses~~

##### ~~Manufacturing District~~

~~See also Development Standards, Manufacturing/Residential Buffers for regulations affecting certain sites~~

~~Permitted Uses (see Development Standards chart for sizes of projects requiring Administrative Use Permit, Use Permit with Public Hearing)~~

- ~~• Arts & Crafts Uses (workspaces only, not live work)~~
- ~~• Auto body & painting~~
- ~~• Automobile dismantling ("junkyards")~~
- ~~• Auto repair~~
- ~~• Bus, Cab, truck, and public utility depots~~

- ~~Composting~~
- ~~Construction yards and associated offices~~
- ~~Farms and Agricultural establishments~~
- ~~Industrial Product Sales (Gases & Chemicals)~~
- ~~Manufacturing: Food processing, textiles, apparel, lumber & wood products, furniture, paper & allied products, printing (exclusive of publishing); asphalt products, leather products (exclusive of primary production of leather); stone, clay, and glass products; fabricated metals, industrial machinery, electrical machinery & electronics, transportation equipment, scientific instruments, miscellaneous manufacturing.~~
- ~~Recyclable materials collection points, exclusive of facilities handling primarily hazardous waste~~
- ~~Parking lots (for uses located in the district)~~
- ~~Self-storage ("mini-storage")~~
- ~~Warehouses~~
- ~~Wholesale trade and distribution~~

~~Uses always requiring Public Hearing (regardless of project size)~~

- ~~Chemicals, including pharmaceuticals (exclusive of the manufacturing of alkalis, chlorine, chemical warfare gases, DDT, chloroform, fertilizers, and explosives)~~
- ~~Parking structures~~
- ~~Primary metals, including smelting and refining~~

~~Ancillary Uses (Uses permitted only as an integral part of manufacturing)~~

- ~~Factory Outlets (for products manufactured on-site)~~
- ~~Laboratories~~
- ~~Offices~~

~~Prohibited Uses~~

- ~~Banks and financial establishments~~
- ~~Gasoline stations~~
- ~~Group quarters residences~~
- ~~Hazardous waste transfer stations & disposal facilities (freestanding facilities)~~
- ~~Hotels and motels~~
- ~~Laboratories (freestanding)~~
- ~~Live-work~~

*(Manufacturing District Prohibited Uses continued)*

- ~~Manufacturing: Tobacco products, alkalies, chlorine, chemical warfare gases, DDT, pesticides, chloroform, fertilizers, explosives, primary production of leather, petroleum refining, products of petroleum and coal not elsewhere classified, tires, inner tubes, synthetic rubber, asbestos products, ordnance and accessories, reprocessing of nuclear cores & scrap~~
- ~~Offices (freestanding)~~
- ~~Publishing~~
- ~~Residences~~
- ~~Restaurants~~
- ~~Retail establishments, except permitted factory outlets~~
- ~~Schools and day care facilities~~

**Mixed Manufacturing District**

See also Development Standards, Large Site Development Process; Manufacturing/Residential Buffers (regulations affecting frontage along portions of 7th St., Dwight Way)

~~Permitted Uses (see Development Standards chart for sizes of projects requiring Administrative Use Permit, Use Permit with Public Hearing)~~

- ~~Arts & Crafts Uses (workspaces only, not live-work)~~
- ~~Auto body & painting~~
- ~~Automobile dismantling ("junkyards")~~
- ~~Auto repair~~
- ~~Bus, Cab, truck, and public utility depots~~
- ~~Composting~~
- ~~Construction yards and associated offices~~
- ~~Farms and Agricultural establishments~~
- ~~Industrial Product Sales (Gases & Chemicals)~~
- ~~Manufacturing: Food processing, textiles, apparel, lumber & wood products, furniture, paper & allied products, printing (exclusive of publishing); asphalt products, leather products (exclusive of primary production of leather); stone, clay, and glass products; fabricated metals, industrial machinery, electrical machinery & electronics, transportation equipment, scientific instruments, miscellaneous manufacturing.~~
- ~~Parking Lots (for uses located in the district)~~
- ~~Recyclable materials collection points, exclusive of facilities handling primarily hazardous waste~~
- ~~Warehouses~~
- ~~Wholesale trade and distribution~~

~~Uses Always Requiring Public Hearing (regardless of project size)~~

- ~~Chemicals, including pharmaceuticals (exclusive of the manufacturing of alkalis, chlorine, chemical warfare gases, DDT, chloroform, fertilizers, and explosives)~~
- ~~Parking structures~~
- ~~Primary metals, including smelting and refining~~

~~Ancillary Uses (Uses permitted only as an integral part of manufacturing or wholesale trade site)~~

- ~~Factory Outlets (for products manufactured on-site)~~
- ~~Laboratories on the ground floor~~
- ~~Offices on the ground floor~~

~~Upper story Uses (Uses permitted on the second story or above)~~

- ~~Laboratories (other than ancillary)~~
- ~~Offices (other than ancillary)~~
- ~~Publishing~~

~~Prohibited Uses~~

- ~~Banks and financial establishments~~
- ~~Gasoline stations~~
- ~~Group quarters residences~~
- ~~Hazardous waste transfer stations & disposal facilities (freestanding facilities)~~
- ~~Hotels and motels~~
- ~~Laboratories (freestanding)~~
- ~~Live-work~~
- ~~Manufacturing: Tobacco products, alkalis, chlorine, chemical warfare gases, DDT, pesticides, chloroform, fertilizers, explosives; primary production of leather, petroleum refining, products of petroleum and coal not elsewhere classified; tires, inner tubes, synthetic rubber, asbestos products, ordnance and accessories, reprocessing of nuclear cores & scrap~~
- ~~Offices (freestanding)~~
- ~~Residences~~
- ~~Restaurants~~
- ~~Retail establishments, except permitted factory outlets~~
- ~~Schools and day care facilities~~
- ~~Self-storage ("mini-storage")~~

~~Mixed Use/Light Industrial District ("Green")~~~~See also Development Standards; Conversions from Manufacturing to Other Uses; Live Work Development~~~~Permitted Uses (see Development Standards chart for sizes of projects requiring Administrative Use Permit, Use Permit with Public Hearing)~~~~1. Industrial & Agricultural Uses~~

- ~~• Arts and Crafts (workspaces only, live-work limited)~~
- ~~• Auto repair~~
- ~~• Bus, Cab, truck, and public utility depots~~
- ~~• Construction yards & associated offices~~
- ~~• Farms & agricultural establishments~~
- ~~• Manufacturing: Food processing (e.g. bakeries, wineries); textiles, apparel, furniture, lumber & wood products, printing and publishing, stone, clay, and glass products; industrial machinery; electrical machinery & electronics (except production of semiconductors and related devices); scientific instruments; miscellaneous manufacturing~~
- ~~• Manufacturing Repair and Service~~
- ~~• Recyclable materials collection points, exclusive of facilities handling primarily hazardous waste~~
- ~~• Vocational Schools (providing training for uses in district)~~
- ~~• Warehouses~~
- ~~• Wholesale trade and distribution~~

~~2. Offices and Services~~

- ~~• Offices—General, medical, and professional (see Conversions from manufacturing to other uses)~~

~~3. Retail~~

- ~~• Building Materials and Garden Supplies~~
- ~~• Business Services (not to exceed 3,000 sq. ft.)~~

~~4. Other Uses~~

- ~~• Parking lots (for uses located in the district)~~

~~Uses Always Requiring Public Hearing (regardless of project size)~~

- ~~• Auto body and painting~~
- ~~• Day Care~~
- ~~• Live-Work (Manufacturing and Arts & Crafts uses only)~~
- ~~• Manufacturing of leather products, rubber products, plastic products, paper products, fabricated metals~~

- ~~Parking structures and parking lots (not for uses located in the district)~~
- ~~Restaurants~~
- ~~Schools (other than Vocational Schools described above)~~
- ~~Shelters for Homeless Persons~~

~~Uses Permitted in Selected Locations—portions of Mixed Use/Light Industrial district north of Gilman St. and west of 3rd St. (Southern Pacific RR)~~

- ~~Laboratories (freestanding)\*~~
- ~~Manufacture of pharmaceuticals~~

#### ~~Prohibited Uses~~

- ~~Banks and Financial establishments (public service)~~
- ~~Gasoline stations~~
- ~~Group Quarters other than Shelters for Homeless Persons~~
- ~~Hazardous waste transfer stations & disposal facilities (freestanding facilities)~~
- ~~Hotels and Motels~~
- ~~Manufacturing—All uses prohibited in Manufacturing zone and Chemicals (except pharmaceuticals in selected locations), petroleum products, primary metals processing (e.g. “foundries”), production of semiconductors and related devices, transportation equipment and primary production of leather, rubber, plastic, or paper~~
- ~~Residences (live/work conditionally permitted, see above)~~
- ~~Retail stores, except as listed above~~
- ~~Self-storage (“mini-storage”)~~

#### ~~Mixed Use/Residential District~~

~~See also Development Standards, Conversions from Manufacturing to Other Uses, Permitted Uses, Live-Work~~

~~Permitted Uses (see Development Standards chart for sizes of projects requiring Administrative Use Permit, Use Permit with Public Hearing)~~

#### ~~1. Residential~~

- ~~Residences—Single family, Multi family, Group Quarters~~
- ~~Day Care~~
- ~~Schools~~

#### ~~2. Industrial & Agricultural~~

- ~~Arts and Crafts (workspaces only)~~
- ~~Farms and Agricultural establishments~~

~~\*Pending further study when Hazard Ranking System is developed for rezoning. Certain types of laboratories may be inappropriate for these locations.~~



~~(Mixed Use/Residential District Permitted Uses continued)~~

- ~~Manufacturing Repair and Service~~
- ~~Recyclable materials collection points, exclusive of facilities handling primarily hazardous waste~~
- ~~Warehouses~~
- ~~Wholesale trade and distribution~~

~~3. Retail~~

- ~~Building Materials and Garden Supplies~~
- ~~Business Services~~
- ~~Food Stores (not to exceed 5,000 sq. ft.)~~
- ~~Cleaners, laundries, and laundromats~~

~~4. Other Uses~~

- ~~Parking lots (for uses located in the district)~~

~~Uses Always Requiring Public Hearing (regardless of project size)~~

- ~~Auto body, auto painting, auto repair (with setbacks from residential use)~~
- ~~Bus, Cab, truck, and public utility depots~~
- ~~Construction yards and associated offices~~
- ~~Live work (work activities those permitted in district)~~
- ~~Manufacturing—Food processing (e.g. bakeries, wineries), clothing & textile production, furniture production, wood products, printing and publishing; stone, clay, and glass products; industrial machinery, electrical machinery & electronics (except production of semiconductors and related devices), scientific instruments, miscellaneous manufacturing, leather products, rubber products, plastic products, paper products~~
- ~~Parking lots (not for uses located in the district)~~
- ~~Restaurants~~

~~Prohibited Uses~~

- ~~Banks and financial establishments (public service)~~
- ~~Gasoline stations~~
- ~~Hazardous waste transfer stations & disposal facilities (freestanding facilities)~~
- ~~Hotels and motels~~
- ~~Laboratories\*~~
- ~~Manufacturing—All uses prohibited in Manufacturing zone and Chemicals (including pharmaceuticals), lumber milling, petroleum products, primary metals processing, production of semiconductors and related devices, primary production of leather, rubber, plastic, or paper (e.g. pulp mills)~~

\*Pending further study when Hazard Ranking System is developed for rezoning. Certain types of laboratories may be appropriate for this district

- ~~Retail stores, except as listed above~~

~~Commercial District See also Development Standards, Live Work~~

~~Generally Permitted Uses (see Development Standards chart for sizes of projects requiring Administrative Use Permit, Use Permit with Public Hearing)~~

#### ~~1. Retail~~

- ~~Barber shops, beauty salons, and other hair cuteries~~
- ~~Gasoline stations~~
- ~~Hotels and motels~~
- ~~Cleaners, laundries, and laundromats~~
- ~~Restaurants~~
- ~~Retail stores (all types)~~

#### ~~2. Residential~~

- ~~Day Care~~
- ~~Schools~~

#### ~~3. Live-Work~~

- ~~Live-work (work activities those permitted in district)~~

#### ~~4. Offices~~

- ~~Banks and financial establishments~~
- ~~Business Services (above the ground floor in designated commercial nodes)~~
- ~~Offices—General, Medical, and Professional (above the ground floor in designated commercial nodes)~~

#### ~~5. Industrial and Agricultural~~

- ~~Arts and Crafts (workspaces)~~
- ~~Auto body, auto painting, and auto repair~~
- ~~Farms and agricultural establishments~~
- ~~Wholesale trade and distribution~~

#### ~~6. Other Uses~~

- ~~Parking lots (for uses located in the district)~~

~~Uses Always Requiring Public Hearing (regardless of project size)~~

- ~~Construction yards and associated offices~~
- ~~Manufacturing—Food processing, printing and publishing, wood products, furniture making, stone, clay, and glass products~~
- ~~Parking structures, and parking lots (not for uses in the districts)~~
- ~~Recyclable materials collection points, exclusive of facilities handling primarily hazardous waste~~

- ~~Residential uses—single family, multi-family, and group quarters (above the ground floor in designated commercial nodes)~~

~~Prohibited Uses—Commercial District~~

- ~~Bus, Cab, truck, and public utility depots~~
- ~~Hazardous waste transfer stations & disposal facilities (freestanding facilities)~~
- ~~Laboratories (freestanding)~~
- ~~Manufacturing (other than uses specified above)~~

~~Residential Districts~~

~~See also Development Standards~~

~~Permitted Uses in All Residential Zones—R1A, R-3, R-4~~

- ~~Parks, playgrounds, playlots~~
- ~~Day care for six or fewer children~~

~~Uses Requiring a Public Hearing (regardless of project size) in All Residential Zones~~

- ~~Churches, Community Centers, and Libraries~~
- ~~Day Care~~
- ~~Food stores (less than 3,000 sq. ft.)~~
- ~~Cleaners, laundries, and laundromats~~
- ~~Residences, 1 unit, 2 unit~~
- ~~Schools~~

~~Uses Requiring a Public Hearing (regardless of project size) in R-3, R-4 zones only, not permitted in R-1A zones~~

- ~~Group Quarters~~
- ~~Medical buildings and hospitals~~
- ~~Multiple dwellings~~

~~Uses Requiring a Public Hearing (regardless of project size) in R-4 zone only, not permitted in R-1A and R-3 zones~~

- ~~Hotels and motels~~
- ~~Institutions and offices~~
- ~~Retail ancillary to hotels, motels, institutions and offices~~

~~Uses Prohibited in All Residential Zones~~

- ~~All other uses—agricultural, other retail, manufacturing, wholesaling~~

~~Note: Most of the “residential core” area of West Berkeley between Dwight and Camelia (excluding University Ave.) and 6th St. and the San Pablo commercial strip is zoned R-1A. However, parts of the blocks on either side of University Ave. are zoned R-3 or R-4.~~

## WEST BERKELEY PLAN

Table 1-5: Selected Development Standards by Zone

| Type of Standard                        | Height & Bulk (maximum)                                                                                                                                                                                                                                           | Use Permit Thresholds <sup>1</sup> (public hearing)                                                                                                                                                                                     | Parking (minimum; by use)                                                                                                                                                                                                                                    | Traffic                                                                                                                             |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Manufacturing</b>                    | <ul style="list-style-type: none"> <li>• 3 stories/45 feet</li> <li>• FAR: 2</li> </ul>                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• Mfg: 40,000 sq. ft. or where EIR req'd</li> <li>• Other Indust: 40,000 or where EIR req'd</li> </ul>                                                                                           | <ul style="list-style-type: none"> <li>• Mfg. assembly &amp; production: 1/1000 sq. ft.</li> <li>• Warehouse: 1/1000</li> <li>• Offices: 2/1000</li> <li>• Retail(ancillary): 2/1,000</li> </ul>                                                             | <ul style="list-style-type: none"> <li>• Demonstrate ability to meet Level of Service standard "D" or "E" as appropriate</li> </ul> |
| <b>Mixed Manufacturing</b>              | <ul style="list-style-type: none"> <li>• 3 stories/45 feet</li> <li>• FAR: 2</li> </ul>                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• Mfg: 40,000 sq. ft. or where EIR req'd.</li> <li>• Other Indust: 40,000 or where EIR req'd</li> <li>• Labs: 40,000</li> <li>• Offices: 40,000</li> <li>• Restaurant: Any</li> </ul>            | <ul style="list-style-type: none"> <li>• Mfg. assembly &amp; production: 1/1000 sq. ft.</li> <li>• Warehouse: 1/1000</li> <li>• Labs: 1.5/1,000</li> <li>• Offices: 2/1,000</li> <li>• Retail(ancillary): 2/1,000</li> <li>• Restaurants: 3/1,000</li> </ul> | <ul style="list-style-type: none"> <li>• Demonstrate ability to meet Level of Service standard "D" or "E" as appropriate</li> </ul> |
| <b>Mixed-Use Light Industrial</b>       | <ul style="list-style-type: none"> <li>• 3 stories/45 feet</li> <li>• FAR: 2</li> </ul>                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• Mfg: 30,000 sq. ft.</li> <li>• Other indust: 30,000</li> <li>• Labs : 20,000</li> <li>• Offices 20,000</li> <li>• Restaurant: Any</li> </ul>                                                   | <ul style="list-style-type: none"> <li>• Mfg. assembly &amp; production: 1/1000 sq. ft.</li> <li>• Warehouse: 1/1000</li> <li>• Labs 1.5/1,000</li> <li>• Offices: 2/1,000</li> <li>• Retail: 2/1000</li> <li>• Restaurant: 3/1,000</li> </ul>               | <ul style="list-style-type: none"> <li>• Demonstrate ability to meet Level of Service standard "D" or "E" as appropriate</li> </ul> |
| <b>Mixed-Use Residential Industrial</b> | <ul style="list-style-type: none"> <li>• 2 stories/35 feet for non-residential</li> <li>• 3 stories/35 feet for residential</li> <li>• FAR: 1 for non-residential; 1.5 for resid./mixed</li> <li>• Residential Density: max. 1 unit/1,250 sq. ft. land</li> </ul> | <ul style="list-style-type: none"> <li>• Mfg: 10,000 sq. ft.</li> <li>• Other indust: 10,000</li> <li>• Offices: 10,000</li> <li>• Restaurant: Any</li> <li>• Residential: Admin. Use Permit w/up to 4 units</li> </ul>                 | <ul style="list-style-type: none"> <li>• Mfg. assembly &amp; production: 1/1000 sq. ft.</li> <li>• Warehouse: 1/1000</li> <li>• Residential: 1/unit</li> <li>• Office: 2/1,000</li> <li>• Retail: 2/1,000</li> <li>• Restaurant 3/1,000</li> </ul>           | <ul style="list-style-type: none"> <li>• Demonstrate ability to meet Level of Service standard "D" or "E" as appropriate</li> </ul> |
| <b>Commercial</b>                       | <ul style="list-style-type: none"> <li>• 3 stories/40 feet for commercial</li> <li>• 4 stories/50 feet for residential above first floor</li> <li>• Encourage 2 stories in this district</li> <li>• FAR: 3<sup>2</sup></li> </ul>                                 | <ul style="list-style-type: none"> <li>• Retail w/ housing : 20,000 sq. ft.</li> <li>• Retail w/office: 20,000</li> <li>• Offices: 10,000</li> <li>• Retail: 10,000</li> <li>• Restaurant: 3,000</li> <li>• Residential: Any</li> </ul> | <ul style="list-style-type: none"> <li>• Residential: 1/unit</li> <li>• Offices: 2/1,000</li> <li>• Retail: 2/1,000</li> <li>• Restaurant: 3/1,000</li> <li>• Fast food: 4/1,000</li> </ul>                                                                  | <ul style="list-style-type: none"> <li>• Demonstrate ability to meet Level of Service standard "D" or "E" as appropriate</li> </ul> |
| <b>Residential</b>                      | <ul style="list-style-type: none"> <li>• R-1A areas: 3 stories/ 35 feet</li> <li>• R-3 areas: 3 stories/ 35 feet</li> <li>• R-4 areas: 4 stories/ 50 feet</li> </ul>                                                                                              | <ul style="list-style-type: none"> <li>• Retail: Any</li> <li>• Residential: Any</li> </ul>                                                                                                                                             | <ul style="list-style-type: none"> <li>• Retail: 2/1,000</li> <li>• Residential: 1/unit</li> </ul>                                                                                                                                                           |                                                                                                                                     |

<sup>1</sup> The square footage thresholds shown here designate the size at which any new use would require a Use Permit, with a public hearing before Zoning Adjustments Board.

<sup>2</sup> Consider increasing height/FAR as bonus for providing parking w/in building.

## B. Special Situations and Regulations

### Conversions from Manufacturing and Industrial Uses to Other Uses

#### Rationale:

The West Berkeley Plan's regulation of "conversions" (technically "changes of use") from manufacturing and wholesale trade is a central element of the Plan's land use concept. In the Mixed Use/Light Industrial ("Green") zone in particular, the conversion limits seek to maintain the industrial character of the area, without completely blocking other uses there. The district description above makes clear how—in many respects—the Light Industrial district is the key manufacturing and industrial district in West Berkeley. Staff estimates that the district contains at least 2.2 million square feet of privately owned manufacturing and wholesaling space, in dozens and dozens of buildings, which range in size from a few thousand square feet to the 162,000 square feet of Utility Body. This district—in contrast with the Manufacturing and Mixed Manufacturing districts—contains a substantial percentage of manufacturers and wholesalers which rent rather than own their space, putting them at much greater risk of displacement.

If no limits on the conversion of manufacturing space were enforced here, widespread displacement of manufacturing would be possible, contrary to the Plan's economic development and land use policy. On the other hand, if the City were to seek to protect manufacturers' spaces in the absence of such a rule, the list of permitted uses in the district would have to be much more restrictive. Thus, given the existence of limits on conversion, the Plan can be much more permissive about allowing certain uses as new construction (e.g. offices) while maintaining the area as an industrial district. The conversion limitation approach allows change, but regulates its pace and scope. Indeed, if the full 25% of space allowed to convert actually were to convert (an admittedly unlikely occurrence), some 550,000 square feet of space would be changed to office or other uses. If this 550,000 square feet were to convert, some 40% of the district's current space would be non-manufacturing/wholesaling, about the maximum level at which the district could still be called "industrial."

The issue is also relevant in the Mixed Use/Residential district, although this district is both smaller and designed to be less protective of manufacturing. In this district, the Plan calls for conversions of manufacturing/wholesaling buildings of 10,000 square feet or more to be reviewed for their impact on the industrial character of the area. Specific criteria will be proposed in the West Berkeley rezoning proposal.

#### Regulation:

#### "Conversion" (Change of Use) of Manufacturing or Wholesaling Space in Mixed Use/Light Industrial District

Scope of Regulation—Changes of buildings currently or last used for manufacturing, wholesale trade, or warehouse uses to any other use, except manufacturing, wholesale trade, or warehouse use.

Limit on Change of Use—The change of use of any manufacturing, wholesale trade, or warehouse use to a use other than manufacturing, wholesale trade or warehousing would be limited to 25% of the floor area of the building now used for purposes other than

~~offices, laboratories, properly approved live-work spaces, or properly approved retail space.~~

~~Example: Thus in a manufacturing site with 100,000 square feet of space (other than office), 25,000 could be converted (with a Use Permit) to other uses permitted in the district. No further conversion would be permitted.~~

~~Hardship Exception Buildings which are uneconomic to maintain in at least 75% industrial use could be converted to other uses permitted in the district with a Use Permit granted by the Zoning Adjustments Board after a Public Hearing. The Board would be required to find that there are exceptional physical circumstances pertaining to the building, which do not pertain to most other buildings in the district, which make it impossible to reuse for industrial purposes. The simple fact that other uses would be more profitable is not adequate for this Use Permit.~~

#### ~~Heavy Manufacturing/Residential Buffers~~

##### ~~Rationale:~~

~~The intent of this regulation is to maintain a minimum distance of 150 feet between residential and "heavy" manufacturing uses in order to mitigate environmental impacts, such as noise, odor, vibration and glare, which would interfere with reasonable residential use and to provide a workable environment for these manufacturers.~~

##### ~~Regulation:~~

~~Affected Districts Mixed Use/Residential; Mixed Use/Light Industrial; Mixed Manufacturing; Manufacturing~~

##### ~~Mixed Use-Residential~~

- ~~• No new residential use may be established within 150 feet of an any property in a manufacturing district (i.e. Manufacturing, Mixed-Manufacturing); nor within 150' of existing "heavy" manufacturer in any zone. Additions to existing residential uses permitted at a "reasonable" level standards to be set forth in the rezoning.~~
- ~~• No new or expanded manufacturing use may be established within 150 feet of an existing residential use, unless Performance Standards are met and a Use Permit is obtained.~~

##### ~~Manufacturing; Mixed Manufacturing; Mixed Use-Light Industrial Districts~~

- ~~• No new or expanded manufacturing use may be established within 150 feet of a residential property located in the Mixed Use-Residential zone, unless Performance Standards are met and a Use Permit is obtained.~~
- ~~• No new or expanded manufacturing use may be established within 150 feet of an existing residential use regardless of zone, unless Performance Standards are met and a Use Permit is obtained.~~

~~Note: Residential uses are prohibited in the Manufacturing, Mixed Manufacturing, and Mixed Use/Light Industrial district.~~



## Large Site Development Process

### Rationale:

West Berkeley has a few large sites—sites of 5 acres or more under a single ownership—which present special challenges and opportunities for planning and development in West Berkeley. These large sites—such as the Miles or (ex) Colgate property—are of a scale where they have a major impact on the area around them, and noticeable impacts on West Berkeley as a whole. They also may require modification of the uses and development standards in a district to facilitate a feasible large scale project.

For these reasons, the West Berkeley Plan incorporates a concept of a Large Site Development Process. While the process remains to be defined, the concept is that a special approval process would be used for certain projects. Because of the importance of these projects, the Planning Commission would be involved in the process. The process would also provide a formal mechanism for early citizen input. The rezoning will propose a Zoning Ordinance amendment to provide for a Master Plan Permit. It would be a middle ground alternative between the Use Permit and the Development Agreement. While a master permit could be issued for a multi-building project, there would be a procedure for review of individual buildings at their time of construction. This alternative could incorporate many of the master planning features of a Development Agreement, but would be acted upon under the procedures of the Zoning Ordinance, rather than as a separate contract.

It is important to note that no special process would be required of large scale projects which conform in all substantive respects to the uses and development standard of their district. Such a project, however large, would require simply the normal Use Permit(s) and environmental review (an Environmental Impact Report or other appropriate documentation).

### Regulation:

Projects which are eligible for the Large Site Development Process are those which:

- On sites of at least 5 acres; and
- Proposing to incorporate uses which would not otherwise be permitted in the district; or
- Requesting an “alternative” land use entitlement, such as a Development Agreement. Another possibility is a Master Plan Permit, whereby a single permit would be issued for the development of a number of buildings and/or uses within a given range.

## Performance Standards

### Rationale:

The West Berkeley Plan incorporates the concept of “performance standards.” Performance standards differ from traditional zoning development standards in that they regulate the impacts of land uses—noise, odor, vibration, etc. By contrast, traditional zoning standards deal with the physical form of building—building mass, height, yards (setbacks), lot coverage, parking, etc. Performance standards set maximum permissible levels for the release of the item they regulate—e.g. X decibels of noise. Such performance

standards are an integral part of Portland's "Industrial Sanctuary" zoning policy, and are used in Oakland and many other communities.

Performance standards become particularly important in a context where disparate uses are close together—like West Berkeley. When differing districts abut each other, performance standards limiting noxious environmental impacts can help substitute for the absence of distance between uses. The sometimes difficult industrial/residential interface is a particularly salient site.

While manufacturing is typically the primary focus of performance standards, other types of business such as construction, transportation, laboratories, and nightclubs can have off-site impacts, and therefore are appropriate as subjects of performance standard regulation.

Regulation:

To be included in rezoning

### Live-Work Development

Rationale:

Live-work space has become an increasingly important element of the West Berkeley built environment. More and more people, in an ever-widening variety of fields, are interested in combining their living and working sites. Originally targeted by state legislation to artists and craftspeople, live-work now serves many more occupations. Originally envisioned as occurring in converted warehouses, in recent years there have been newly constructed purpose-built live-work buildings as well. There are now over a dozen legally permitted live-work sites in West Berkeley, with 4 more projects (ranging in size from 1 large unit to 17 units) under construction, as of September, 1993. Given strong interest by both space users and developers, additional live-work developments—particularly new construction developments—are likely.

Live-work is generally a positive presence in Berkeley and West Berkeley, but it must be carefully regulated so that it does not cause negative impacts. Live-work generates life in neighborhoods which are otherwise moribund at night, increasing activity and safety. It can provide workspaces which do not need to be commuted to. Some live-work still houses artists, a culturally important but often economically marginal segment of the population.

Live-work originally grew up in the interstices of economically marginal industrial areas. However, in 1990s West Berkeley, both built space and land is scarce, highly prized, and competitive. This means that live-work uses have the potential of displacing or being physically incompatible with manufacturing, especially "heavier" manufacturing. These potentials for incompatibility have grown as live-work has gained new constituencies, who are not always as tolerant of the pre-existing industrial land uses as artists and craftspeople tended to be. Some developers of live-work have complained about the activities of manufacturing uses which long predated the live-work project. In those parts of West Berkeley which combine industrial and residential uses (in the Mixed Use/Residential district), existing residents are concerned about the visual, parking, and economic impacts of new live-work developments in the area.

~~Regulatory Concept: The West Berkeley Plan intends to regulate live-work along two dimensions. First is location: live-work is permitted in the Mixed Use/Residential districts (where historically most live-work has occurred) and the Commercial district; restricted to artists and craftspeople in the Mixed Use/Light Industrial district; and barred outright in the Manufacturing, Mixed Manufacturing, and Residential districts (although in the last home occupations are permitted). These provisions keep live-work out of the "heavy" manufacturing districts, where there are great physical incompatibilities. Live-work is restricted in the Light Industrial district to help maintain the industrial character of that area, but allow that live-work which is most likely to be compatible.~~

~~The second dimension of regulation is new development standards for live-work, covering such matters as height, bulk (total permitted amount of construction), parking, open space, and other issues, particularly for newly constructed live-work spaces. There are also general construction standards for live-work — one is what requirement should there be for live/work projects to provide and/or contribute to the provision of affordable live-work spaces. Another is what the approval process requirements should be live-work projects, and how these requirements should relate to residential and commercial permit thresholds. Because of the complexity of these issues, specific proposals for them will be presented as part of the rezoning of West Berkeley.~~

### ~~Changes of Use from Residential in the Mixed Use/Light Industrial District~~

#### ~~Rationale:~~

~~This represents a clarification of existing City regulation, but it is important to note because it has been an ambiguous point. This note is to affirm that residential uses may be eliminated in industrial districts, so long as replacement dwelling units are provided elsewhere.~~

~~In Manufacturing, Mixed Manufacturing, and Mixed Use/Light Industrial, residential uses are not permitted. No new dwelling units may be constructed or created in any of these districts.~~

~~However, in the Mixed Use/Light Industrial District, there are a small number of residential currently existing. There are no legal residential units in the Manufacturing or Mixed Manufacturing Districts (Live-work spaces are a separate category). While the Plan allows these Units to remain and even expand modestly, in the long run it would best achieve the industrial purposes of the district if the requirements of the neighborhood Preservation Ordinance, the units would have to be replaced with other residential units (or a fee paid in lieu of constructing such replacement housing), but they could be replaced in a district (residential, commercial, Mixed Use/Residential) where residential uses are allowed and more appropriate. Changing the use of these properties from residential would not necessarily require demolition of the buildings.~~

~~Regulatory Concept: Residential uses in the Mixed Use/Light Industrial District may be changed to permitted uses. The residential use must be replaced in a district where residential uses are permitted, or an appropriate in-lieu fee paid. Review of any alteration or demolition of the structure by the Landmarks Preservation Commission would not be affected.~~

# 2

## ECONOMIC DEVELOPMENT

### I. STRATEGIC STATEMENT

West Berkeley is in a very real sense one of the economic engines of Berkeley, and has historically played that role. It has the most private sector employment of any Berkeley area, and thus roughly 1/4 of all jobs in the city. West Berkeley is home to thriving manufacturing, retailing, business services, and other types of enterprises. These businesses provide jobs for more types of occupation than anywhere else in Berkeley; provide quality, often specialized goods and services for Berkeley, the Bay Area, and often beyond; and supply much needed City tax revenue.

The West Berkeley Plan should help make it possible for all sectors to—in an environmentally sound manner—continue to thrive. Some sectors will play their most important role in the creation of good jobs, particularly for those with poor employment prospects, others in supplying a wide and innovative range of goods and services, perhaps still others in increasing the City's tax revenue. The Plan recognizes that the widespread view of (West) Berkeley as a “clean, environmental” area is an economic as well as an environmental advantage.

The Plan has a special focus on retention of manufacturing because West Berkeley is Berkeley's only manufacturing center, and because manufacturing provides many well paid jobs to people without advanced education. By supporting manufacturing, a sector which has had difficulties in the marketplace, but continues to have important promise, the Plan supports its overall goal of maintaining a sectorally mixed economy. In addition to stabilizing and renewing growth in manufacturing, the Plan anticipates that the largest growth sectors will continue to be retail and (office-based) services. The Land Use Element of the Plan contributes strongly to these goals by defining appropriate locations for manufacturing, office, and retail growth.

The policy approach of the West Berkeley Plan is spelled out in more detail in the next section of the Element—The Economic Development Rationale of the West Berkeley Plan.

## II. ECONOMIC RATIONALE OF THE PLAN

### A. The Rationale Overall

The fundamental economic goal of the West Berkeley Plan is to maintain a sectorally mixed economy in West Berkeley — an economy which includes (along with others) healthy manufacturing, retail, and service sectors. Maintaining such a mix in West Berkeley is critical to maintaining it in the city as a whole, because of both the size and the sectorial mix of the West Berkeley economy. West Berkeley houses some 1/4 of total Berkeley jobs, and the great bulk of its manufacturing, wholesale trade, and transportation/public utilities jobs. By seeking to keep manufacturing, services (particularly advanced services) and retailing all healthy in West Berkeley, the city can reap the benefits provided by each sector (which are discussed below). The city can also avoid the dangers of dependence on too narrow an economic base, which is more vulnerable to sudden collapse. This rationale provides the basis for making the projections of West Berkeley's Economic Future below, since projections can only be made in the context of assumptions about policies.

As noted in the Strategic Statement, jobs, goods and services, and tax revenues are the three key City goals in economic policy. In general, different businesses and different sectors are superior at generating one than the other. Economic development policies are also of course framed by the City's environmental and physical policies. The City's economic policy must seek to create and maintain jobs for its citizens, most importantly for its citizens who would have the most difficulty obtaining jobs. The City should seek to assure the availability of needed goods and services for its citizens, which also is typically most difficult for the poorest citizens. City government should strive for adequate tax revenue to provide City services.

The City's economic policy must also strike a balance between working within market, environmental, and physical realities on the one hand, and guiding and regulating economic actors to achieve City goals on the other. A policy not grounded in market and other realities would be quixotic, while a policy which passively followed dominant market forces would not necessarily achieve City economic or environmental goals (and would not require a Plan). The City also generally seeks to retain existing businesses, in all sectors. It is almost always more difficult to attract a new business than retain an existing one, and there is almost always time (and thus tax revenue and wages) lost until a site is reused by a new business. The greater the number of employees or the capital investment on a site, (generally) the greater the lag. Maintaining the economic mix requires active City intervention to support the retention of manufacturing plants. In the absence of supportive land use policy, and other support for manufacturing, West Berkeley would tend to "de-industrialize" over time, with manufacturing facilities and jobs moving elsewhere. While support for advanced services and retailing is also important, these sectors are generally supported, rather than threatened, by market developments. Thus, the policy structure for these sectors should be different. We now turn to the reasons for supporting manufacturing, advanced services, and retailing in turn.



Manufacturing provides several benefits for the City and its residents. While some manufacturing jobs—particularly in “biotech”—now require more advanced skills, manufacturing still provides the best combination of jobs accessible to the less educated with good wage levels. Manufacturing historically has hired people who have difficulty being hired elsewhere, most notably Black and Latino men. Manufacturing also has higher “multiplier” effects—that is generates other local economic activity because of the inputs it uses—than other sectors. Thus, while the direct tax generation of non-biotech manufacturing is often (although not always) lower than other sectors, the multiplier effect leads to more economic activity and thus tax revenue. For biotech manufacturing the rationale is somewhat different—stronger on tax revenue creation, but probably weaker on hiring of the lesser skilled (although in the particular case of the Miles Development Agreement, policy seeks to draw more residents in). Supporting manufacturing in West Berkeley is typically a retention activity, on sites which in some cases would be costly and difficult to reuse.<sup>1</sup>

Perhaps the strongest benefit from advanced services (e.g. software preparation, research laboratories, architecture & engineering) come from the high salaries paid to the professional element of its workforce. These wages should generate daytime spending in West Berkeley, and perhaps elsewhere in the city. The support element of the service workforce (clericals, janitors, etc.) do not of course generate such high wages. In direct tax revenue, advanced services occupy an intermediate place—higher than many manufacturing activities, but lower than retail. Certain kinds of advanced services (e.g. research laboratories) can lead to the creation of new companies with new products or services (“spin-offs”), which might be produced in West Berkeley. To date, this process has not been widely documented for West Berkeley. Market forces at this time seem to strongly support the development of advanced services in (West) Berkeley, particularly in small companies.

Retail trade’s strongest suit from an economic policy standpoint is its tax generation, well above any other sector. With the sales tax currently providing between 1/5 and 1/4 of the City’s hard pressed General Fund, this quality is quite important. Retailing also provides needed goods, although much West Berkeley retailing is in specialized goods, rather than daily necessities. “Neighborhood” oriented retail—food stores, hardware stores, drug stores—which is relatively weak in (comparatively) low density, low income West Berkeley, most directly satisfies these needs. This weakness is

<sup>1</sup>On a regional level, the Bay Area Economic Forum (formed by the Association of Bay Area Governments and the Bay Area Council, which represents major Bay Area businesses) makes a strong case for the importance of retaining manufacturing. In *The Bay Area—A Region At Risk* in a section entitled “Why Manufacturing Matters” they argue in part: “... Because service industries have generated so many jobs, and shown higher productivity than most traditional industries, it’s easy to dismiss manufacturing as an activity that is inevitably declining and may be expendable anyway. That would be a mistake—especially in the Bay Area, where high-tech manufacturing has been so integral to our economy. Lately the region has been losing some manufacturing operations to lower-cost areas, and while that is natural in a maturing economy where land supplies are tight, the regional economy would be ill-served by policies exacerbating the trend.

“The most obvious reason is the linkage of manufacturing to jobs in other sectors. Many of those highly-paid jobs that show up in the services sector are in fact dependent on high-tech production operations. High-tech manufacturing also has a high export quotient, meaning that much of the income it generates is new wealth brought here from other parts of the globe.”

Loss of manufacturing jobs in Berkeley can have region-wide impacts. When manufacturers leave Berkeley, they sometimes move to Hayward or Richmond, thus remaining within the regional economy and labor market. In other cases, however, they migrate to other parts of the state or out of state, damaging the whole regional economy.



most pronounced in the poorer, southern part of West Berkeley. On the other hand, West Berkeley has shown clear strength as a regional retail center. "Interesting" retail as a city amenity can also be an attraction for various types of business.

### ***B. Defining the Economic Role of West Berkeley within Berkeley***

Part of the economic rationale of the Plan is to define West Berkeley's role within Berkeley. While West Berkeley is the leading economically active area in Berkeley, it is far from the only one. Thus not all economic functions which are important in Berkeley need be fulfilled in West Berkeley. Some can take place in Downtown Berkeley, in the Telegraph commercial district, in North Shattuck, on the University of California campus and elsewhere. The General Plan, which is being initiated in mid-1993, will address the intended economic roles of various sections of the city.

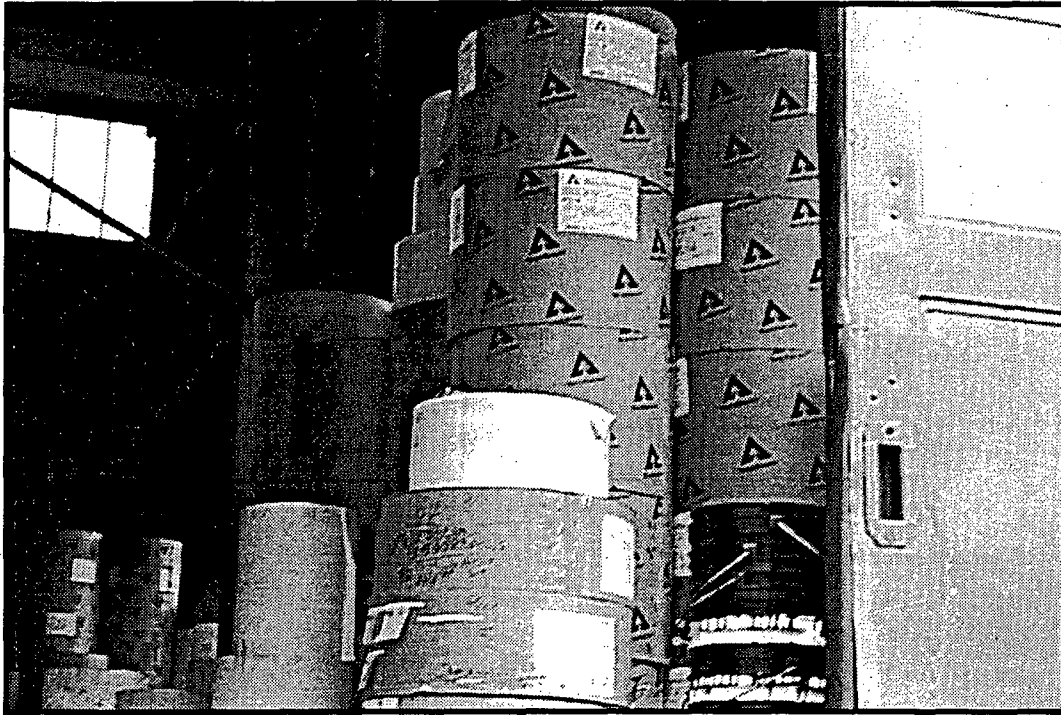
This Element noted that West Berkeley and Downtown have been the two leading economic centers in Berkeley. In fashioning an economic development rationale and strategy for West Berkeley its economic role within Berkeley, as contrasted with Downtown's role, must be considered. Ideally a strategy would be fashioned which would treat the areas as complementary, not competitive.

Downtown and West Berkeley have some overlaps, but many differences, in their economic roles in Berkeley. Downtown is the center of public employment in Berkeley, with the University of course adjacent. Downtown is the civic and cultural center of the city, having the most nighttime-oriented uses: movies, live theatre, and concert venues. While restaurants are strong throughout Berkeley, Downtown—with its nearby student, University staff, and office worker markets—has the greatest concentration. Downtown retail has been weak recently, but some stores with "niche" markets have prospered.

West Berkeley's first distinction is as the city's manufacturing area. Laboratory uses also locate in West Berkeley. As noted previously, West Berkeley has increasingly become the city's main regional retail area—a trend which is particularly pronounced around 7th & Ashby and 4th & Hearst. West Berkeley also has some office uses—such as graphic artists—which need relatively low rents to function. West Berkeley—especially San Pablo Ave.—has numerous low rent service/retail uses, notably auto repair.

Both areas house professional services (e.g. architects) and business service functions, including computer services, such as software development. Both areas also have a complement of neighborhood-oriented retailers (such as food stores) and personal services (such as beauty salons) though clearly the neighborhood populations served in West Berkeley and Downtown are quite different.

How do these existing orientations translate into economic strategies? Answering this requires ongoing analysis and testing in the two areas to see what uses are viable. Initially, however, the city can seek to build on the existing strengths of the area. In the Downtown, this could mean focusing particularly (although certainly not exclusively) on its office worker, University staff, student, and nearby resident markets for retail. Downtown can reinforce its role as a nighttime activity center, perhaps by encouraging more stores to stay open later, and by encouraging theatre goers and moviegoers to patronize Downtown restaurants and businesses. New housing and/or new office devel-



opment in and around the Downtown would both themselves provide tax revenue and strengthen Downtown retail markets.

West Berkeley's uniqueness and thus economic strategies for it begin with the manufacturing base. In retailing, West Berkeley's closeness to the Freeway will provide for the foreseeable future a thick stream of potential customers from throughout the East Bay. Given this proximity, there are still opportunities to augment West Berkeley's regional retail role (and thus increase the City's tax revenue), particularly in the 4th & University area although impacts from such regionally oriented development must be carefully monitored and mitigated. The 4th & University area may ultimately benefit from increased rail passenger traffic, although this volume is unlikely to approach the Freeway's. San Pablo Ave. also could absorb more intense retail uses in some locations, as has begun to occur. Yet there are unmet neighborhood retail needs, especially along the southern part of San Pablo, which should be better served. There will presumably continue to be strong interest in office development in West Berkeley. These offices may house some firms which would have difficulty using Downtown offices, such as those which require large areas on a single floor. Just as the *West Berkeley Plan* seeks to assure that office development in West Berkeley does not interfere with retention of manufacturing, so must economic planning assure that these offices complement, rather than compete with Downtown office development.

### III. BACKGROUND

#### A. Introduction *West Berkeley as Economic Engine for Berkeley*

West Berkeley is one of the key economic areas of Berkeley, and has been so since the city was founded. Berkeley's history is unique in that the city was formed by a merger of two communities—campus-based “Berkeley” and “Oceanview” or West Berkeley. Even then, West Berkeley was beginning to develop as an industrial center, although stronger growth would occur after the turn of the century. Today, West Berkeley has some 1/4 of jobs in Berkeley, while UC and LBL have roughly another 1/4 (Downtown has perhaps another 15% of jobs, the rest are scattered).

West Berkeley clearly has unique economic elements within Berkeley. It is the city's only manufacturing center. It is where major “biotech” firms—some laboratories, some manufacturers—have located. It is Berkeley's leading regional retail area—with the largest department store (Whole Earth Access), two large auto dealers (Weatherford BMW and McNevin Cadillac), and major specialty retailers (e.g. REI, Nature Company, Amsterdam Art). These elements can all fairly be thought of as key to Berkeley's economic “base.”

We have noted the economic functions of firms and areas (from a public policy standpoint) as providing jobs, goods and services, and tax revenue. The firms which fulfill one of these municipal needs may not fulfill others. After reviewing the overall economic mix in West Berkeley, this background section will look at West Berkeley as job provider, as goods and services provider, and as tax base.

#### B. The Economic Mix in West Berkeley

Before considering West Berkeley's roles as employer, goods and service provider, and tax revenue generator, we must first note what economic activity is there. The geography of these firms is discussed in the Land Use Element. More detail on the subsectors of West Berkeley's broad sectors is provided in the Goods and Services portion of this Background discussion.

Table 2-1 demonstrates both the mix and the evolution of the West Berkeley economy. Manufacturing remains the largest sector, with 32% of employment, despite a sharp decline in the 1980's. City data suggests that the sector stabilized at least somewhat at the end of the 1980's. The related field of wholesale trade was more robust, adding jobs to reach 1,488 (about 9% of the total) in 1991. Construction held about 8% of employment, transportation and public utilities 3%.

Remaining jobs were in “white” and “pink” collar sectors. Retail trade nearly doubled the number of stores, and close to tripled its number of workers to reach 16% of the workforce.<sup>1</sup> Similarly spectacular have been the increases in services, especially office-based services. These office-based services—in West Berkeley primarily business ser-

<sup>1</sup>Please note that this table is based on zip code 94710, and therefore excludes San Pablo Ave and includes the Marina/Waterfront. However, many San Pablo Ave. retailers would not in any case be included in County Business Patterns—the source of this data—because they do not have “payroll.”

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ices, and engineering and management services now constitute virtually 20% of area employment.

Table 2-1: Sectors of the West Berkeley<sup>1</sup> Economy 1981-1991

| Sector                                | 1991<br>Business | 1991<br>Employees | 1981<br>Business | 1981<br>Employees | 1981-1991<br>Change in #<br>Employed | 1981-1991<br>% Change<br>in Employees |
|---------------------------------------|------------------|-------------------|------------------|-------------------|--------------------------------------|---------------------------------------|
| Agriculture                           | 9                | 34                | 2                | 8                 | +26                                  | +325%                                 |
| Construction                          | 67               | 1,251             | 55               | 1,605             | -354                                 | -22%                                  |
| Manufacturing                         | 153              | 5,025             | 133              | 7,833             | -2,808                               | -36%                                  |
| Transportation<br>& Public Utils.     | 24               | 463               | 15               | 408               | +55                                  | +13%                                  |
| Wholesale Trade                       | 100              | 1,488             | 69               | 994               | +494                                 | +49%                                  |
| Retail Trade                          | 108              | 2,598             | 51               | 967               | +1,631                               | +169%                                 |
| Finance,<br>Insurance,<br>Real Estate | 25               | 160               | 17               | 132               | +28                                  | +21%                                  |
| Services                              | 258              | 4,723             | 117              | 2,302             | +2,421                               | +105%                                 |
| Unclassified                          | 14               | 67                | 24               | 75                | +8                                   | +11%                                  |
| <b>Total</b>                          | <b>758</b>       | <b>15,809</b>     | <b>469</b>       | <b>13,661</b>     | <b>+2,148</b>                        | <b>+16%</b>                           |

Source: County Business Patterns, Computer Run for Berkeley, Calculations by Berkeley Planning Dept.

To get a view of the leading businesses, the distribution of larger firms should be considered. West Berkeley in 1991 reported 56 businesses with 50 or more employees, over 40% of the total number citywide (131). Although they represented only some 7% of the businesses reported, these 56 biggest West Berkeley firms had an estimated 59% of West Berkeley employment. The largest number of 50 or more employee businesses—17—are now found in services. However, it is in manufacturing where firms with 50 or more employees (16 of them) make up the largest proportion of the workforce (an estimated 66%).

### C. West Berkeley as a Place of Employment

Because of the wide variety of sectors active in West Berkeley, there is an equally wide range of occupations there. West Berkeley businesses provide good quality blue collar jobs, highly skilled white collar jobs, and the low wage jobs often referred to as "pink collar." This section of the report will present an overview of the occupational composition of the West Berkeley workforce, then review wages, unionization, and "minority" hiring in manufacturing, services, and retail respectively.

#### 1. Estimated Distribution of Employment by Occupation

There is no central source of data on jobs by occupation, unlike jobs by industry. The City of Berkeley has collected information on specific companies, but this is not adequate to develop estimates on West Berkeley as a whole. However, by applying national data on the mix of occupations in a given industry to the number of jobs by industry, an estimate of jobs by occupation can be derived. The following table estimates

<sup>1</sup>West Berkeley in this table is defined as Zip Code 94710, which excludes San Pablo Ave. addresses and includes the Marina and Waterfront.



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jobs by occupation in private sector employment in West Berkeley as of 1990. The city as a whole has a higher proportion of professional jobs, and a lower proportion of production and related jobs.

Table 2-2: Estimated Private Sector Employment by Occupation, West Berkeley 1990

| Occupational Category | Mgmt. & Admin. | Professl. & Tech. | Sales & Related | Clerical Admin. & Support | Service | Agri. | Prod. Const. & Oper. |
|-----------------------|----------------|-------------------|-----------------|---------------------------|---------|-------|----------------------|
| Number in W.B.        | 1,269          | 2,670             | 2,094           | 2,867                     | 1,558   | 75    | 5,929                |
| % W.B. Total          | 8%             | 16%               | 13%             | 17%                       | 9%      | <1%   | 36%                  |

Source: Bureau of Labor Statistics, Occupational Employment Survey, 1989-1991

Note: Occupational totals were derived with information by 1 digit SIC code industries (e.g. Construction), except for Manufacturing and Services, where two digit SIC code industries (e.g. Printing) were used. Bureau of Labor Statistics occupational categories have been used.

## 2. Jobs in Manufacturing

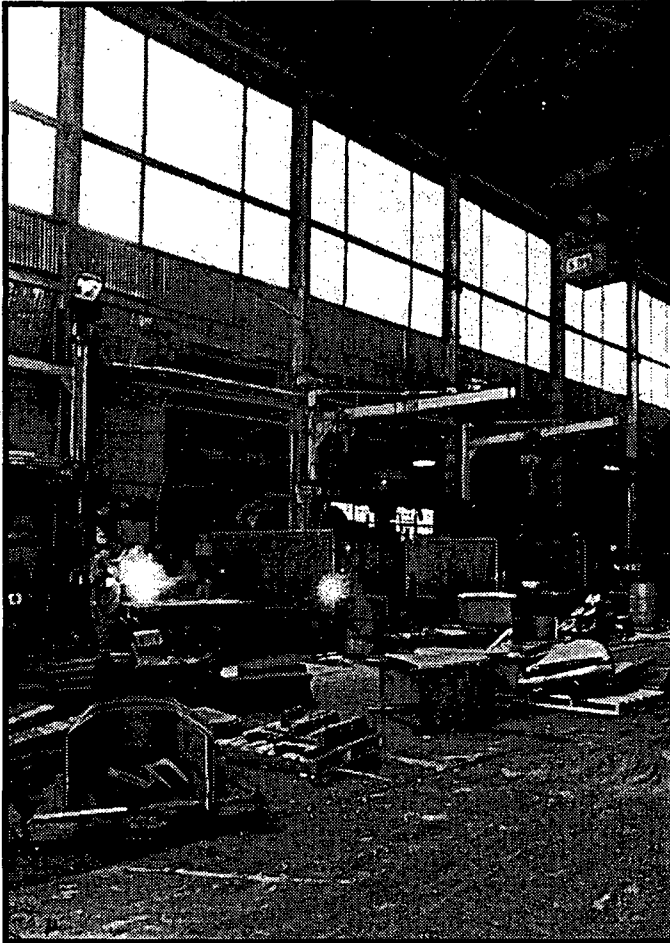
Manufacturing, as discussed above, continues to be the largest sector in West Berkeley. Wages and benefits in manufacturing are generally good, and many of the larger firms are unionized. Most of the jobs in manufacturers are classified as "production and related", generally not requiring formal education, although sometimes requiring significant on the job learning. As of the end of 1989 (the last date for which local data by detailed sector is available), the average annual pay for a manufacturing employee in metropolitan Oakland was \$32,945. On the high side, among sectors represented in Berkeley were chemicals at \$39,134 in average annual pay; scientific instruments at \$37,297 and primarily metals at \$35,921. Towards the low end are printing at \$24,307; miscellaneous manufacturing at \$21,882, and apparel at \$15,194. Falling in the middle were electrical machinery at \$29,839 and fabricated metals at \$33,221. Individual firms of course vary.

The extent of unionization is significant, because unionized jobs generally pay better and provide better benefits. In West Berkeley, most heavy manufacturing workers, and some light manufacturers, are covered by union agreements. There are at least 20 manufacturers in West Berkeley, with a total of some 1,900 jobs, which are unionized.<sup>1</sup> In some cases, almost all jobs at the site are under union contracts, in other cases less than half. Miles, Pacific Steel Castings, and Peerless Lighting are among the unionized firms. The Business Outreach Survey found 26 other firms, with some 1,350 employees. The non-unionized firms tended to be in sectors such as food processing, machinery, and scientific instruments; they also tended to be smaller.

Manufacturing has a generally weak record of Berkeley resident hiring. Sector-wide, as of 1989, only some 20% of Berkeley manufacturing employees were Berkeley residents, compared to just under 40% for Berkeley workplaces for a whole. Individual companies vary widely while several food processors reported 50% or more Berkeley resident employment, other companies reported 10% or less resident employment. A number of manufacturers are working with the First Source program and may improve

<sup>1</sup>There is no central database of what companies are unionized and what companies are not, thus information must be gathered on a firm by firm basis. While we have attempted to identify all the unionized firms, there may well be other unionized manufacturers.

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this record.<sup>1</sup> There is clearly a Berkeley workforce needing manufacturing jobs—almost 1/3 of the unemployed registering at the Berkeley EDD office were in “blue collar” occupations most likely to appear in manufacturing or wholesaling. The proportion of Non-White workers in Berkeley manufacturing (Outreach companies) was 43%—higher than any sector except retail.

### 3. Jobs in Advanced Services

We noted above that West Berkeley's services tend to have high technical content, like Business Services, and Engineering and Management. These sectors tend towards high-paying jobs which require higher education on the one hand, and clerical jobs on the

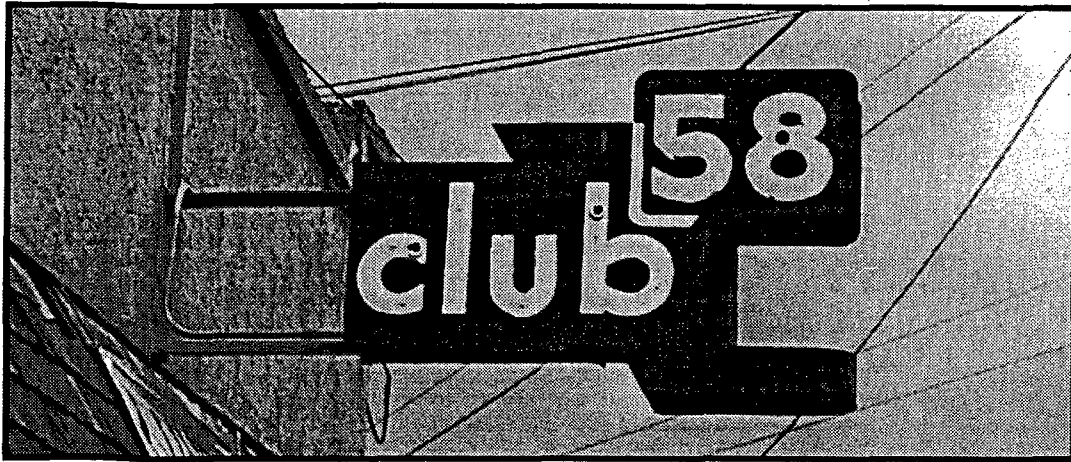
other. Business Services, which has a high proportion of clerical workers, had an end-1989 annual average pay of \$21,109, some 2/3 of the manufacturing average. But Engineering and Management—where over 60% of the workforce is professional and technical—had an average pay of fully \$38,651, just behind chemicals.

Virtually no service firms in West Berkeley are unionized—most tend to be extremely small. One notable exception in health services to both rules is the very large Kaiser Permanente facility, which is being expanded and rebuilt.

There is not reliable data on what proportion of West Berkeley service employees live in Berkeley. Citywide data from the 1980 Census (parallel 1990 data is not yet available) indicated that 36% of business and repair services employees live in Berkeley, slightly under the workforce wide average. For professional services (including engineering and management), the figure was 44%. However, this figure is perhaps inflated by the high proportion of University staff who live in Berkeley. Data is not adequate to assess the racial composition of the West Berkeley advanced services workforce specifically but it appears that the professional element of it is disproportionately White. For example, as of 1980 in Alameda County as a whole, engineers, managers, and architects were 74% non-Hispanic White.

<sup>1</sup>A travel survey of employers of over 100 workers was conducted in summer, 1993, and results should be available in fall, 1993, which will give current information on what percentage of their workers live in Berkeley.





#### 4. ~~Jobs in Retail~~

~~Retail trade has been expanding in West Berkeley. Unfortunately, retail trade jobs generally pay poorly and provide poor benefits. The Department of Labor, for example, characterizes retail jobs as having a high growth rate, but very low wages, high unemployment rate, very high "separation rate" (turnover of employees) and a very high percentage of part-time workers. The retail-wide end of '89 average annual pay was \$16,239. Best paid were salespeople at auto dealers \$26,981, and at building materials stores \$20,549. Below average pay was found at restaurants \$9,772; and in miscellaneous retail at \$15,663. With the exception of a few large restaurants like Spenger's, West Berkeley retailers are generally not unionized (in retailing, supermarkets and conventional department stores are most unionized).~~

~~The proportion of residents in retail employment—37% is typical for the Berkeley employed labor force as a whole. Only 4% of the Berkeley unemployed were in sales, the most characteristically retail field, but there may be candidates in other occupational groupings. Retail employment was heavily minority—46%. A high proportion of young people also work in retail jobs.~~

#### 5. ~~Self employment in Live Work~~

~~One small but growing employment type in West Berkeley occurs in live-work spaces, which now house a wide occupational range, beyond their original artist-craftspeople tenants. The work done in these spaces, generally by self-employed people, cuts across the spectrum from manufacturing to advanced services (although retailing is unusual, and generally not permitted).~~

#### 6. ~~Goods and Services from West Berkeley~~

~~West Berkeley provides a broad range of goods and services to customers, both at retail and as producer products for wholesalers, manufacturers, and other businesses.~~

##### ~~a. The Bazaar—West Berkeley Retail~~

##### ~~Regional Retail—The Broadest Selection~~

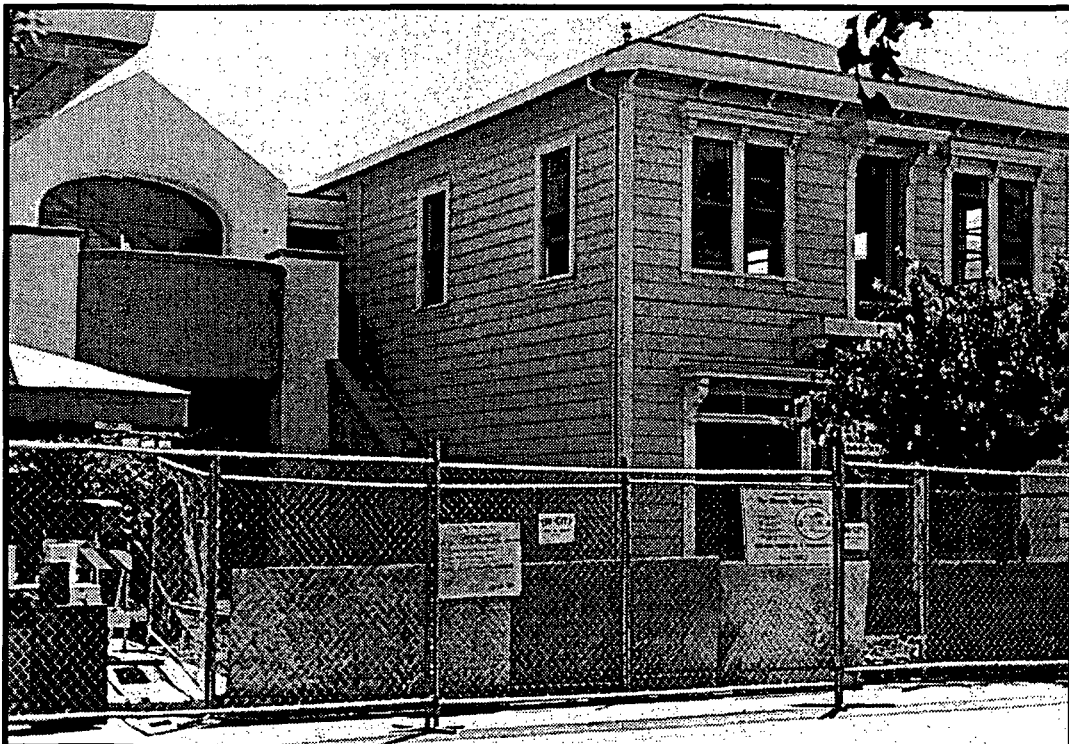
~~West Berkeley has the broadest range of retail stores of any area within Berkeley.~~

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The Standard Industrial Classification (SIC) recognizes 63 types of retailers, 48 of which (or 76%) exist in West Berkeley, more than in any other Berkeley shopping district. Usually these retail types are represented in West Berkeley by more than a lone outpost. The SIC groups its specific retail types into 8 major retail groups: Building Materials & Garden Supplies, General Merchandise (department and discount stores), Food, Autos and Auto Parts, Apparel, Furniture, Restaurants and Bars, and Miscellaneous Retail. As of 1991, West Berkeley had a significant proportion of Berkeley's sales in all these categories, except apparel, where it represents only 5% of Berkeley sales dollars. West Berkeley dominates building materials (81% of citywide sales) and general merchandise (74% of citywide sales). It has roughly half of autos (46% of citywide). West Berkeley sales range from some 1/3 to 1/5 of citywide in furniture, restaurants, and miscellaneous retail (food is discussed in the next section). West Berkeley also dominates auto repair (69% of citywide gross receipts), which is considered a service, but functions alongside retail. West Berkeley has 63% of the city's sales in sporting/outdoor goods.

The area also has a broad range of retail on other dimensions as well. West Berkeley stores are among the cheapest and the most expensive in Berkeley in areas such as home furnishings and apparel. There are also a wide range of ethnically identified stores and restaurants, with a prominent group of Indian stores cohabiting with Arab/Middle Eastern, Japanese, Mexican, and African American enterprises. These businesses often attract a more regional clientele than would otherwise come to (for example) a food store.

An emerging element of West Berkeley retailing is stores which wholly or partially focus their appeal to customers around the environment. There are stores which offer a range of goods which have been checked for their environmental appropriateness, while others seek to provide environmentally sound goods in a given sector. Analysts suggest



**Table 2-3: West Berkeley's Largest Retailers, 1991 (by employment)**

| Company              | Goods Sold          | Employees |
|----------------------|---------------------|-----------|
| Spenger's Restaurant | Fish dinners        | 198       |
| Whole Earth Access   | General merchandise | 175       |
| REI                  | Outdoor clothing    | 135       |
| Truitt & White       | Lumber              | 110       |
| Amsterdam Art        | Art supplies        | 94        |
| McDonald's           | Cheeseburgers       | 60        |
| Bette's Diner        | Breakfast, lunch    | 50        |
| Rubber Stampede      | Rubber stamps       | 50        |
| McNevin Cadillac     | Cars                | 49        |
| Nature Company       | Miscellaneous goods | 40        |

that this type of retailing is likely to have growing appeal in the future.

#### **b. The Workshop**

Producer Goods from West Berkeley Manufacturers

West Berkeley manufacturers are also in a sense "shopped" at, though typically by other businesses, rather than retail consumers. Berkeley's manufacturers are too diverse to occupy a particular niche in the business market. However, Berkeley clearly represents a city in which specialized, sometimes technically sophisticated, often custom ordered products, rather than mass produced ones, are made.<sup>1</sup> It is also part of the large Alameda County manufacturing "complex" whose overall employment levels were generally stable through the 1980's and early 90's (Alameda County is California's 5th largest manufacturing county).

Most West Berkeley manufacturers do not make consumer products directly for the public. There are of course important exceptions to this rule, (especially in the food processing sector) — outdoor equipment from North Face, sake from Takara Sake, and energy bars from Powerfood are among them. Other West Berkeley products are used by contractors in construction, such as concrete from Berkeley Ready Mix and lighting fixtures from Peerless Lighting. But most typical are A&B's die castings for manufacturers, Flint Inks for printers, PQ's salts for soap makers.

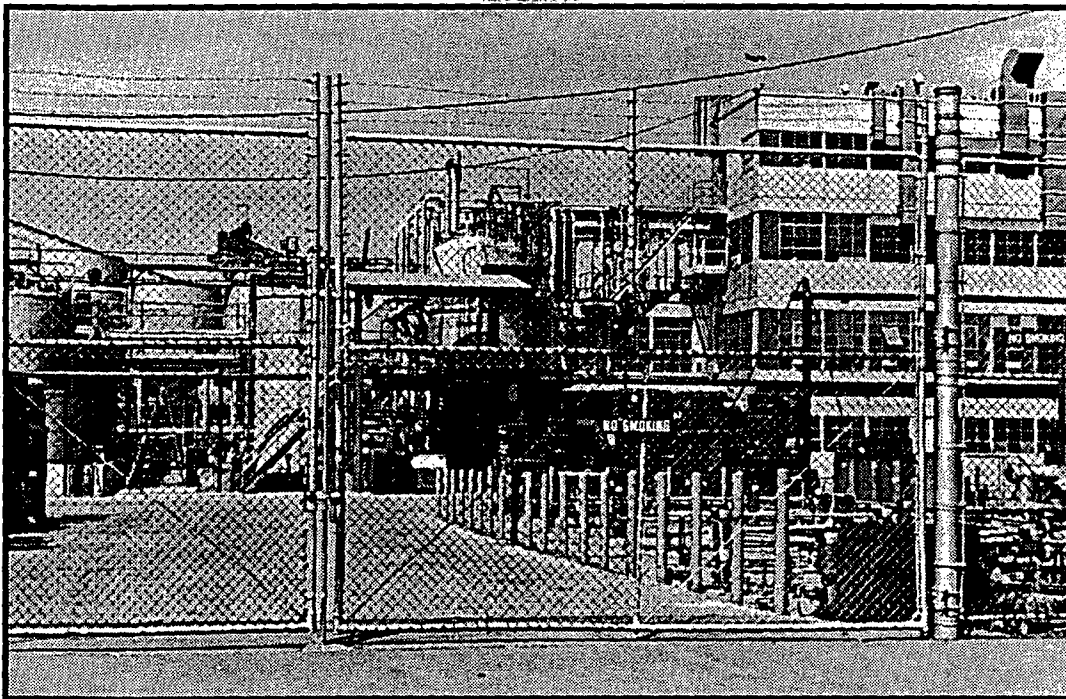
**Table 2-4: West Berkeley's Largest Manufacturers, 1991 (by employment)**

| Company                  | Goods Produced    | Employees |
|--------------------------|-------------------|-----------|
| Miles Inc.               | Pharmaceuticals   | 686       |
| North Face               | Outdoor Equipment | 445       |
| Pacific Steel Castings   | Steel Castings    | 300       |
| Xoma                     | Pharmaceuticals   | 250       |
| Flint Ink (Cal Ink)      | Printing Ink      | 144       |
| Peerless Lighting        | Light Fixtures    | 130       |
| De Soto Inc.             | Coatings          | 113       |
| Andros Analyzers         | Gas analyzers     | 110       |
| Permanente Medical Group | Eyeglasses        | 94        |
| Macaulay Foundry         | Iron              | 93        |

Berkeley manufacturers' markets are typically regional and national. Slightly under half of Berkeley manufacturers interviewed in the Business Outreach Surveys said their primary markets were found within Northern California. In a few cases (PQ, Asphalt Products Oil Corp.) the manufacturers are branches established to serve the Northern California market. No companies saw Berkeley itself as their primary

<sup>1</sup>This general characteristic probably bodes well for the economic future of Berkeley manufacturers. Analysts of American manufacturing argue that to compete in the future, manufacturers in general will need to learn to produce specialized "niche" products, as many Berkeley manufacturers are already doing.





market, and there were distressingly few links between Berkeley based manufacturers (some firms saw opportunities to expand Berkeley sales). Silicon Valley was an important market for some, as was the industrial East Bay in general.

Roughly 1/3 of manufacturers served the national market. A number of these firms said that they did secondarily serve international markets, but only 3 firms (of 48 surveyed) saw their primary market as international. Firms with an international presence tended to be in "higher tech" sectors such as chemicals, machinery, and instruments. One reason for the relative lack of international activity by Berkeley manufacturers may be their comparatively small size vis-a-vis multinational firms.

Businesses of course buy wholesale products from wholesalers as well as directly from manufacturers. West Berkeley has approximately 100 wholesalers, who sell goods in 37 different categories. They are overwhelmingly small — with the departure of Bookpeople, no wholesaler has more than 50 employees (three book wholesalers do remain). Direct data for comparing Berkeley wholesale trade with other communities is not available, but it does not appear that Berkeley has a strong specialization within this sector.

### ~~The Back Office~~

#### ~~West Berkeley as a Provider of Services~~

As noted above, West Berkeley has increasingly added an office based services component in recent years. West Berkeley now has slightly over 1/4 of Berkeley's private sector employment in office based fields — such as business services, architecture and engineering, and legal services.

West Berkeley has not develop a clear specialization in services, unlike other sectors. On a regional level, Berkeley does not have a strong share of office based services, with the partial exception of gaining 14% of Alameda County receipts in computer



services. This suggests, but does not prove, that much of the market for Berkeley service firms is within Berkeley (an alternative explanation is that Berkeley, for whatever reasons—perhaps the Berkeley residence of firm proprietors—has a certain share of region-serving firms).

Within Berkeley, West Berkeley's strongest performance is engineering and management services, where it gains almost half of citywide gross receipts. This category includes, among other things, architectural services, engineering services, and freestanding laboratories. West Berkeley has about 1/4 of citywide receipts in business services, which includes such fields as computer services (among them software), graphics services, and advertising.

West Berkeley's share of those subfields does not exceed roughly 25%.

## 7. The Revenue Functions of West Berkeley

### West Berkeley as Tax Generator

From a city government perspective, one of West Berkeley's key contributions is to City revenues. City government finances have become increasingly con-

**Table 2-5: The Largest Service Firms in West Berkeley, 1991 (by employment)**

| Company                | Services Provided         | Employment |
|------------------------|---------------------------|------------|
| Permanente Medical     | Medical laboratory, other | 410        |
| Gannett Outdoor        | Billboard creation        | 104        |
| Engineering Sci.Ass.   | Architecture/planning     | 72         |
| General Parametrics    | Software                  | 71         |
| Ecole Bilingue         | School                    | 60         |
| Fantasy/Prestige/Miles | Records                   | 59         |
| Innovative Interfaces  | Software                  | 45         |
| Gazette Press          | Direct mail marketing     | 34         |
| Custom Process         | Photo Processing          | 33         |
| Cygnat Technologies    | Research laboratory       | 28         |

**Table 2-6: Contribution of Various Taxes to General Fund, 1991-92**

| Tax                     | Contributes         |
|-------------------------|---------------------|
| Property Tax            | 39% of General Fund |
| Sales Tax               | 22% of General Fund |
| Utility Users Tax       | 17% of General Fund |
| Business License Tax    | 11% of General Fund |
| Property Transfer Tax   | 6% of General Fund  |
| Transient Occupancy Tax | 3% of General Fund  |

strained due to Proposition 13 and state and federal cuts in aid to cities. Thus California cities have been forced to increasingly "fiscalize" their policies. This section explores the revenue contribution of various forms of economic activity in West Berkeley.

It must be acknowledged at this point that direct tax revenues are not the only economic contribution to the City that businesses make. Two

other forms of contribution which ultimately lead to City tax revenue are the impacts of employee spending and the "multiplier" effects of business spending for other businesses in the community. Unfortunately, available information is inadequate to quantitatively estimate these impacts. West Berkeley employees undoubtedly spend money on lunches and other goods. However, given the relative dispersal of West Berkeley employees compared to a compact employment district such as Downtown Berkeley it is difficult to accurately estimate how much they spend. Parallel problems arise with multiplier effects of business a buying from business b, which in turn buys goods or services from business c, etc. Given Berkeley's small size, and the lack of linkages (at least in goods purchases) between West Berkeley manufacturers, Berkeley may not be receiving the full benefit of presumed multipliers.

The comparison of these impacts between sectors yields mixed results. Advanced Services firms tend to have the employees with the highest overall wages/salaries, thought to contribute heavily to retail and restaurant spending. However, in manufacturing, wages are highest for the broadest spectrum of workers. Retailers generally pay the lowest wages, but often seek to stimulate spending by providing employee discounts. Regarding multipliers, construction and manufacturing generally have the greatest multiplier effect, but there is the difficulty of capturing these in Berkeley.

#### **a. West Berkeley's Contribution to Various Taxes**

Returning to taxes, there are six key taxes which support the City of Berkeley's General Fund (the funds over which the City has the most control). These are, in order of funds generated:

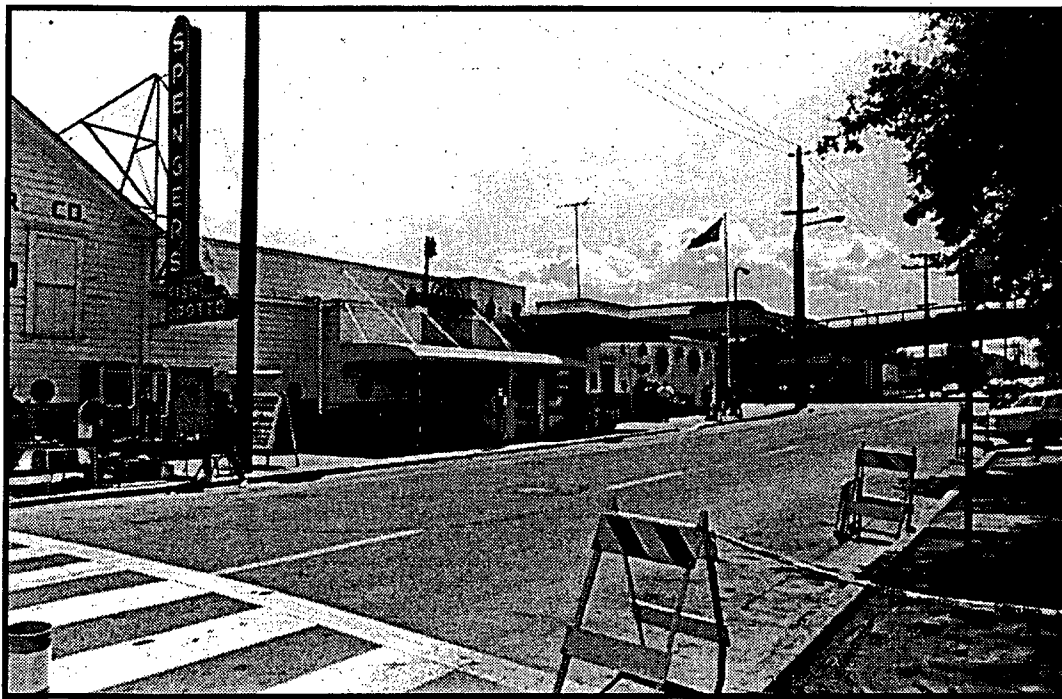
It should be noted that the property tax is divided among a number of taxing agencies (e.g. Berkeley Unified School District, Alameda County, etc.). Concerning sales tax, the City gets 95¢ from each dollar of taxable sales (which generates total sales tax for all agencies of over 8¢). The discussion in this report concerns only the tax revenue received by the City of Berkeley.

The percentage of revenues generated in the West Berkeley Plan area varies greatly for each of these taxes. The City does not keep official statistics on taxes generated by area, these figures represent estimates with available data. Table 2-6 outlines the basic information. It appears that West Berkeley generates approximately 10% of citywide



property tax revenue.<sup>1</sup> This relatively low percentage is in part explained by the relatively low turnover (compared to homes) of West Berkeley commercial properties, thus keeping the assessments down under the Proposition 13 system.

West Berkeley's largest contribution comes in sales tax, where it represents some 40% of citywide revenue. West Berkeley has some 33% of citywide retail sales dollars, according to the City's business licenses. But some 20% of Berkeley's taxable sales come in business-to-business transactions. These include sales of electronic equipment, chemicals, software, metal products, and other items. Based on an analysis of detailed taxable sales data from the Board of Equalization, it appears that West Berkeley accounts for some 67% of these sales in Berkeley. Thus, sales from sectors such as construction, manufacturing, wholesaling, and health services make up 1/3 of the over \$4 million in



sales tax generated. We estimate that West Berkeley generates 20% of utility users tax revenues, based on citywide estimates of how much of the utility users tax residents and businesses respectively pay. However, West Berkeley has many of the City's energy-intensive businesses—such as certain manufacturers. If data becomes available on energy use by business type, it may be possible to re-analyze this question.

The other taxes provide a less important contribution from West Berkeley. The slow rate of West Berkeley property transfers—depressing that revenue—has been noted above. Berkeley's major hotels, including the Marriott, are outside the West Berkeley Plan area, limiting that revenue.

<sup>1</sup>The most recent data on assessed value come from the Redevelopment Expansion Feasibility Study, which indicated that West Berkeley's total assessed property value was \$304.5 million. At that time, 1986-87, the Citywide total was \$2,966 million. Regarding later change, West Berkeley has had faster economic growth than the city as a whole (tending to increase its share of property tax) but properties there turn over more slowly than in the city as a whole (slowing reassessments and tending to decrease West Berkeley's share).

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Table 2-7: ~~Estimated West Berkeley Plan Area Contribution to Major Taxes, 1991-92~~

| Tax                        | Citywide<br>Projected<br>Revenue | West Berkeley<br>Estimated<br>Share | West Berkeley<br>Estimated<br>Revenue |
|----------------------------|----------------------------------|-------------------------------------|---------------------------------------|
| Property Tax               | \$19,001,725                     | 10%                                 | \$1,901,725                           |
| Sales Tax                  | \$10,618,200                     | 40%                                 | \$4,247,280 <sup>1</sup>              |
| Utility Users Tax          | \$8,502,000                      | 20%                                 | \$1,700,400                           |
| Business License Tax       | \$5,565,000                      | 29%                                 | \$1,613,850                           |
| Property Transfer Tax      | \$2,935,000                      | 5%                                  | \$146,750                             |
| Transient<br>Occupancy Tax | \$1,664,000                      | 10%                                 | \$166,400                             |
| <b>Tax Total</b>           | <b>\$48,285,925</b>              | <b>20%</b>                          | <b>\$9,776,345</b>                    |

<sup>1</sup>Includes both retail sales and other taxable sales

#### b. Relative tax importance of Various Sectors

The information above demonstrates the overall importance of the West Berkeley Plan area in City tax collections. But a more "micro", site specific, view is also important. Without looking at all West Berkeley companies, this can most easily be constructed on a sectoral basis.

Table 7 shows the estimated City revenue (including special taxes and assessments)<sup>1</sup> derived from a square foot of new construction for various sectors. It should be emphasized that the table is based on prototype revenues, drawn from prototype property values, retail sales, and utility usage of actual cases where available, and general data where not. Other situations in the same sector may vary. The table represents new development—the far greater amount of existing development will usually generate substantially less. This is primarily because the property taxes on existing buildings are based on assessed value as of 1978 or the most recent sale, whichever was later. Thus property taxes for a given type of property within West Berkeley (and throughout California) vary wildly.

Not surprisingly, given the key role of the sales tax in West Berkeley, retail is the most lucrative sector for the City. A successful West Berkeley retailer could generate \$3.42 in City tax revenue per square foot per year. Fully \$2.38 is from the sales tax. It should be noted that this revenue assumes a quite successful retailer, with (taxable) sales of \$250 per square foot. If sales per square foot are lower, sales tax revenue to the City is reduced. This level of sales per square foot (or an even higher one) is not uncommon in the interior West Berkeley commercial areas.

Laboratory "R&D" and heavy manufacturing provide similar revenues, but through different taxes. The manufacturers' heavy use of energy is reflected in the 23¢ per square foot of utility users tax, a tax where the R&D impact is modest. Conversely, the R&D user contributes 19¢ per square foot in business license tax on its landlord on the rents it pays, while the heavy manufacturer contributes none, since it owns its site. These tenures are typical in Berkeley for these sectors.<sup>2</sup> While we did not develop a

<sup>1</sup>Special tax and assessments are paid to the City for specific purposes, such as streetlighting, or public schools. They are not part of the General Fund.

<sup>2</sup>It should be noted that some firms may make extraordinary investments in plant and equipment, thus increasing property taxes. For example, City staff has estimated that Miles' expansion per year will generate some \$4 per square foot in tax revenue (a higher level than the retail prototype above), in addition to its other mitigation payments. This is because of the massive plant and equipment expenditures Miles proposes. Other biotech and chemical firms could also have large expenditures.

prototype for conventional office use, it should be broadly similar to laboratory R&D.

Light manufacturing is a weaker revenue producer. Its facility requirements are less demanding than heavy manufacturing or R&D, therefore lowering the cost of and thus the property tax derived from its buildings. Light manufacturing also tends to use less energy. This prototype case was an owner-occupant firm, but there are tenant light manufacturers whose rents generate property owner business license tax revenue. It should be cautioned, however, that varying light manufacturers have very different levels

Table 2-8: W. Berkeley Estimated Direct Tax Revenues per Sq. Ft. of Added Space

| Tax Source                     | Heavy<br>Manufacturing | Light<br>Manufacturing | Laboratory/<br>"R and D" | Retail      |
|--------------------------------|------------------------|------------------------|--------------------------|-------------|
| Property Tax                   | .31                    | .20                    | .38                      | .26         |
| Special Taxes<br>& Assessments | .21                    | .21                    | .23                      | .23         |
| Sales Tax                      | .19                    | .19                    | .19                      | 2.38        |
| Business License Tax           |                        |                        |                          |             |
| Business                       | .27                    | .05                    | .14                      | .30         |
| Landlord                       | .00                    | .00                    | .19                      | .19         |
| Utility Users'                 | .23                    | .16                    | .05                      | .06         |
| <b>Total</b>                   | <b>\$ 1.21</b>         | <b>.81</b>             | <b>1.17</b>              | <b>3.42</b> |

of investment in plant and equipment, and thus varying tax levels.

## 8. Advantages and Disadvantages of Doing Business in West Berkeley

In assessing how West Berkeley is likely to evolve and grow as a business center, its advantages and disadvantages as a business locale must be analyzed. Some of the issues can be viewed in strictly financial terms—what is the cost of doing business in West Berkeley, while others are more qualitative—e.g. perceptions about the community's attitudes. This analysis was developed both by staff and by the Economic Development Subcommittee of the West Berkeley Plan Committee.

### a. A Creative "Town" in the Heart of the Bay Area—Advantages of West Berkeley

West Berkeley's advantages center on its character as a dynamic, innovative center in the heart of the Bay Area. The Business Outreach Survey asked firms (mostly manufacturers) what they thought the advantages and disadvantages of doing business in West Berkeley are. Advantages they cited included the centrality of West Berkeley to the Bay Area and the strong availability of skilled labor here. Indeed, Miles Inc., in explaining why it wishes to concentrate its biotech operations in Berkeley cited the large number of biotech companies and personnel located in Berkeley and the Bay Area.

Access to the University is an important part of the attraction. Berkeley's cosmopolitan population was seen as a plus by some. In this same vein, the innovative, sophisticated image of Berkeley made Berkeley a "good address" for scientific instrument makers, specialty food processors, publishers, and outdoor wear firms. A view of Berkeley

as a "clean, environmental city" with enlightened business leaders helped attract like-minded firms. For smaller firms of many types, Berkeley is a good place to "incubate" start-up or grow in "a fertile entrepreneurial environment." The amenities of the city, such as restaurants, are also an advantage in getting and keeping firms in West Berkeley. Berkeley's amenities and its tolerant atmosphere make Berkeley a place many employees enjoy working.

Office users also enjoy the accessibility, amenities, and to them "funky" image of West Berkeley. The mix of uses is part of the cultural appeal. Office users find rents lower and parking easier than in Downtown Berkeley and some other office locales.

Berkeley has both comparative advantages as against other cities in the region, and advantages it shares with them. Berkeley's unusual combination of a "smaller city" flavor with a dynamic urban economy appeals to many. Berkeley is safer from crime than Richmond or Oakland, two cities which businesses often compare Berkeley against. Berkeley's relatively modest size (10th in population among Bay Area cities) makes its City government more accessible than in larger cities like San Francisco. The Business Outreach Survey and follow ups to it by the Community Development Department have opened lines of communication with business. The *West Berkeley Plan* itself (and perhaps now the Miles Development Agreement) stand as positive examples of how business, the City, and various community groups can come together to make decisions that provide planning frameworks. Berkeley shares a well-developed infrastructure with the Bay Area (as against more rural areas where roads, water lines, etc. must be built for each plant, at significant cost).

#### b. The Price of Entry — Disadvantages of West Berkeley

The disadvantages of West Berkeley as a business locale center on the real and perceived costs of doing business in time, money, and real or perceived community hostility. In the Business Outreach Survey, the lead negative was "anti-business" attitude on the part of the City and/or citizens, even though most surveyed firms had no complaints about specific City services or processes (these comments were not a reference to taxes, as only 3% of companies singled those out as an issue). Instead, many businesses—manufacturers in particular—felt that the community did not recognize their value. An equally important negative was transportation and congestion—an ominous note (but one shared with much of the region) given the strong possibility of worsening conditions on I-80.

Economic factors did appear in the survey—11% of companies surveyed cited land cost and availability as the biggest disadvantage of doing business here. Average listed Berkeley industrial rents range from 8-27¢ (all rents converted to industrial gross) higher than in other East Bay cities, depending on the size of the space and the city (see Table 7). In general, rent differentials were greater for smaller spaces, than larger ones, although this was not always the case. These differentials reflect both higher pre-tax lease costs and higher taxes and assessments of some 3.5¢ per square foot.<sup>1</sup> Similarly, the maximum \$2 per square foot in initial mitigations a manufacturer might be charged could cost as little

<sup>1</sup>A sign of this cost problem is that a number of manufacturers and wholesalers, including a candy maker, a book distributor, and a household equipment distributor, have left Berkeley for other local cities, where they found industrial space more affordable.

as 2¢ per month under typical financing terms. Nonetheless, taxes, impact mitigations, and other fees can serve as an irritant to business. A separate, but related, problem is the difficulty that both manufacturing and advanced services firms have finding large sized spaces. Another problem for many firms was difficulty of obtaining qualified entry level

Table 2-9: Berkeley and East Bay Cities—Industrial Rents by Size-Class, 1992\*

| City        | 0-9,999<br>sq.ft.spaces<br>monthly rent/<br>sq.ft. | 10,000-19,999<br>sq.ft. spaces<br>monthly rent/<br>sq.ft. | 20,000-49,999<br>sq.ft. spaces<br>monthly rent/<br>sq.ft. | 50,000 sq.ft. &<br>larger spaces<br>monthly rent/<br>sq.ft. |
|-------------|----------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------|
| Berkeley    | \$.64 (18)                                         | \$.46 (7)                                                 | \$.52 (3)                                                 | \$.30** (2)                                                 |
| Emeryville  | \$.44 (4)                                          | \$.31 (4)                                                 | \$.30 (1)                                                 | \$.27 (2)                                                   |
| Oakland     | \$.37 (21)                                         | \$.38 (8)                                                 | \$.28 (9)                                                 | \$.27 (5)                                                   |
| San Leandro | \$.48 (14)                                         | \$.33 (9)                                                 | \$.30 (13)                                                | \$.31 (5)                                                   |
| Hayward     | \$.44 (31)                                         | \$.37 (18)                                                | \$.35 (15)                                                | \$.30 (13)                                                  |
| Union City  | \$.56* (5)                                         | \$.30 (2)                                                 | \$.29 (5)                                                 | \$.29 (2)                                                   |
| Richmond    | \$.45 (5)                                          | \$.37 (2)                                                 | \$.34 (2)                                                 | \$.20 (1)                                                   |

\*number of spaces in parentheses

\*\*All or a majority of listings from a single property.

Source: Oakland Multiple Listing Service.

workers, although not all had difficulties in this area.

The Economic Development Subcommittee suggested some additional problems. Besides cost factors, they noted the difficult Use Permit process, which can be time-consuming and sets no priorities between permit applications. The perception that Berkeley is a difficult political environment with difficult approval processes, peopled by hostile activists, Commissions, and perhaps City staff and officials, was noted. They also noted the perception that Berkeley sets more stringent environmental regulations and enforces them more strictly than other communities, even though all are most often enforcing state law. It was noted that for some firms the mixed-use nature of West Berkeley is a very mixed blessing, bringing incompatible uses to their doorstep, as well as residents who might oppose their expansions. Berkeley also shares in the regional lack of affordable housing, despite the City's substantial efforts to deal with the problem.



### III. THE ECONOMIC FUTURE OF WEST BERKELEY

The West Berkeley Plan is a 15 year Plan for the economic, physical, and social development of West Berkeley. Projecting the likely economic future and shaping it to the extent that an active local government can is a difficult, but necessary, task. All projections should be understood as analyses of likely future development based on information available today, and thus inevitably limited.

#### Regional Context

The West Berkeley Plan proceeds in the context of the Association of Bay Area Governments' projections for the 9 County Bay Area—the only such set of detailed local area projections. The Bay Area can be seen as the economic context for (West) Berkeley development, although the region is of course influenced by state, national, and international factors. ABAG projects continued growth in the Bay Area until the year 2005, although at a slower pace than occurred in the 1980's. ABAG's Projections 92 also projects that 3 broad sectors of the West Berkeley economy—manufacturing, services, and retail trade—will also grow. Regionally, manufacturing employment is projected grow 18% between 1990 and 2005, services 37%, and retail trade 23%. ABAG predicts that most manufacturing growth will be in sectors it labels “high technology”—electronics, computers, office equipment, and scientific instruments (with modest growth in remaining sectors). In services, it cites business services, along with legal services and architecture and engineering, as special growth areas.

ABAG projects more sectorally balanced growth patterns within Alameda County.<sup>1</sup> They project a 30% growth in manufacturing employment in the County between 1990 and 2005, a 33% growth in services, and a 23% growth in retail trade. “High technology” manufacturing is projected to grow from 29,000 to 52,000 employees in the County over the period, while other manufacturing grows very modestly from 55,000 to 58,000. In services, a business services cluster identified by ABAG, including business services as identified by the Standard Industrial Classification, legal services, and architectural & engineering services (or SIC codes 73, 81, and 89) will garner 59% of growth.

#### Local Conditions

These projections, if accurate, set the framework for considering economic development in West Berkeley, but of course cannot precisely predict it. Development in West Berkeley is constrained by the available supply of land and buildings. Moreover, even with some 15,000 jobs, West Berkeley is a small enough area so that the performance of individual companies can make a substantial difference in the area's direction. This is particularly true in manufacturing, but there are some large retailers and office-based service companies as well. The development of specific geographic areas is important, particularly such retail concentrations as 7th & Ashby, University & San Pablo, and 4th & University. Nonetheless, some general projections can be made.

<sup>1</sup> Alameda County is a relevant unit of analysis because the County government is becoming more active in economic development, and because to a certain extent the County (excluding the Livermore Valley) forms an economic sub-region.





Future economic development in West Berkeley should be assessed both in terms of building development and economic activity by sector. Economic activity by sector is ultimately the more important and driving force, but building development gives the area its physical form and sets (or removes) constraints on economic activity.

In building development, the West Berkeley Plan projects an increase of some 1,535,000 square feet of occupied space from 1992 to 2005. Major sites for development or reuse include UC's Harrison tract, Utility Body, and the Colgate site. It also projects retail additions throughout the commercial zone, primarily through conversion from other uses, and to a lesser extent from new construction. Linking these buildings to use types, the Concept projects that this space will be distributed as follows: a net addition of 400,000 square feet in manufacturing (with wholesaling); 680,000 square feet in office and laboratory uses, and 325,000 square feet of retail uses. It should be stressed that the manufacturing figure is a Net figure, the product of new construction, reuse of vacant space, and also of losses of space due to conversion to other uses.

### ***Economic Prospects by Sector***

Manufacturing is likely to be in a stable to slow growth mode, when net gains and losses of employees are totalled. West Berkeley's role as a manufacturing center is set largely by the firms that are here, since manufacturers do not move easily but West Berkeley manufacturing is also characterized by technical and product innovation. National scale manufacturers have largely left the city, leaving less footloose locally based firms. Few recent Berkeley plant closures have been due to business failures, a trend which will hopefully continue. However, some firms unable to find (affordable) expansion space—ideally space adjacent to existing sites—are likely to continue leaving. The

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projected growth in manufacturing assumes that the City places a priority on retaining existing manufacturers and facilitating their expansion, as the *West Berkeley Plan* calls for. These expansions, rather than attraction of new companies into the city, will almost certainly be the main source of new manufacturing jobs (one potential source of relocated manufacturing jobs is printers and other manufacturers leaving San Francisco).

The most dramatic example of expansion should occur at Miles/Cutter, where the City and the company have agreed to a 30 year development plan for the 25 acre site. Peerless Lighting and Andros Analyzers are other examples of large manufacturers who plan to add jobs in Berkeley. Most manufacturers polled in the Business Outreach Survey stated that they planned to add jobs. Certainly, company by company factors concerning markets for the company's products, site conditions (including expansion possibilities) and costs, management plans for the company, and others will affect these expansion plans over the long run.

Biotechnology could be a growth area for Berkeley manufacturing, if local companies can successfully develop and prove the safety of their products. Miles and Xoma are large existing "biotech" firms, perhaps their presence, the presence of the University, and the presence of similar firms in the East Bay "Biotech Corridor" will attract new producers. Among sectors highlighted by ABAG, Berkeley has a strong presence in scientific instruments, with firms also in electronics and industrial machinery. Thus, in Berkeley, as in the region, "high tech" manufacturing will continue to grow as a proportion of total manufacturing, but "traditional" manufacturing will remain as well.

The broad services sector is likely to continue growing significantly. One of Berkeley's economic roles as a city with a strong contribution from West Berkeley firms is as a reservoir of brainpower and artistic talent for the East Bay, the Bay Area, and to some extent an even larger area. Business services as defined by the Standard Industrial Classification are strong in West Berkeley, particularly in graphic arts and software writing. In terms of overall growth (or decline), the specific fates of individual firms are least important in this sector, since it is composed of many (mostly) small firms. West Berkeley and other parts of Berkeley have numerous small software companies, to some extent as a result of the presence of the University and of a major software research institute. In the past, some of these firms have left Berkeley if they got large, but the potential for office developments at such sites as the University's Harrison Tract may make it easier for them to remain in the future. Architectural and engineering services also part of ABAG's services growth cluster are also strong in West Berkeley and likely to remain so. Berkeley is also a likely site for the expansion of research laboratories, particularly in association with or as a precursor to biotech manufacturing. Other services, most notably auto repair, are not likely to grow and may even shrink as competition for commercial sites increases.

Retail trade should also expand in West Berkeley over the Plan period. While Berkeley is narrowing the gap, it remains "understored" in sales dollars per capita (in some retail sectors) compared to other Alameda County or Bay Area cities. Paradigmatic West Berkeley retailers seek to project images of creativity, technical sophistication, supportive service, and environmental concern. The key assumption allowing West Berkeley to grow



as a retail area is reasonable traffic flow on I-80.<sup>1</sup>

West Berkeley's current strength as a regional retail area is marked by the entrance of Orchard Supply Hardware, the expansions of Whole Earth Access and the planned addition of a second car dealership at Weatherford BMW. The 4th & University area also has potential for added regional retail (much of it in smaller shops), particularly if a train station and parking structure are added. If San Pablo Ave. retail nodes (e.g. San Pablo & University, San Pablo & Dwight) can be strengthened, as the Plan hopes, both neighborhood and regional serving retail can be developed at these locations. The many ethnically identified retailers along University and San Pablo Aves. should prove to be a source of strength, as the population of the East Bay continues to grow more diverse. There is less basis to predict an expansion of purely neighborhood serving retail, although the City can attempt to foster it. On San Pablo Ave., Walgreen's has opened two drug stores, a classification generally considered to be neighborhood serving, although the stores are on a scale which suggests a somewhat broader clientele.

<sup>1</sup>A major increase in traffic congestion on the Freeway could also drive away manufacturers, who cite the Freeway as an advantage of their Berkeley location.



## V. GOALS AND POLICIES

### Goal 1:

~~Take all reasonable actions to maintain and promote manufacturing and other industrial sectors in Berkeley.~~

#### Rationale:

~~One of the central thrusts of the Preferred Land Use Concept was to provide a land use framework which would allow manufacturing to remain and expand. Manufacturing is the one economic sector which is unique to West Berkeley. Manufacturing also provides often well-paid blue collar jobs accessible to moderately skilled people. Some manufacturers also produce products with important technical content, thus also providing technical jobs. The Plan is also premised on the concept that manufacturing can be maintained and expanded without sacrificing environmental quality.~~

#### Policies:

~~A. Implement the land use concept in the Preferred Land Use Concept, which allows for the retention and expansion of manufacturing, in conjunction with other Plan goals;~~

~~B. Implement the measures in the Preferred Land Use Concept which will streamline the permit process for manufacturers (consistent with other Plan goals such as the maintenance of environmental standards) and explore additional methods for streamlining the process;~~

~~C. To the greatest extent possible, focus business assistance efforts, including efforts to retain and attract new companies, on manufacturers which will provide jobs and/or other benefits for Berkeley.~~

~~D. Continually assess the impact of policies in other areas such as taxes, impact mitigations, transportation planning, environmental quality, and others to assess how these policies affect the goal of retaining and attracting manufacturing, and how the goals which these policies are intended to achieve can best be harmonized with the manufacturing retention goal.~~

### Goal 2:

~~Support the growth of regionally oriented retail trade in West Berkeley in locations which are consistent with other goals and standards, particularly the traffic goals of the Transportation Element.~~

#### Rationale:

~~West Berkeley has been increasingly successful as a regional retail center. This success has provided tax revenue to the City, provided innovative goods and services (which are not generally available at locally oriented retailers) to Berkeley and surround-~~

~~ing communities, and in some cases created stimulating urban environments. In a time of fiscal stringency for the City, gaining new tax revenue is critical. There are a number of locations—the Ashby corridor, around 4th & University, and along San Pablo Ave., where retail expansion can occur without damaging industrial activity. Clustering of regional retail uses can help them succeed, help make retail areas more pleasant and attractive, and allow for centralized parking facilities shared among retailers. However, in developing these areas, the City and businesses should assure that they do not cause undue traffic congestion at nearby major intersections. Such congestion is both undesirable in itself and tends to make the retail areas less successful.~~

### ~~Policy:~~

~~A. Assist appropriate types of retailers to locate in West Berkeley retail areas, and to meet planning standards for those areas.~~

### ~~Goal 3:~~

~~Improve the level of neighborhood serving retail in West Berkeley~~

#### ~~Rationale:~~

~~As discussed above, many West Berkeley residents feel the area is deficient in neighborhood serving retail, such as food stores. There are many factors—e.g. competing commercial areas, the need for service commercial uses such as auto repair, low population density—which have led to the character of commercial strips such as San Pablo Ave. Yet San Pablo Ave. may have the ability to attract local customers from both West Berkeley and neighboring areas. Doing so would not only provide needed services, but also improve the urban environment. Improving the level of neighborhood serving retail might make it possible for area residents to walk or bike instead of drive on some shopping trips. Therefore, the City should explore and take feasible action to improve the situation.~~

### ~~Policies:~~

~~A. Explore how neighborhood serving retail uses might be brought to San Pablo Avenue specifically.~~

~~B. Explore the potential of other locations within West Berkeley to support neighborhood serving retail.~~

~~C. Implement the provisions of the Preferred Land Use Concept which allow small scale food stores in residential zones.~~

### ~~Goal 4:~~

~~Continue to support the growth of advanced technology manufacturing (such as biotechnology) and advanced technology services (such as research laboratories) in appropriate locations, under appropriate environmental safeguards.~~

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**Rationale:**

As is discussed earlier in this Element (see p 74), Berkeley's concentration of both scientifically trained personnel and scientific research institutions is a "comparative advantage" (vs. other cities) for this community. The recently signed Development Agreement between the City and Miles Labs indicates both City and corporate interest in this type of expansion. The body of trained people here makes it possible for Berkeley firms to set up the most technologically sophisticated manufacturing and research processes possible. Research conducted in these operations may (or may not) have spinoff benefits in other fields. While research activities generally provide jobs solely for the highly trained, jobs requiring less advanced training are also likely to be created if products move into the production process. The heavy capital investments required for advanced technology manufacturing, and to a lesser extent for advanced technology services, also translate into increased property tax revenues for the City. While advanced technology firms cannot and will not completely supplant "mainstream" manufacturers or service providers, they are likely to form an important part of West Berkeley's economic base and thus should be supported.

**Policies:**

- A. Provide assistance to advanced technology firms to help them establish or expand businesses in appropriate locations.
- B. Periodically review the City's regulation of biotechnology to assure that it both meets City regulatory objectives and does not unnecessarily interfere with the creation and expansion of biotechnology firms here (see Environmental Quality Element for implementation measures)
- C. Develop links between training agencies and Berkeley biotech firms, so that Berkeley residents can become qualified for biotech jobs.

**Goal 5:**

Continue to create employment opportunities, especially for Berkeley and West Berkeley residents.

**Rationale:**

Finding employment opportunities, especially in good jobs, is one the major goals of the City's overall economic development policy. It is particularly important to find these opportunities for economically disadvantaged Berkeley and West Berkeley residents. In 1990, the Census showed that West Berkeley residents were less likely to work in Berkeley than other Berkeley residents. Doing so both serves needy citizens and reduces the strain on the stressed regional transportation network. Getting residents employed, has secondary beneficial effects, such as reducing social service costs and increasing retail spending in Berkeley. Creating employment opportunities requires not only assuring that there are jobs in Berkeley, but also that needy residents have the skills and mechanisms to access these jobs. Therefore, the City implements such programs as First Source, which



requires that businesses which get Use Permits review Berkeley resident candidates first for their job openings (however, the program does not require that the businesses hire the Berkeley candidates, and does not expect businesses to hire unqualified employees).

#### Policies:

A. Pursue all avenues which will result in the training of Berkeley residents, particularly economically disadvantaged Berkeley residents, for the widest possible range of occupations that exist in West Berkeley. To do so, pursue strengthened links between major employers and educational institutions, and major employers and training agencies. In the context of citywide efforts, improve the abilities of Berkeley training agencies and schools to prepare future workers.

B. Improve the access of (West) Berkeley residents to jobs which exist in West Berkeley through mechanisms such as an actively implemented First Source Program.

C. Improve the placement and retention rate of First Source Program participants by improving training through intensified links between the First Source Program and the planning and outreach process for employment and training agencies.

#### Goal 6:

*Promote opportunities for business ownership by the economically disadvantaged non-Whites, women, and other economically disadvantaged people.*

##### Rationale:

While paid employment will remain the primary source of income for most households, business ownership can be a means for economic advancement for some non-White people, women, and other economically disadvantaged people. The diverse West Berkeley economy, with its many niches and many small businesses, provides opportunities for business ownership without capital requirements that are prohibitive to non-traditional business owners. As of 1991, 20% of West Berkeley businesses report themselves as minority owned, although these businesses gain only 8% of total gross receipts. The City should be alert for opportunities to assist African-American, Latino-American, Asian-American and women entrepreneurs. The "high technology" sectors present in West Berkeley have tended to have a low percentage of entrepreneurs from these groups. To the extent that San Pablo Ave. becomes a focus of economic development activity, it could be a good locale (among others) for expansion of "minority" owned businesses.

#### Policy:

A. Use City economic development programs, such as the Revolving Loan Fund, business outreach, and ownership transfer assistance as vehicles to promote business ownership by non-Whites and women.

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**Goal 7:**

~~Protect small businesses, particularly arts and crafts businesses, so they can continue to flourish in West Berkeley.~~

**Rationale:**

~~Small businesses, especially arts and crafts businesses, are key in creating the unique character of West Berkeley. The City has developed Arts and Crafts zoning to protect these businesses. However, the zoning has not always worked as intended. It is vital to assure that arts and crafts enterprises are genuinely protected from displacement.~~

**Policy:**

~~A. Use available mechanisms, including zoning, property purchase assistance, and direct City assistance to artists, to assure that artists and craftspeople remain a vital part of the West Berkeley community.~~

**Goal 8:**

~~Encourage linkages between West Berkeley businesses, and between public institutions and Berkeley businesses.~~

**Rationale:**

~~West Berkeley businesses—especially (but not only) manufacturers—purchase millions of dollars of goods and services annually as inputs into their goods and services. To the extent that these purchases can be made locally, their economic impact can be greatly increased. Many necessary inputs are not available within Berkeley (and sometimes even Alameda County) but there has been no concerted effort to assure that businesses are maximizing their opportunity for local purchases. There is a particular opportunity for those firms which are undertaking major construction projects. Beyond purchasing, there may be possibilities to increase cooperative information sharing efforts, training, or problem solving.~~

~~A similar logic obtains for public agencies, such as the City of Berkeley or the University. Public agencies are major goods and services purchasers, although typically of final products, not intermediate inputs. Public agencies can also seek to use the funds they have on deposit to encourage lenders to engage in socially constructive (or "community development") lending.~~

**Policies:**

~~A. Explore mechanisms which can facilitate increased linkages between West Berkeley businesses.~~

~~B. Explore the possibility for City funds to be used in "linked deposit" programs.~~

~~C. Use the Recycling Markets Development Zone (RMDZ) as a way of encouraging manufacturers to use local inputs. (see Environmental Quality Element~~

## IV. ISSUES AND STRATEGIES

This section forms a transition between the Background and Goals and Policies on the one hand, and the specific implementation measures on the other. The Background section seeks to paint a picture of existing conditions in the West Berkeley economy, while the Goals and Policies section points out desired goals and directions for City policy. This section outlines some key issues—largely those highlighted by the Economic Development Subcommittee of the West Berkeley Plan Committee—and discusses in general how the City should respond to them, how to move towards the goals. The strategic discussions in this section suggest approaches to problems, although specific implementation steps have not necessarily been developed, particularly if areas of program activity are required. It is expected that the strategic concepts discussed here—and the specific measures used to implement them—will evolve over time.

### A. Strategies for Business Retention

Business retention is one of the central elements of the West Berkeley Plan. The Preferred Land Use Concept was conceived in significant part to provide a more stable planning environment for manufacturers and other businesses. Manufacturers in certain areas of West Berkeley are protected by the Plan from invasive and destabilizing uses, in others the nature of the mix of uses is clarified. In all areas, permitted and prohibited activities are more clearly defined, and the process for expanding a permitted use is generally eased—changes which will benefit manufacturers and other businesses. Streamlining the permit process has been repeatedly cited as a key goal of businesspeople.

These changes are necessary, but not sufficient, to retain manufacturers—particularly expanding ones.<sup>1</sup> These expanding companies often face the need to find space at affordable rents/prices, which can be difficult in West Berkeley. The Community Development Department currently works intensively with manufacturers and other businesses to help them find appropriate space. In some cases these efforts have been successful, in others they have not.

The Economic Development Subcommittee suggested that business retention efforts focus on sectors such as scientific instruments, printing, machinery, biotechnology, and possibly other light manufacturing sectors. While the City generally seeks to retain most businesses, these sectors are particularly promising for Berkeley and do deserve special attention. The mechanisms to do provide this attention will need to be defined. Perhaps (with adequate staffing) a special program of regularly contacting these businesses to make sure they were functioning well in Berkeley would be possible. The West Berkeley Manufacturers' Forum planned in the Miles Development Agreement will provide another avenue to implement these ideas.

In addition to these concrete, bottom line factors, there are less objective factors—such as how the “business climate” seems—as well. It is unclear how important these factors are in business retention—companies relocating out of Berkeley cited cost and

<sup>1</sup>In recent years, Berkeley manufacturers have not generally closed because of business failure, although such cases have occurred.

space availability as their key reasons for leaving. These factors are discussed in the Opportunities and Constraints subsection of the Background section of this Element.

One relatively low cost way to improve perceptions about doing business in Berkeley to recognize and reward those Berkeley firms which make a particularly positive contribution to the city. For example, Berkeley manufacturers have been leaders in seeking out environmentally sensitive ways to manufacture products. Those who innovate in this field or in the making of environmentally sound products should be recognized and rewarded. Some such firms have been noted in the *South and West Berkeley Revitalization Exchange*, but there are many other possible publicity mechanisms. A Made in Berkeley labeling program for such products has also been proposed (as has similar labeling for the Bay Area as a whole).

Another important strategy for retaining manufacturers is addressed in the following discussion.

### ***B. Strategies for Retaining Local Ownership of Manufacturers***

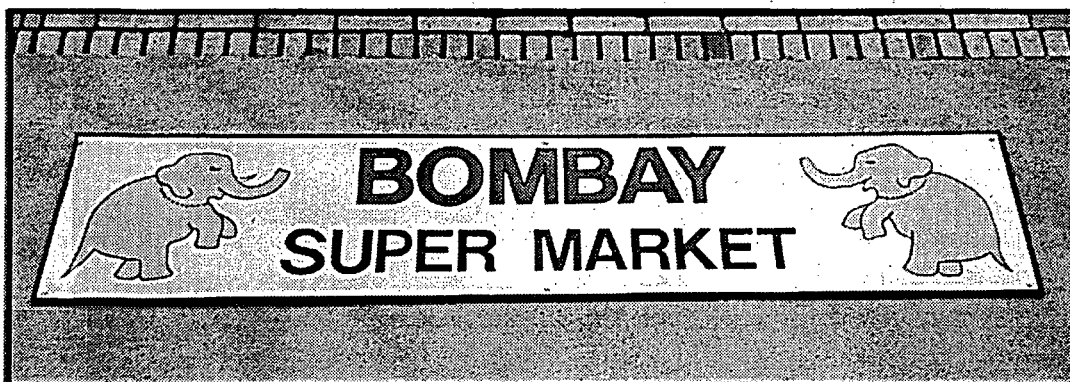
One important strategy area for business retention is retaining local ownership. Both academic studies and Berkeley experience demonstrate that owners based outside Berkeley (or the Bay Area) are much more likely to move or close a plant than locally based ones. Non-local owners may "consolidate" Berkeley plants into plants elsewhere. Durkee Foods, Colgate Palmolive, Heinz, Canada Dry, Lectra Lighting, and Upright Scaffolding are all examples of outside corporations which closed Berkeley plants. This is not to suggest that all local owners are community-minded, or that all outside owners (even foreign ones) are not, but rather that in general local owners are more committed to remaining in Berkeley.

In order to maintain local ownership of West Berkeley businesses, there must be intervention at the time when a company is likely to pass out of local hands. Two times when this likely to occur are 1) retirement of owner(s); and 2) major expansion. When the local owner(s) retire, (s)he may not have a family member who is interested in assuming control of the business. At that point, (s)he may sell the business to an outsider or simply close it down, even if it is still profitable. Major expansions generate the need for increased capital for the firm. One way that firms generate that capital is by selling the firm to non-local owners.

There are many roles for the City, or a City-supported intermediary such as an Economic Development Corporation, to play in facilitating local ownership. These could include finding financing for a local buyer, guaranteeing loans for a local buyer, providing information on employee ownership options such as ESOPs (Employee Stock Ownership Plans) and finding technical assistance for that buyer. The City or Economic Development Corporation would have to develop mechanisms to learn of impending owner retirements or company sell-offs, though some such situations are already known. In cases where the firm's workers were interested, they could be the local buyer. It seems prudent for this effort to focus initially on smaller firms, to help build up a credible record for later efforts to intervene with larger firms.

### ***C. Strategies for Improving the Level of Neighborhood-Serving Retail***

Some West Berkeley residents feel the area is short of neighborhood-serving retail. Food stores are the key issue. In a 1989 survey of Berkeley households, 57% of West Berkeleyans responded that there were too few food stores near their house. More West Berkeleyans felt they were lacking for food stores than any other neighborhood's residents in South Berkeley 38% felt there were not enough. West Berkeley residents missed food stores more acutely than any other category, though 48% also desired more specialty stores and 39% more drug stores. (Most West Berkeleyans 54% felt they had too many liquor stores.)



Unfortunately, it may be rather difficult to increase food stores in West Berkeley. West Berkeley already has 27 of Berkeley's remarkable total of 157 food stores<sup>1</sup>, or 17%. West Berkeley's food stores racked up some \$12.5 million in sales in 1990, almost 10% of the Citywide sales of \$128 million, despite the absence of a major supermarket in West Berkeley. The portion of Berkeley's population which could be expected to rely on West Berkeley food stores is also 10%, suggesting that the area is capturing a fair share of sales (This adds Census Tract 4233—the San Pablo Park area—to West Berkeley proper, because San Pablo Ave. is the closest major shopping street for them). Berkeley has only some 9 supermarkets—depending on exactly what stores are considered supermarkets—again suggesting that West Berkeley's population may be too small (and too low income) to attract one.

However, most of West Berkeley's food stores are in the area from Addison St. north, suggesting that the southern residential areas are relatively underserved. In addition, a West Berkeley supermarket might be feasible if it could capture some of the traffic from outside West Berkeley which use West Berkeley arterials. In addition, it has been suggested that the Redevelopment Agency explore the idea of establishing an outdoor "mercado" or farmers/arts and crafts market at the Delaware St. Historic District (Delaware St. between 5th and 6th). Such a mercado might be able to draw on the regional traffic 4th St. draws while providing locally useful services (and re-establishing the retail importance of Oceanview's historic main street).

<sup>1</sup>Food stores as a category in the Standard Industrial Classification includes both general grocery stores, such as supermarkets and corner groceries, and more specialized shops such as bakeries, fish markets, and meat markets. Perhaps one reason West Berkeley residents feel underserved by food stores is that many area food stores are specialized, while others are small. Small stores also generally have higher prices than supermarkets. However, Berkeley as a whole has significantly more food stores than typical for a California city its size.



## VII. IMPLEMENTATION MEASURES

### **Priority Implementation Activities**

The first group of activities are activities which have been selected for both their particular importance in implementing the goals of the Element and for the likelihood that they can be at least partially implemented in the short run.

1. ~~Targeted industrial retention and attraction program~~—Develop and implement a targeted West Berkeley industrial retention and attraction program, including preparation of appropriate and timely informational and promotional materials.

~~Goals and Policies Implemented:~~ Goal 1, Policy 1C; Goal 4, Policy 4A

~~Responsibility:~~ Community Development Services, Community Development Department

~~Funding:~~ Costs not yet analyzed, but general Berkeley promotional brochure published, West Berkeley promotional brochure planned.

2. ~~Large Site Reuse Project~~—Make reuse of large sites such as Colgate and Utility Body priorities for business assistance, explore how planning tools such as the Large Site Development Process could facilitate development on these sites, and explore mechanisms for financing toxic remediation and improvements on the site, including (but not limited to) expansion of the Redevelopment Area and creation of assessment districts.

~~Goals and Policies Implemented:~~ Goal 1, Policy 1C; Goal 4, Policy 4A; Goal 5, Policy 5A

~~Responsibility:~~ Community Development Services, with City Planning Dept.

~~Funding:~~ No non-staff costs yet identified.

3. ~~Major Employer Training Project~~—Implement the Biotech Academy provisions of the Miles Development Agreement, and seek to develop similar comprehensive education and training arrangements with other large employers, particularly those in the biotech/laboratory field.

~~Goals and Policies Implemented:~~ Goal 4, Policy 4C; Goal 5, Policies 5A and 5B

~~Responsibility:~~ Community Development Services

~~Funding:~~ Miles Development Agreement.

### **General Implementation Activities:**

#### **A. Ordinances, Regulation and Policy Development**

1. ~~Rezoning~~—Rezone the West Berkeley Plan Area to reflect the land use districts, permitted and prohibited uses, and development standards of the West Berkeley Plan.

~~Goals and Policies Implemented:~~ Land Use Element Goals and policies, also Economic Development Element Goal 1, Policies 1A & 1B; Goal 2; Goal 3, Policy 3B; Goal 4, Policy 4A

~~Responsibility:~~ City Planning Department



~~Funding: Regular staff and operations funding~~

~~2. Arts and Crafts— Review the functioning of the arts and crafts Ordinance, and develop recommendations about how it can best be implemented.~~

~~Goals and Policies Implemented: Goal 7, Policy 7A~~

~~Responsibility: City Planning Department, in consultation with affected parties.~~

~~Funding: Regular staff funding~~

~~3. Mitigations— Develop and adopt as Ordinances housing, child care, and possibly other mitigations which reflect both the City's goal of recovering the impacts of development, and the City's goal of maintaining manufacturing and creating jobs generally.~~

~~Goals and Policies Implemented: Housing/Social Services goals~~

~~Responsibility: Community Development Services, Community Development Department, with City Planning Department~~

~~4. Coordination with County— Increase City coordination with and participation in Alameda County industrial retention, defense conversion, job training, and other economic development programs and policy development.~~

~~Goals and Policies Implemented: Goal 1, Policy 1C; Goal 2; Goal 5, Policy 5A~~

~~Responsibility: Community Development Services, Community Development Department, with Berkeley representative on Alameda County Economic Development Advisory Commission~~

~~Funding: Regular staff and operating funds~~

## ~~B. Programs~~

~~1. Building Buyout Program— Implement the West Berkeley small business buyout program, established as a mitigation for the Durkee project.~~

~~Goals and Policies Implemented: Goal 1, Policy 1C; Goal 5~~

~~Responsibility: Community Development Services, Community Development Department~~

~~Funding Program Self-funded~~

~~2. Buyouts of Retiring Owners— Develop and implement a financing and technical assistance program to facilitate worker or community buyouts of retiring owners of manufacturers.~~

~~Goals and Policies Implemented: Goal 1, Policy 1C~~

~~Responsibility: Community Development Services, Community Development Department~~

~~Funding Costs not yet analyzed. Industrial Development Bonds possible source for project financing.~~

~~3. Employment/Training System— Institute a coordinated program to improve Berkeley's system for employment training, and to improve Berkeley resident workers' access to Berkeley jobs (see also Priority Activity #3)~~

~~Goals and Policies Implemented: Goal 5, Policy 5A & 5B~~

~~Responsibility: City Manager's Office, possibly to be delegated~~

~~Funding: Costs not yet analyzed.~~

~~4. Recognition—Develop mechanisms to recognize and publicize manufacturers and other businesses with outstanding records in environmental quality, local hiring, or other contributions to the Berkeley community.~~

~~Goals and Policies Implemented: Goal 1, Policy 1C~~

~~Responsibility: Community Development Services, Community Development Department~~

~~Funding: Regular staff and operating funds~~

~~5. Business Assistance—Continue to provide assistance to manufacturers, retailers, and other businesses seeking to locate or expand in appropriate West Berkeley locations.~~

~~Goals and Policies Implemented: Goals 1,2,3,4; Policies 1C, 2A, 3A, 4A~~

~~Responsibility: Community Development Department~~

~~Funding: General Fund~~

### **C. Projects**

~~1. Business Directory—Develop a directory of West Berkeley businesses, both for retail customers and to assist West Berkeley businesses in buying goods from each other.~~

~~Goals and Policies Implemented: Goal 1; Goal 2; Goal 3; Goal 8, Policy 8A~~

~~Responsibility: Not yet determined, directories frequently published by community organizations~~

~~Funding: Costs not yet analyzed.~~

### **D. Studies**

~~1. San Pablo Ave. Economic Development Study—Analyze the social, economic, and physical conditions and potentials on San Pablo Ave., in order to formulate and implement an Improvement Strategy for San Pablo Avenue. The strategy should emphasize attracting and retaining desired businesses and improving the physical character and appearance of the street.~~

~~Goals and Policies Implemented: Goal 3, Policy 3A; Goal 6~~

~~Responsibility: Not yet determined~~

~~Funding: Costs not yet analyzed.~~

~~2. Redevelopment Feasibility—Study whether renewal and expansion of the Redevelopment Area would be a feasible and appropriate method to finance West Berkeley Plan proposals. The study would develop an appropriate proposed area.~~

~~Goals and Policies Implemented: Goals from Housing, Transportation, Environmental Quality Elements, also Goal 1, Policy 1C; Goal 3, Policy 3A; Goal 4, Policy 4A; Goal 6, Policy 6A; Goal 7, Policy 7A.~~

~~Responsibility: Redevelopment Agency~~

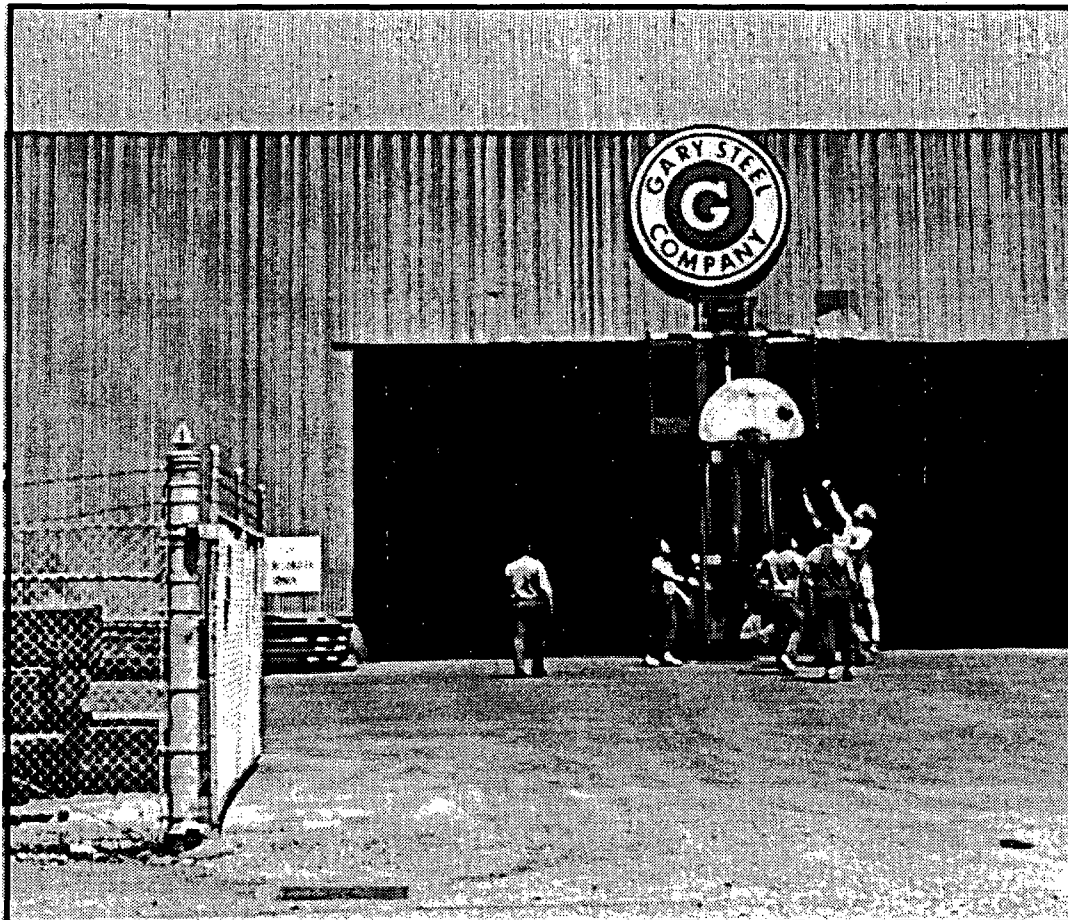
~~Funding: Costs not yet analyzed.~~

~~3. Economic Development Organization~~ Explore the feasibility and usefulness of creating some form of West Berkeley economic development entity, such as an Economic Development Corporation, perhaps analogous to Coliseum Corporation in Oakland.

~~Goals and Policies Implemented:~~ Potentially all, depending on entity's focus.

~~Responsibility:~~ Community Development Services with City Planning Dept.

~~Funding:~~ No sources identified, but Miles Development Agreement provides for Miles' in-kind support to West Berkeley economic development forum.



Economic Development Element

## 3

## ENVIRONMENTAL QUALITY

## I. STRATEGIC STATEMENT

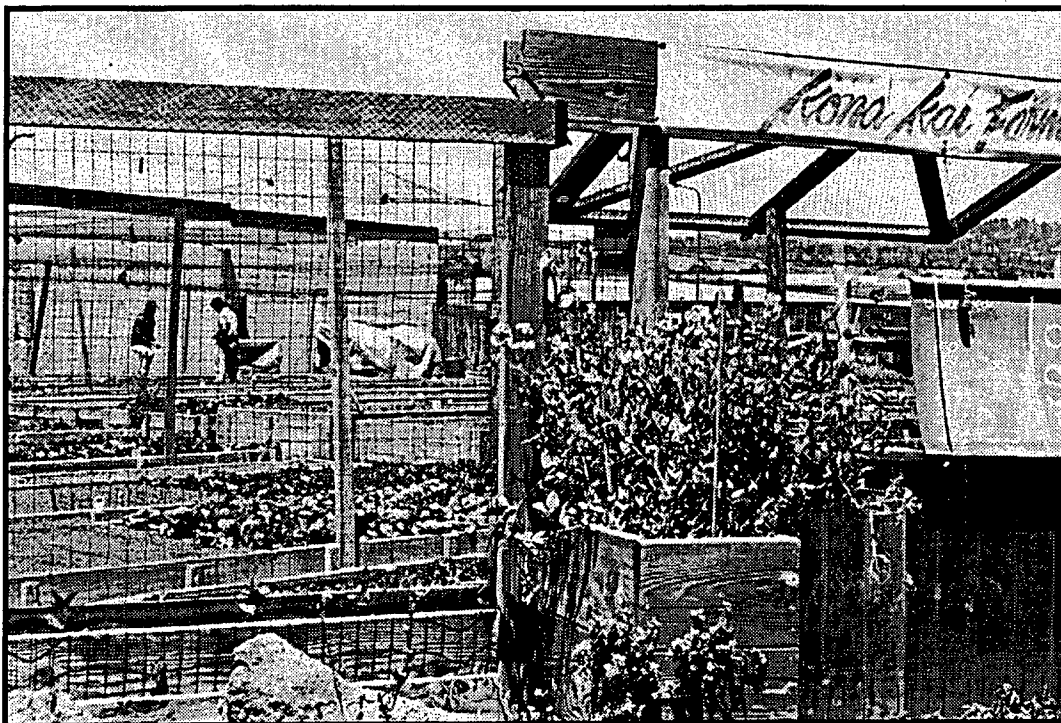
West Berkeley in many ways is the environmental "frontline" of Berkeley. It is adjacent to the Bay and Interstate 80, and contains the Southern Pacific Railroad and all or part of Berkeley's 2 State highways. West Berkeley has Berkeley's largest concentration of users of hazardous materials, such as manufacturers, laboratories, and auto repair shops. West Berkeley also has a thinner network of public transportation network than the rest of Berkeley, forcing greater reliance on automobiles for transportation. In this special and especially vulnerable context, citywide policies and strategies to protect and improve the environment become particularly crucial for maintaining West Berkeley's productive diversity of industrial, residential, and commercial land uses.

Environmental strategies are found throughout the *West Berkeley Plan* because achieving good environmental quality is a key goal of the Plan. Environmental measures are found particularly in the Transportation, and Land Use Elements, as well as this Environmental Quality Element. This Element establishes the environmental measures necessary to maintain a balance between a viable and productive economy — which provides economic opportunity (and funds environmental protection efforts) — and a decent, safe, and sanitary residential community and work environment. Implementation has already begun on a great many of its measures. The Plan is premised not on the displacement of existing manufacturers, but rather on the improvement of their (as well as other business', institutions', and households') environmental practices.

This Element's goals and policies complement those of the Transportation and Land Use (and Economic Development) Elements. The Land Use and Transportation Elements provide environmental protection through a gradation of zoning/land use districts, the careful selection of permitted and prohibited uses, strategies to reduce single occupant vehicle trips, and a set of appropriate development standards. The environmental goals and policies that follow are based on a strategy of increased communication, community participation, regulatory coordination, and a spirit of cooperation and compromise. In particular this Element addresses community awareness and the regulatory process, as well as 5 specific areas of concern: Hazardous Materials, Biohazardous



~~Materials, Air Quality, Soils and Groundwater, and Noise. On the positive side, the Element briefly reviews the actual activity and potential for further activity of recycling in West Berkeley.~~



## WEST BERKELEY PLAN

## II. BACKGROUND

## A. General Introduction

On some fundamental levels, the environmental quality of West Berkeley is good and improving. The Bay Area overall has almost the lowest air pollution of the 20 largest American metropolitan areas, with most measures showing continued improvement. West Berkeley, with its strong prevailing westerlies from the Bay and the ocean, shares in this favorable circumstance. Drinking water, supplied by the East Bay Municipal Utilities District (EBMUD), is high quality, drawn from clean Sierra sources.

Yet there are unquestionably serious environmental issues in West Berkeley. Interstate 80 is a major emitter of carbon monoxide, nitrogen oxides, and reactive organic gases, joined by some industrial users. There is significant use of hazardous materials in industries and households, causing the potential for environmental problems. Aquatic Park has suffered water quality problems, many other sites have contaminated soils. The ground itself can be a cause for concern in West Berkeley, given that it has liquefaction potential in earthquake, particularly west of 3rd St. (Southern Pacific RR).

These environmental stresses do not occur in splendid isolation in West Berkeley—because from virtually its beginnings as Oceanview until today West Berkeley has encompassed the full range of uses from “heavy” industrial to residential. Conflicts over noise, odors and sometimes more severe problems are virtually structured into this pattern. Some previous planning efforts sought to deal with these conflicts by eliminating either the residential or the industrial component. The West Berkeley Plan by contrast recognizes conflicts, seeks to reduce them, and seeks to improve environmental performance while maintaining a mix of uses.

The response to these issues has come from a variety of levels, resulting in a complex of federal, state, regional, and local environmental regulations to protect both residents and workers. The appropriate level for regulation continues to be discussed, especially in the legislature. State laws are often particularly far-reaching. This growing mass of sometimes duplicative legislation can bewilder and irritate businesspeople. Yet the multiplication of laws does not necessarily produce effective enforcement, particularly if resources are not available to enforce them. And some Berkleyans express frustration about what they see as a lack of effective environmental protection.

The West Berkeley Plan Preferred Land Use Concept has a healthy environment as a central goal, without destructive overregulation of West Berkeley's economic base. One impediment to developing and evaluating environmental strategies is lack of data—local data on environmental conditions is not yet as well as developed as for areas such as housing, economic development, or transportation. Many environmental problems are broadly regional or site specific, limiting the availability of data about West Berkeley as an area. Over time more relevant data should be available.

This Element of the West Berkeley Plan, along with the Land Use and Transportation Elements lays out the environmental policy framework and strategies of the West Berkeley Plan. This Element discusses goals, policies, and implementation measures in



the areas of environmental review generally, hazardous materials, soils and groundwater, air quality, noise, and biohazardous materials. The Environmental Quality Element incorporates one of the most detailed programs for City action of any West Berkeley Plan Element.

Appendix A—Environmental Strategies and Implementation Measures—is a 1992 evaluation of a set of generally shorter range strategies in these areas which the West Berkeley Plan Committee put forward for review. In many cases, as the Appendix describes, the City is already implementing programs in these areas. Taken as a whole, the goals, policies, and implementation measures in the Element and the Appendix are designed not only to address specific environmental concerns, but to improve the environmental regulatory process as well.

## ***B. Hazardous Materials Use & Disposal***

### ***1. Existing Conditions***

Hazardous materials raise environmental concerns because they may be released into the air, water, or soil, and then pose a threat to people who are on site or nearby. In recent years, most businesses and institutions have tried to reduce their use of hazardous materials, in part because it has become increasingly expensive to handle them. However, for many manufacturers, laboratories, and service providers, there are as yet no adequate substitutes for many hazardous materials.

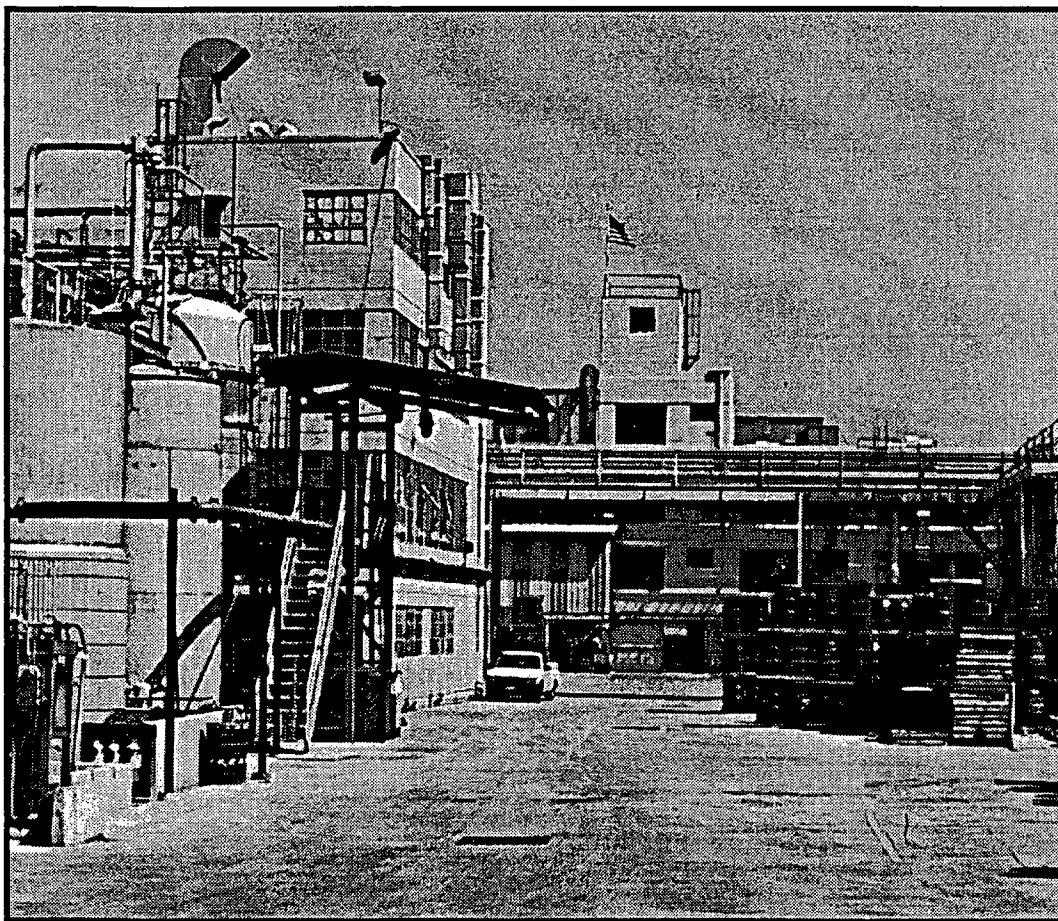
Hazardous materials releases can occur during any of the stages of use of hazardous materials. These stages are: first, hazardous materials of various types are acquired and stored by a business or institution. Secondly, these hazardous materials are used in the production of a (generally) non-hazardous product or provision of a non-hazardous service (e.g. chlorine is used to clean swimming pools). Finally, a typically much smaller quantity of hazardous waste is produced as the outcome of the production/service process. Hazardous wastes represent those portions of hazardous materials not consumed or transformed during the production process.

At present, there is no comprehensive source of current data on the hazardous materials or the hazardous waste stream from Berkeley. City records are not yet adequate to assess the overall level of hazardous materials use in West Berkeley. As of November, 1992, 256 users of hazardous materials in West Berkeley have registered with the City. There may be additional users of hazardous materials who have failed to register. West Berkeley has more hazardous materials users than any other area, but the largest single users in Berkeley are UC Berkeley and Lawrence Berkeley Labs. The users range from gas stations and auto repair shops to foundries and pharmaceutical companies. The City—in the office of Toxics & Emergency Management—is currently assembling a data base on the various hazardous materials used by different companies and institutions.

West Berkeley hazardous materials users are generally found on commercial corridors and in “heavier” industrial areas. San Pablo Ave. has by preliminary count some 67 users of hazardous materials/generators of quantities of hazardous waste sufficient to require the filing of a Business Plan. However, these businesses are largely

auto repair shops, whose main waste is small quantities of used oil. The Mixed Use/Light Industrial district which is the largest non-residential district in West Berkeley has the largest number of users/generators—95. These businesses are not concentrated—spreading from the Emeryville to the Albany line, from near San Pablo Ave. to the railroad track. Hazardous materials users in this district largely consist of auto repair shops, wholesalers, and light manufacturers. The smaller Manufacturing and Mixed Manufacturing districts have smaller numbers of hazardous materials users—27 and 15 respectively. However, these users tend to be larger and “heavier”, such as foundries, chemical plants, and pharmaceutical plants. Finally, the Mixed Use/Residential district has some 25 hazardous materials users, including auto repair shops, light manufacturers, and wholesalers.

Data on the waste stream is somewhat outdated. The most comprehensive data now available are the 1986 figures contained in the Alameda County Hazardous Waste Management Plan. The Plan indicates that Berkeley generated 6,248 of the 85,107 tons of hazardous waste generated countywide. Thus Berkeley generated slightly over 7% of the County's waste stream, while representing slightly under 9% of the County's population. Berkeley wastes were made up of 3,267 tons of manifested waste, 2,744 tons from small generators, an estimated 160 tons from households, and an estimated 77 tons from tank cleanups. While no data is available for West Berkeley specifically, we may safely assume it provided a major part of the waste stream. Non West Berkeley contributors include the University of California, Lawrence Berkeley Laboratory, private laboratories, auto repair shops, and gas stations.



The composition of manifested wastes (those wastes shipped offsite) from Berkeley was dominated by "Miscellaneous Waste" (40%) which includes inorganic solids, aged organics, empty containers, photo and lab wastes, household wastes, pharmaceuticals, and asbestos. Soils contaminated by leaks or spills represented 21% of the waste stream. Non-halogenated solvents (solvents whose composition does not include chlorine) accounted for an additional 18% of the manifested waste. The wastes represented a wide range of hazard levels.

Since 1986, source reduction and pollution prevention efforts seem to have reduced the waste stream. One major change is a dramatic reduction in hazardous waste disposal by DeSoto, Inc (now Courtalds). DeSoto's 1,104 tons disposed of in 1986 accounted for 34% of Berkeley's manifested waste stream and 18% of the city's total hazardous waste stream<sup>1</sup>.

## 2. Regulatory Framework

There are over 15 major state, federal, and local laws which regulate the use of hazardous materials and waste in (West) Berkeley. Each has a variety of complex reporting, inspection, and monitoring programming requirements. Virtually any business using hazardous materials in Berkeley is required to submit a Hazardous Materials Management Plan, which contains basic information on the facility, materials used there, and emergency response plans for handling incidents. Risk Management and Prevention Programs, specifying engineered backup safety systems to protect the community in the event of a primary systems failure, are required for a small number of large scale hazardous materials users. Berkeley's own Disclosure Ordinance also requires users to disclose known carcinogens or reproductive health hazards that they use. Alameda County is preparing to adopt a Hazardous Waste Management Plan, to coordinate and guide hazardous waste management in the County. The City has recently enacted 2 hazardous materials Ordinances—the Ozone Depleting Compounds Ordinance (July, 1989) and the Hazardous Waste Importation Regulation Act (Feb. 1991), and is considering adoption of a Pollution Prevention Act.

## C. Biohazardous Materials—Use and disposal

### 1. Existing Conditions

Biohazardous materials are specific subset of hazardous materials. Biohazardous materials are those with the potential to cause infection and disease. Such materials are used in West Berkeley by "biotechnology" manufacturers, by laboratories, and to lesser extent by medical, dental, and veterinary offices (which are relatively rare in West Berkeley). Biotechnology is a growing industry in the Bay Area, and one which Berkeley is well positioned to capture—thus it may well expand in West Berkeley in the years ahead.

<sup>1</sup> The prominence of DeSoto reflected a Countywide pattern. In 1986, 12 manifestors (or .01% of all manifestors)—DeSoto and 11 non-Berkeley establishments—created 13,257 tons of waste, or 20% of the Countywide manifested waste stream.



## 2. Regulatory Framework

The use and disposal of biohazardous materials is regulated by a very extensive network of state, federal, and local law. The National Institutes of Health (NIH) has developed Guidelines for use of recombinant DNA. One of the requirements of the Guidelines is establishment of an Institutional Biosafety Committee at each site using DNA. The manufacture of pharmaceuticals intended for human use is regulated by the Food and Drug Administration (FDA). The FDA not only inspects the final product, but inspects manufacturing facilities to insure that they follow Current Good Manufacturing Practices. (Bio) hazardous waste generation and management are regulated by state statutes such as the California Hazardous Waste Control Law. The City has been restructuring its regulation of biohazards. A former City Ordinance, now repealed, dealt solely with recombinant DNA, and required public hearings to use it. Current City law is much broader and includes disclosure requirements for such items as the use of biosafety level 2 and 3 organisms, safety and health information for emergency responders, and certification of compliance with safe laboratory practices.

Miles, Inc. is the largest biotech company in Berkeley. The Development Agreement which they recently signed with the City (which will allow them to pursue a 30 year development program) contains a number of measures to both reduce the risk of biologically hazardous material, and to increase community awareness about the topic. Miles' Waste Reduction program applies to biohazardous material as well as other hazardous material, a requirement which goes beyond current California law. Similarly, Miles' Risk Communication program incorporates material about biohazards as well as "conventional" hazardous material.

The State of California adopted the 1991 Medical Waste Management Act. The Act regulates the generation, transportation, disposal, and treatment of medical wastes. Medical waste generators include medical and dental offices, clinics, hospitals, laboratories of all types, veterinary treatment facilities, and pet shops. The state's expectation was that local "Administering Agencies" such as the City of Berkeley would administer the Act's regulations. However, upon reviewing the costs of administration and the state's proposed fee structure, the City decided not to assume responsibility for the program. This decision was also made by a majority of the other administering agencies in the state.

## D. Soil and Groundwater Contamination

### 1. Existing Conditions

Soil and groundwater contamination can occur if hazardous materials (or biohazardous materials) are not handled safely. Such contamination can be caused by incidents, such as a spill of materials. It can also result from losses of material during operation of a facility. Leaks from underground tanks have been a particularly common source of contamination. Typically, contamination is a site by site issue, but if contaminants have leaked into the groundwater there can be "plumes" of contaminants to neighboring properties. Soil and groundwater contamination is more dispersed throughout Berkeley than some other environmental problems. Of the properties in Berkeley

known to have experienced underground tank leaks, less than half are in West Berkeley. These leaks occurred at a great variety of types of uses — manufacturers, gas stations, auto repair facilities, private and University-related laboratories, apartment buildings (out of heating fuel tanks), and other types of sites.

## 2. Regulatory Framework

Like other environmental arenas, soil and groundwater contamination is subject to both state and local regulation. The California Health and Safety Code sets out the basic requirements that all underground tanks be registered, that permits be obtained before they are installed, and that they meet construction and operating standards. The Uniform Fire Code — which the City of Berkeley adopts as its own Fire Code — also includes provisions concerning fire safe fuel storage and tank installation. The Regional Water Quality Control Board is responsible for monitoring the cleanup of hazardous materials that have contaminated groundwater. The State Department of Health Services is responsible for approving soil remediation goals, and thus has overlapping jurisdiction with the Regional Board. Once contamination is detected, soils and groundwater must be remediated before sites can be released for further use.

The City's Toxics and Pollution Prevention Program acts as lead agency and administering agency for the Regional Board, and therefore oversees granting of permits, monitoring of conditions, tank removal, and release investigations. However, closure — regulatory signoff than work is completed — on sites with hazardous wastes is handled by Alameda County rather than the City of Berkeley.

## E. Air Quality

### 1. Existing Conditions

While environmental problems related to hazardous materials are site specific, air quality problems tend to spread across multiple sites. Depending on the source of air pollutants, and the particular pollutant being emitted, the problem may spread over a greater or lesser area. Unlike some parts of the Bay Area, air quality in Berkeley meets clean air standards almost every day of the year.

Transportation is the greatest source of air quality problems in the Bay Area. Over half of the background concentration of toxic air contaminants in the Bay Area comes from motor vehicles (cars, trucks, and other vehicles). Motor vehicle emissions account for 83% of ambient carbon monoxide, 43% of human-caused reactive organic gases (gases which react with nitrogen oxide in sunlight to form dangerous low level ozone), and 56% of nitrogen oxides. The remainder come from a variety of stationary sources, notably fuel combustion by utilities, manufacturers, and households. Use of paints, solvents, and chemicals, in manufacturing, business, and household situations also contributes. The most severe problem in the Bay Area (although relatively mild by large metropolitan area standards) is ozone in photochemical smog. Particulate matter has also become an increasing concern. West Berkeley's foremost local air pollution problem — likely to get worse with worsening traffic conditions — is Interstate 80. There are also other major roads and some major manufacturers contributing to pollution problems.



## 2. Regulatory Framework

Authority to regulate air pollution descends from the federal government to the state government to regional agencies. In California, the California Air Resources Board coordinates and oversees both the Federal and State air pollution control programs. These are implemented through regional districts. In West Berkeley, the Bay Area Air Quality Management District (BAAQMD) is responsible for both air quality planning and enforcement. The District has recently adopted a Clean Air Plan which includes a number of Transportation Control Measures and controls on stationary sources in an effort to bring the Bay Area as close as possible to 100% attainment of state pollution standards. Specifically, the Plan seeks to reduce per capita exposure to pollutant levels above the state standards by 50% by 1994 and by 75% by 1997 (it should be noted that inland valleys, San Jose, and Vallejo are more likely to have excessive pollutant levels than the East Bay). For air emissions compliance, the District has a full-time Berkeley inspector, and the Toxics Program maintains a reciprocal referral and monitoring system with BAAQMD for responding to air quality complaints.<sup>1</sup>

BAAQMD has enacted on a regulation which would require every employer of over 100 people in the region to develop measures to increase "Average Vehicle Ridership"—to increase the number of people who commute by transit, carpool, bicycle, and other "alternative" means. The City could accept "delegation" of authority from BAAQMD to implement this Program, but has chosen not to do so at this time. The City's Trip Reduction Ordinance complements this regulation. It requires—among other provisions—that employers designate a commute coordinator and provide information about alternatives to driving alone to their employees (see the Transportation Element)

<sup>1</sup>In addition, at this time—October, 1993—the Mayor of Berkeley, Loni Hancock, sits on the Air Quality District Board.



## F. Noise

### 1. Existing Conditions

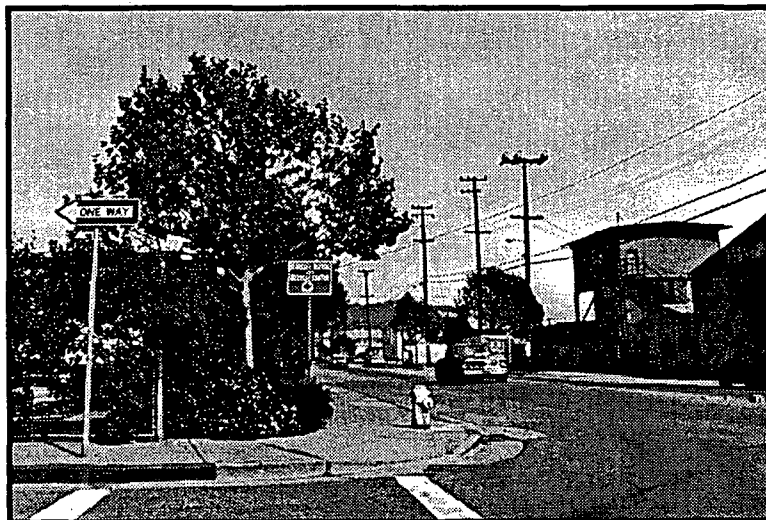
Like air quality, noise is a problem of contamination of the ambient environment, in this case by excessively loud sound. Noise can be a problem in the outdoor environment, for those who work and/or play there. Noise can also enter the indoor environment, although some measures can be taken to reduce noise impacts on indoor places.

According to environmental studies, the primary source of noise in West Berkeley is auto and truck traffic on major roads. Typically, this noise will most impact the first row of buildings along the street, which attenuate (lessen) the impact for people in buildings behind them. However, a major highway like I-80 has literally far-reaching noise impacts. Another noise source is the Southern Pacific railroad line, which currently accommodates some 36 trains per day (2 direction total). A secondary noise source is from various industrial operations.

Noise is difficult to measure, because it not only varies from place to place, but also from time to time. The West Berkeley Plan Environmental Impact Report projects noise contours—areas where overall noise levels are likely to exceed 60 decibels. 60 decibels is the level the 1977 Master Plan sets as a generally acceptable level. The EIR indicates that noise is likely to be higher on major travel corridors, and generally from 4th St. west, due to the impact of freeway noise. Aquatic Park is one of the more heavily noise-impacted sites in Berkeley, although this should improve somewhat with the construction of soundwall along I-80 near the park.

### 2. Regulatory Framework

Noise is one of the few environmental areas where regulation is almost completely local. The City's Noise Ordinance—last amended in 1982—sets limits for permissible noise levels during the day and night according to the zoning of an area. Residential zones have quieter standards than industrial or commercial zones, but the Ordinance does not recognize residents living in non-residential zones. However, if ambient noise—the general level of noise in an area—exceeds the standard, that ambient noise level becomes the allowable noise level. The Ordinance is widely viewed as both inadequate and hard to enforce, therefore the Health Department is in the process of documenting the current state of Berkeley noise problems as a prelude to revising the Noise Ordinance.



### III. GOALS AND POLICIES

#### A. Community Awareness and the Regulatory Process

##### Goal 1:

~~Improve the efficiency, coordination and effectiveness of environmental review and regulation, and provide recognition and reward to firms which exceed environmental standards.~~

##### Rationale:

~~The West Berkeley community—residents, businesses, environmentalists and others—seek to improve the existing local environmental review and regulation process. All parties seek a more “transparent” and understandable process. Environmentalists seek to assure that environmental information will be accessible, that there will be citizen participation in the policy-making process, and that any new users of hazardous materials will be carefully reviewed. Businesses seek to assure that regulation will not be so onerous as to threaten business viability, and that regulatory requirements are not duplicated or conflicting. All sectors of the community recognize the need to improve preparedness for environmental emergency, compliance with environmental law, enforcement, and clean up efforts. They also acknowledge the value of recognizing and rewarding those firms which exceed environmental standards or otherwise undertake extraordinary environmental efforts.~~

##### Policies

- ~~1.1 Provide environmental information which is accessible to the community and in a central location, through a coordinated staff effort.~~
- ~~1.2 Coordinate environmental regulation, both within the City of Berkeley, and with County, regional, state, and federal agencies, to avoid duplicative and unnecessary efforts by regulators and businesses, while meeting environmental standards.~~
- ~~1.3 Increase<sup>1</sup> citizen participation in environmental policymaking, in coordination with City staff programs.~~
- ~~1.4 Increase preparedness for environmental emergencies, utilizing existing neighborhood organizations and watch groups, as well as other resources.~~
- ~~1.5 Retrofit seismically unsafe buildings.~~
- ~~1.6 Avoid the establishment of new uses which pose unmitigable environmental hazards (see Permitted and Prohibited Uses in Land Use Element).~~
- ~~1.7 Require new uses to demonstrate an ability to meet applicable environmental laws and standards.~~

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<sup>1</sup>In this document, the terms “increase”, “reduce,” or “enhance” mean (unless otherwise specified) increase, reduce, etc. from 1990-91 levels.

~~1.8 Enforce new and existing environmental laws in coordination with non-City regulatory agencies.~~

~~1.9 Assist existing manufacturers (and other businesses and institutions) to achieve compliance with environmental standards.~~

~~1.10 Require businesses which close or leave Berkeley to clean up contaminated sites, as mandated by State law.~~

~~1.11 Recognize and reward those companies which exceed City of Berkeley or regional environmental standards, or undertake other extraordinary environmental efforts.~~

## ~~B. Hazardous Materials~~

### ~~Goal 2:~~

~~Reduce the generation of, importing importing into West Berkeley, transportation, use, storage, and disposal of all hazardous material/hazardous waste.~~

#### ~~Rationale:~~

~~It is in the interest of all West Berkeley stakeholders to see that the transport, use, and disposal of hazardous materials is minimized. Recognizing this, an increasing number of West Berkeley industries have indeed sought to minimize or eliminate the use of hazardous materials, or to use materials with a lower level of hazard. They have done so because it is increasingly expensive to handle and dispose of hazardous waste, and because there is an increasing market for products produced in an environmentally sound manner. Nevertheless, there are many firms and research organizations—large and small—which still must use hazardous materials for producing goods or providing services. Although on a much smaller scale, ordinary households use hazardous materials. Given these realities, and given the close proximity of industrial, laboratory, and residential uses in West Berkeley, the effective regulation of hazardous materials and waste is critical.~~

### ~~Policies~~

~~2.1 Reduce to the greatest feasible extent the amount and/or hazard intensity of hazardous materials and hazardous waste imported into West Berkeley, transported through West Berkeley, used or stored in West Berkeley and disposed of by West Berkeley businesses, institutions, and households.~~

~~2.2 Promote risk management and communication~~

~~2.3 Promote hazardous waste reduction and recycling~~

**~~C. Biohazardous Materials~~****~~Goal 3:~~**

~~Assure that biohazardous materials are appropriately regulated, by the City or other agencies.~~

**~~Rationale:~~**

~~Biohazardous materials even more than other environmental problems are regulated by complex network of agencies at various levels of government. The City should work to assure both that regulation covers important issues, and that businesses are not subject to unnecessary and repetitive regulation.~~

**~~Policies:~~**

~~3.1 Implement the City's new biohazards amendments to the Hazardous Materials Disclosure Ordinance~~

~~3.2 Coordinate City regulatory action with other agencies.~~

**~~D. Soil and Groundwater Contamination~~****~~Goal 4:~~**

~~Decrease the level of contamination in West Berkeley soils and groundwater.~~

**~~Rationale:~~**

~~The degree to which soils and groundwater in West Berkeley are contaminated is not fully understood at present. Unfortunately, there have been cases of contamination, the apparent result of decades when industrial, commercial, and even residential environmental practices were less than careful. Nonetheless, increased disclosure requirements, inspections, and enforcement efforts can both provide information about conditions and improve the conditions.~~

**~~Policies~~**

~~4.1 Increase contaminated site clean up efforts~~

**~~E. Air Quality~~****~~Goal 5:~~**

~~Enhance air quality in West Berkeley~~

**~~Rationale:~~**

~~Air quality in the East Bay (as measured by state standards) has been generally good in recent years. Nevertheless, the I-80 Freeway, and to a lesser extent industrial sources, continue to be significant sources of air pollution. Some air emissions are actually~~

~~or potentially hazardous to health, while others are not, but result in unpleasant odors. By working along with the Bay Area Air Quality Management District for trip reduction, and improvements in industrial emissions, air quality in West Berkeley can continue to improve.~~

### *Policies*

~~5.1 Improve communication and coordinate responsibilities for assistance, enforcement, and complaint response with the BAAQMD.~~

~~5.2 Reduce existing traffic and adequately mitigate the impact of future traffic (see Transportation Element)~~

~~5.3 Regulate the use of ozone depleting compounds.~~

~~5.4 Promote risk management and communication practices.~~

~~5.5 Reduce the importing, transportation, use and storage of materials which will become airborne hazardous waste.~~

~~5.6 Avoid the establishment of new uses which would create unmitigable odors in residential districts.~~

~~5.7 Institute tree planting as an anti pollution measure (see Physical Form Element for Implementation Measures)~~

### *F. Noise*

#### *Goal 6:*

~~Reduce irritating noise by mitigating existing noise conflicts and preventing the development of future noise conflicts.~~

#### *Rationale:*

~~There are many quiet times in West Berkeley, yet the area is also often subject to freeway and highway noise, railroad noise, and industrial noise, along with other ambient urban noise. However, there are many measures which can be taken to reduce the amount that noise impinges on "sensitive receptors" such as residents. Separating industrial and residential uses to prevent the creation of additional noise conflicts.~~

### *Policies*

~~6.1 To the extent feasible, separate noise emitters from sensitive receptors (see Buffer Standards in Land Use Element.)~~

~~6.2 Develop performance standards for new uses (see Performance Standards in Land Use Element).~~

~~6.3 Investigate problem noise sources and develop appropriate solutions through negotiation or enforcement.~~

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WEST BERKELEY PLAN

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~~6.4 Regulate truck circulation. (see Transportation Element for Implementation Measures)~~

~~6.5 Construct sound walls around freeways where feasible.~~

~~Goal 7:~~

~~Support and increase the recycling of a broad range of materials.~~

~~Rationale:~~

~~Berkeley has historically been a leader in recycling activity, and West Berkeley has historically been a location for recycling businesses. Recycling of discarded materials such as glass, paper, metals, plant debris, and construction materials is more important than ever, to help us towards a sustainable economy, to help preserve resources, and to fulfill local, State, and Federal mandates.~~

~~These issues are discussed in detail in the Source Reduction and Reduction Element, by the City to fulfill the requirements of the California Integrated Waste Management Act of 1989 and subsequent amendments.~~

~~West Berkeley is the Berkeley portion of the Oakland-Berkeley Recycled Materials Development Zone (RMDZ), a state designated zone where businesses are encouraged and assisted to use recycled materials in producing products. In this way, recycling of materials can support the goals of the Plan to retain and attract manufacturers.~~

~~Policies:~~

~~7.1 Support the growth of businesses using recycled materials in the West Berkeley RMDZ. Assist existing manufacturers and other businesses to convert to recycled materials in their production processes, and attract new businesses that use recycled materials.~~

~~7.2 To the extent feasible, and consistent with other land use goals, provide locations for recycling businesses in West Berkeley.~~

~~7.3 Implement citywide recycling programs in West Berkeley.~~

~~7.4 Encourage local businesses to use products — especially locally-made products — made from recycled materials, such as packaging, office supplies, and construction and landscaping materials.~~



## ~~IV. IMPLEMENTATION MEASURES~~

### ~~A. Implementation Programs~~

#### ~~General Programs:~~

~~1. Centralize and coordinate environmental information using measures such as an improved software program through the Emergency & Toxics Management Office, Office of Special Community Services. This will provide Community Right to Know information.~~

~~Goals and Policies Implemented: Goal 1, Policy 1~~

~~Responsibility: Emergency & Toxics Management Office~~

~~Funding/Status: Ongoing operations~~

~~2. Develop and implement work program for the Community Environmental Advisory Commission.~~

~~Goals and Policies Implemented: Goal 1, Policy 3~~

~~Responsibility: Emergency & Toxics Management Office~~

~~Funding/Status: Ongoing operations~~

#### ~~Hazardous and Biohazardous Materials Programs~~

~~3. Revise and resubmit to state Citywide Chemical Emergency Response Plan.~~

~~Goals and Policies Implemented: Goal 1, Policy 4~~

~~Responsibility: Toxics & Pollution Prevention Program~~

~~Funding/Status: 1991-92 Work Program Completed~~

~~4. Provide risk management and communication program assistance to manufacturers and other businesses.~~

~~Goals and Policies Implemented: Goal 2, Policy 2~~

~~Responsibility: Emergency & Toxics Management Office~~

~~Funding/Status: Ongoing operations~~

~~5. Work with businesses to improve existing odor problems.~~

~~Goals and Policies Implemented: Goal 5~~

~~Responsibility: Emergency & Toxics Management Office; Community Development Department~~

~~Funding/Status: Ongoing operations~~

#### ~~Air Quality Programs~~

~~6. Continue to review new and expanded uses for odorous potential.~~

~~Goals and Policies Implemented: Goal 5, Policy 6~~

~~Responsibility: City Planning Department~~

~~Funding/Status: Ongoing City operations, project applicants fees.~~

### ~~Recycling Programs~~

~~7. Provide assistance to businesses through the Recycling Market Development Zone (RMDZ)~~

~~Goals and Policies Implemented: Goal 7, Policies 1-4~~

~~Responsibility: RMDZ Program (jointly funded by Cities of Oakland and Berkeley)~~

~~Funding/Status: Ongoing Implementation~~

### ~~B. Projects~~

~~1. Map source sites and groundwater contamination plumes.~~

~~Goals and Policies Implemented: Goal 3, Policy 2~~

~~Responsibility: Emergency & Toxics Management Office~~

~~Funding/Status: 1994-95 Work Program~~

~~2. Construct acoustic berm along western edge of Aquatic Park, as recommended in Aquatic Park Master Plan.~~

~~Goals and Policies Implemented: Goal 6, Policy 5~~

~~Responsibility: Public Works Department (Parks/Marina Division)~~

~~Funding/Status: Caltrans to fund, design not yet finalized~~

### ~~C. Ordinance and Regulatory Changes to Implement Element~~

#### ~~Hazardous Materials Ordinances~~

~~1. Implement 1991 Hazardous Material Importation Regulation Act.~~

~~Goals and Policies Implemented: Goal 2, Policy 1~~

~~Responsibility: Emergency & Toxics Management Office~~

~~Funding/Status: Ongoing operations — to be reviewed in Hazardous Waste Management Plan~~

~~2. Create a hazard ranking system for use in charging fees and evaluating Use Permits~~

~~Goals and Policies Implemented: Goal 1, Goal 2; Policies 1.2, 1.6, 1.7, 2.1, 2.2~~

~~Responsibility: Emergency & Toxics Management Office~~

~~Funding/Status: To be developed in Fiscal Year 1993-94, in conjunction with rezoning of West Berkeley~~

~~3. Develop and implement standard Use Permit conditions for hazardous waste hauling in West Berkeley.~~

~~Goals and Policies Implemented: Goal 2, Policy 1~~

~~Responsibility: City Planning Department, Emergency & Toxics Management Office, Public Works Department (Traffic Engineer)~~

~~Funding/Status: Will be developed with Hazard Ranking System~~

~~4. Adopt requirement for pollution prevention planning (proposed in the Petris bill) to reduce hazardous waste generation and encourage hazardous waste recycling.~~

~~Goals and Policies Implemented: Goal 2, Policy 1~~

~~Responsibility: Emergency & Toxics Management Office~~

~~Funding/Status: Business/Generator fees (potential)~~

### ~~Soil and Groundwater Ordinances and Regulations~~

~~5. Implement Non-Point Discharge Program which regulates runoff of water into storm sewers and Bay.~~

~~Goals and Policies Implemented: Goal 3, Policy 1~~

~~Responsibility: Public Works (Engineering) with Emergency & Toxics Management Office~~

~~Funding/Status: Being implemented using business Fees~~

### ~~Air Quality Ordinances and Regulations~~

~~6. Work with Bay Area Air Quality Management District to assure that BAAQMD Clean Air Plan Transportation Control Measures and Stationary Source Control Measures are implemented in a fair and effective manner.~~

~~Goals and Policies Implemented: Goal 5, Policies 1,2~~

~~Responsibility: City Planning Department, with Community Development Department~~

~~Funding/Status: Ongoing operations.~~

~~7. Implement ozone depletion Ordinance through preparation of self-enforcement and waiver materials.~~

~~Goals and Policies Implemented: Goal 5, Policy 3~~

~~Responsibility: Emergency & Toxics Management Office~~

~~Funding/Status: Implementation Program submittal to Council 2/92—numerous CFC inspections already conducted.~~

### ~~Noise Ordinances~~

~~8. Revision of Noise Ordinance~~

~~Goals and Policies Implemented: Goal 6, Policies 1 and 2~~

~~Responsibility: Health & Human Services Dept.~~

~~Funding/Status: To be completed mid-1994~~

~~9. Improve the consideration of noise in Use Permit decisions—particularly for new residential or industrial uses—by measures such as performance standards, standard Use Permit conditions, or other appropriate mechanisms.~~

~~Goals and Policies Implemented: Goal 6, Policy 2~~

~~Responsibility: City Planning Department~~

~~Funding/Status: To be included in rezoning of West Berkeley~~

## ~~D. Studies~~

### ~~General Studies~~

~~1. Review benefits and drawbacks, including potential to jeopardize companies' existence (see Economic Development Element, Policy 1.1) in Berkeley, from requirements for increased public notification for environmental review, particularly when related to hazardous materials.~~

~~Goals and Policies Implemented: Goal 1, Policies 2,3~~

~~Responsibility: Emergency & Toxics Management Office with City Planning Department~~

~~Funding/Status: Source not yet identified~~

~~2. Study possibility of extending tax credits or other incentives for pollution prevention, source and toxic use reduction.~~

~~Goals and Policies Implemented: Goal 1, Policies 9,11~~

~~Responsibility: Emergency & Toxics Management Office with Community Development Dept.~~

~~Funding/Status: Source not yet determined~~

### ~~Hazardous Materials Studies~~

~~3. Research more comprehensive Hazardous Materials Transportation Ordinance, to extend regulation beyond BART right-of-way.~~

~~Goals and Policies Implemented: Goal 2, Policy 1~~

~~Responsibility: Fire Department, with City Planning Department, Public Works Department (Traffic/Engineer)~~

~~Funding/Status: Source not yet identified~~

~~4. Research a mandatory commercial hazardous waste recycling Ordinance, including costs to Berkeley businesses and effects on their competitiveness.~~

~~Goals and Policies Implemented: Goal 2, Policy 3~~

~~Responsibility: Toxics and Pollution Prevention Program~~

~~Funding/Status: Source not yet identified~~

~~Noise Studies~~

~~5. Identify sources of night noise, and develop appropriate mitigations when possible.~~

~~Goals and Policies Implemented: Goal 6, Policy 3~~

~~Responsibility: Health & Human Services Dept. with City Planning Dept., Community Development Department~~

~~Funding/Status: Source not yet identified~~

## 4

## PHYSICAL FORM

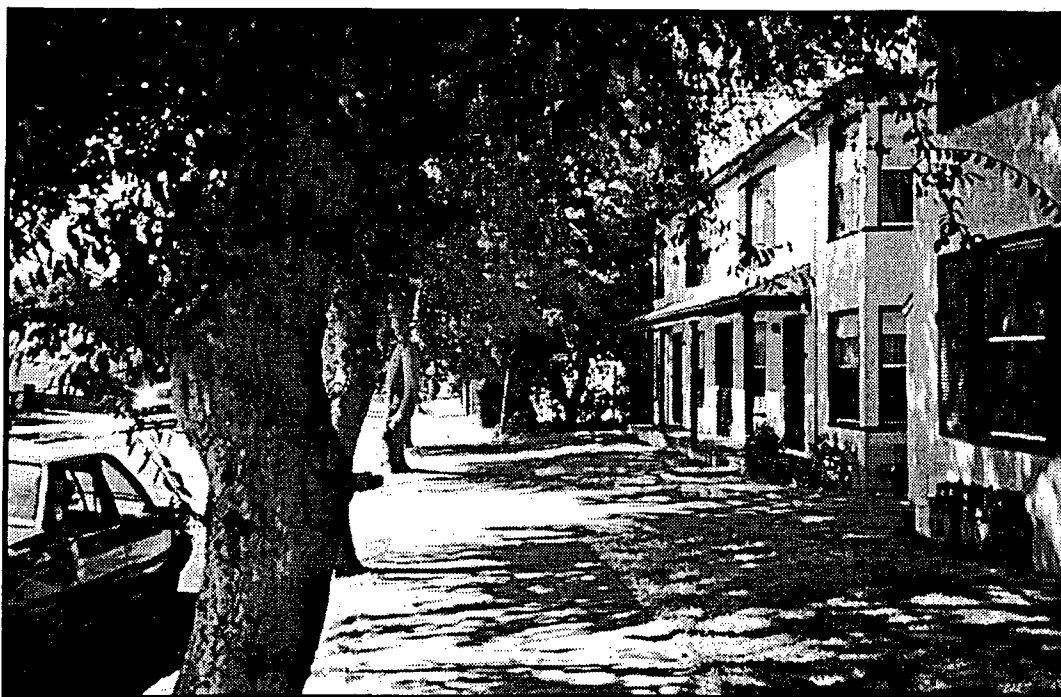
## I. STRATEGIC STATEMENT

West Berkeley is a unique urban environment within Berkeley (and indeed the East Bay). West Berkeley's built environment encompasses Berkeley's widest range of building and site types—from massive "heavy" industries to single family houses on small lots. It encompasses an equally wide range of building dates—from the 1870's to the 1990's—the result of a virtually continuous process of building and rebuilding. West Berkeley's built form is the product of decades of additions and subtractions, not of the vision of single developer. This incrementally achieved richness should be conserved and improved as West Berkeley continues to evolve.

West Berkeley is home to striking industrial architecture, historic Victorian homes, and urbane new commercial buildings, as well as purely utilitarian structures and highway-oriented "strips". Industrial West Berkeley's bold forms and sharp edges communicate a message of motion and machine force. Large low buildings on large sites give a valuable sense of (relative) openness in industrial areas. By contrast, the dense weave of smaller structures in mixed use areas convey the sense of a busy workshop. The parks of West Berkeley despite their deficiencies are key open spaces softening the environment.

The West Berkeley Plan's design and physical form policies accept and celebrate this diversity of form and use, while recognizing that design can be improved within any given use type and geographic area. On the physical level, the Plan seeks to integrate historic preservation and urban design policies, not treat the two as separate issue areas. On the functional level, the Plan's and the Element's policies seek to continue and accentuate West Berkeley's history as a successful multi ethnic, multiracial, industrially-based community. The West Berkeley Plan's design and historic policies and programs thus seek to preserve the historic and urban character of West Berkeley in the context of—not in opposition to—its land use and economic development goals. The Plan's premise is that the character of West Berkeley is the product of West Berkeley's buildings and landscapes, the activities carried on in and around the buildings and landscapes, and the people who live and work here. Thus, the whole Plan—not just this Element is broadly





~~"preservationist," and clearly in contrast with the development path some Bay Area communities have chosen.~~

~~Yet West Berkeley's urban landscape can be made better—more welcoming of walkers and bicyclists, more gentle with trees and landscaping. The area does suffer from certain problems in the built environment—from pedestrian-unfriendly commercial areas, from unmarked gateways to the area which weaken its sense of place, from overly harsh transitions between different types of areas, and from underutilized parks. Moreover, while the great majority of West Berkeley buildings will remain over the course of the Plan period, some new ones will be added, and some old ones subtracted, and these changes must be integrated as much as possible into the West Berkeley urban environment. These Plan policies therefore seek to further define and develop the urban form of all parts of West Berkeley, to highlight West Berkeley's historic character, revitalize its parks, organize its commercial corridors, intensify the use of commercial nodes while making them more pleasant for pedestrians, and to improve the design of new industrial, commercial, and residential buildings.~~

## II. BACKGROUND

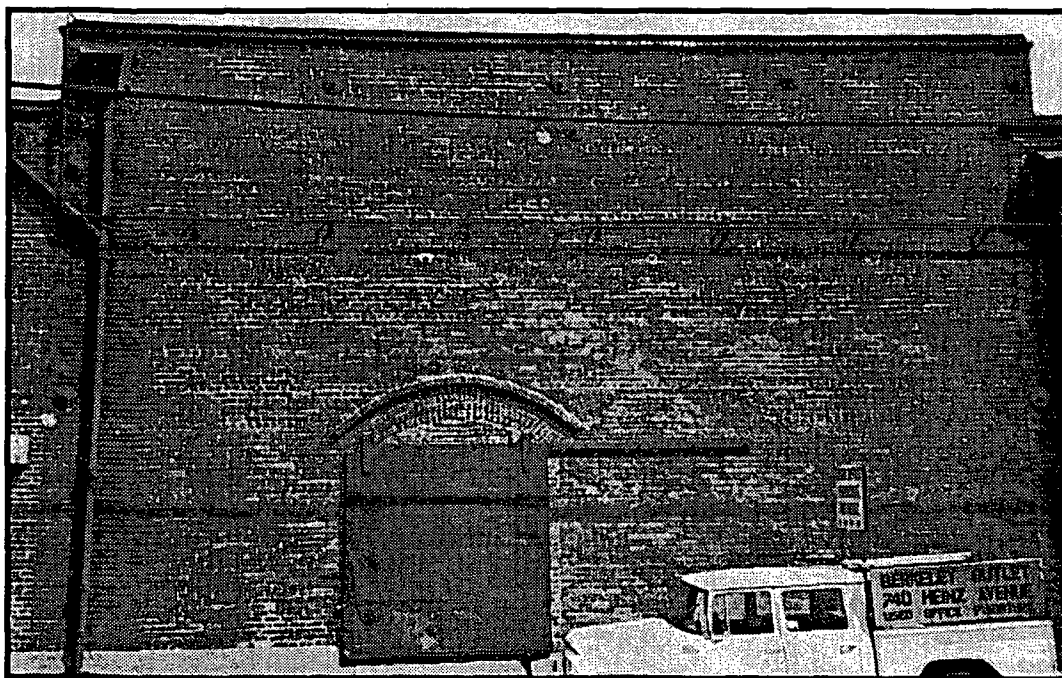
### A. West Berkeley's History

West Berkeley's history is intertwined with, yet clearly a quite distinct part of, the broader history of Berkeley in the Bay Area. West Berkeley originated as the community of Ocean View, separated by miles of fields from the Campus-based community of "Berkeley." Oceanview and then West Berkeley was a working class community whose residents held jobs in local factories, while "uptown" Berkeley was dominated by academics and professionals. By the end of the 19th century, West Berkeley was a predominantly immigrant community, but native born Whites dominated most of the rest of Berkeley until World War II. Even today, the residents, jobs, and buildings of West Berkeley are distinctive within Berkeley. Thus West Berkeley's history demonstrates both tension with and participation in the broader city of Berkeley.

The periods of West Berkeley's history and development might very roughly be divided into 6 major periods:

- 1) 1853-1878 Pre-incorporation Initial Settlement of Ocean View
- 2) 1878-1906 "Nineteenth Century" Development;
- 3) 1906-1941 Twentieth Century Growth;
- 4) 1941-1945 World War II Boom
- 5) 1946-1978 Post War Stability and Decline;
- 6) 1979-\_\_\_ Contemporary Restructuring and Resurgence

This section will outline key social, political, and architectural developments in each period.



## ~~1. 1853-1878 Pre-Incorporation Initial Settlement of Ocean View~~

~~San Francisco was already an "instant city" of at least 50,000, and Oakland a budding town when Oceanview's first American settlers arrived in 1853. Jacob's Wharf, established in 1853 near the foot of Delaware St. was the port of entry into the community. It was quickly followed by an inn, a grocery store, and a school (at the Franklin School site). Ocean View in this period developed primarily in the area between (current) Delaware St. and University Ave. It served as an agricultural and industrial (and commercial) center, supplying San Francisco and Oakland. In 1860, the area reported 69 residents, most of them working on area farms. By 1874, there was a horsedrawn stage connecting Ocean View and Berkeley.~~

~~Ocean View was also an industrial center virtually from its beginning. The first factory—the Pioneer Starch and Grist Mill—opened in 1855. It would be joined by enterprises such as a soap plant and a gunpowder maker. Industrial development got further boosts with the 1876 development of a "shoreline railroad" (the current SP mainline) and of gas mains in 1877 (well before central Berkeley got this service).~~

~~Few structures from this era remain. One which does is Higgins' Grocery at 834 Delaware—a simple 2 story redwood building which originally served as both inn and grocery store. The storefront now occupied by the Carpet Center (875 University) dates from an 1875 commercial development.~~



## ~~2. 1878-1906 "Nineteenth Century" Development~~

~~Oceanview's decision in 1878 to jointly incorporate as a city with Campus-based Berkeley (which was also then unincorporated) would profoundly shape its history. It~~





may seem odd that Ocean View chose to incorporate with another community with clearly different residents some 2 miles away. In the 1870's before electric trolleys or automobiles linked the two areas the separation was substantial. The communities decided to join forces in part because they both feared being absorbed into Oakland, which was seeking to annex the area. Community leaders also sought improved water service, sewers, and law enforcement. However, the joint incorporation initiated an era in which East and West Berkeley fought over how taxes should be levied and used, where City Hall should be located, and to what extent alcohol should be regulated. East Berkeleyans attempted to impose local prohibition on Berkeley in 1899, and were successful in doing so in 1909 (ultimately the prohibition grew so stringent that Oakland grocery stores could not deliver alcohol to Berkeley customers). The City Hall building, for example, was physically moved several times until settling in its current Downtown location, considered to be "neutral" territory between East and West.

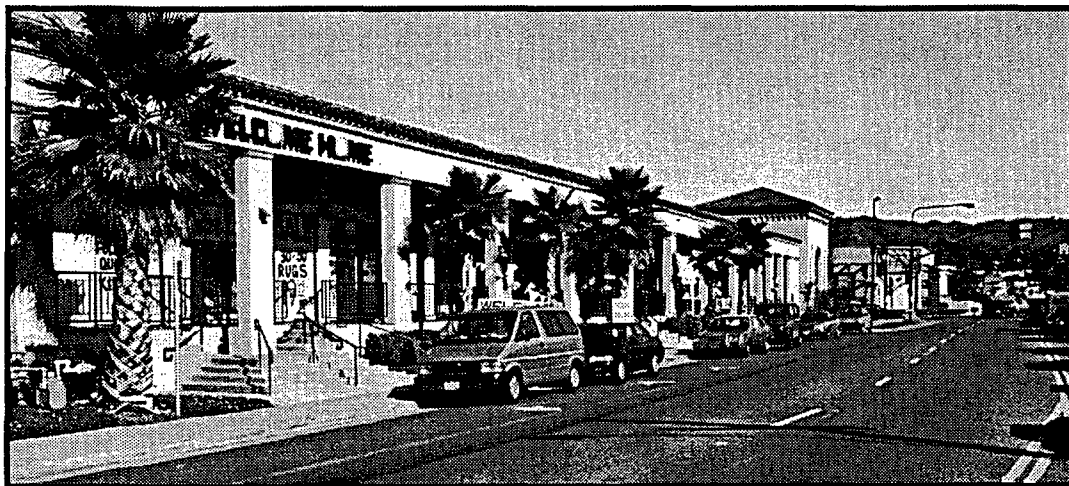
West Berkeley's economic development accelerated in this period, as its industrial life came increasingly to overshadow (but not completely eliminate) its agricultural life. Improved transportation was a significant factor—the building of a railroad station in 1878 at Delaware St. (which would later be joined by Corbin Station north of Gilman) was an important stimulus. Even more important was the 1891 opening of an electric trolley line on San Pablo Ave., followed by a line on 9th St. (the reason for that street's great width). 1891 also saw the inauguration of trolley service on University Ave., but east-west routes were never as important to West Berkeley as north-south ones. New and expanded enterprises included a lumber yard with a pier 1/3 of a mile long for shipping lumber, the Manassee Tannery, and a cement works. By the end of the period, Cutter Labs and California Ink (now Flint Ink) had begun to establish their manufacturing on their current sites. A very few other West Berkeley businesses can trace their origins to this era—Spenger's began frying fish (at its current location) in the late 1880's.

West Berkeley's population grew with its economy. By 1900, the area's population had reached 1,544, or about 12% of the city's 13,000 population (West Berkeley today represents 7% of Berkeley's population). In that year, for the first time, a majority of the West Berkeley population was foreign born including Finns, other Scandinavians, and Germans. Just as today West Berkeley has the city's most diverse population, it was in the late 19th and early 20th Century the center of the foreign-born population.

Incorporation was thus followed by both residential and industrial growth. In 1874, the Berkeley Land Title and Improvement Association was formed to sell lots in West Berkeley, but the promotion had little success until 1878. But the succeeding years saw a proliferation of Victorian cottages, as well as a few grander structures. One modest cottage is the Italianite 2105 5th, erected in 1886. Twin to its southerly neighbor, in the 1890's it housed Thomas F. Dowd, an English immigrant framemaker and Berkeley town trustee from the 6th Ward. 5th St., 6th St., and the block of Delaware between 5th and 6th are particularly rich in homes from this era. Perhaps the grandest structure of the era is the currently abandoned Niehaus House at 7th & Channing. Built in 1889 on a lot originally incorporating a full block, the flamboyant woodwork advertised the products of Niehaus' planing mill a few blocks away. The late 19th Century also generated the Gothic spires of St. Procopius' Church at 8th & Hearst, and Church of the Good Shepherd at 9th & Hearst. Changing technological needs has all but eliminated factory buildings from the period, although there are some remaining portions from California Ink's original plant.

### 3. 1906-1941: 20th Century Growth

West Berkeley became an integral industrial and residential part of the Bay Area metropolis in the early 20th Century. As noted above, the early 20th Century saw growth in West Berkeley even before the 1906 earthquake. Expanding industries were relocating from San Francisco to the East Bay shore, with Standard Oil's development of a "new town" of Richmond being the most spectacular example. But the 1906 San Francisco earthquake and fire spurred greatly accelerated economic and population growth. Berkeley's population more than tripled between 1900 and 1910, from approximately 13,000 to some 40,000, making it one of the fastest growing cities in the country (no



## WEST-BERKELEY PLAN

separate figures are available for West Berkeley, but numerous houses were built here in this period). Berkeley was the region's booming fringe suburb. Over 30 factories were constructed in Berkeley in the 3 months after the earthquake (Macaulay Foundry is one example). The Census of Manufactures found 84 factories in 1909.

Rapid although somewhat slowed growth continued between 1910 and 1930. Berkeley's population doubled again by 1930 to 82,000, when West Berkeley reached 5,900. By 1929, there were 173 manufacturers with some 3,400 production workers (the available employment statistic). It was in this era that national manufacturers such as Colgate, Heinz, and Durkee Foods established their California branches in Berkeley (earlier firms were usually locally based).

Many of the buildings of this era remain today. The added factories filled what was then the waterfront (well east of today's shoreline) and blocks along railroad tracks and spurs. The Pfister Knitting (1906), Kawneer (1913), and Heinz Buildings (1929) are all landmark-designated examples of the industrial growth of the era. The area west of 7th St. between Dwight and Heinz—the Plan's Mixed Manufacturing District—was first developed in this era as “an early industrial park”. Although residential growth was somewhat scattered, and not in large scale tracts, 1900-1910 saw substantial development in the University-Dwight and Grayson-Heinz areas. By the 1920's homebuilding had moved north and become more systematic—19 of the 25 houses on assessor's block 2125 (9th-10th, Virginia-Cedar) were built between 1919 and 1928. Hundreds of these “workingmen's homes” from these decades survive in West Berkeley, forming the fabric of most of residential West Berkeley. 2515-27 10th St., for example, is an intact group of “Mission cottages” built between 1925 and 1935. Yet not all were owner-occupied: the 1940 Census found virtually an even split between owners and renters in West Berkeley.

Socially, West Berkeley was dominated by White working class immigrants, but not by any one nationality. Over time, Italians and Mexicans (counted as White in the 1940 Census) joined the Finns and Northern Europeans who dominated earlier. However, the Non-White population in 1940 was less than 3% of West Berkeley's total.

Some of the Finns gathered at Finn Hall at 1819 10th St., later known as Finnish Comrades Hall, after non-communist Finns split and established another hall. Others worshipped at the Finnish Evangelical Lutheran Church on Channing between 8th and 9th. Another kind of gathering place were the backyard public saunas which some Finns established in this pre-zoning era. Finns would later play an important role in founding the Berkeley Coop grocery.

Yet while all parts of Berkeley benefited (in that era's perception) from growth, political issues remained between West and East Berkeley. West Berkeley made a serious, though unsuccessful attempt to secede from Berkeley in 1908. One major reason for the effort was its incorporation in the “reform” City Charter of 1909 of a complete prohibition on bars and alcohol sales in Berkeley, more than a decade before national prohibition. The new Charter also replaced 7 ward representatives on the City Council with 5 at large ones. Even as the Charter was approved by voters Citywide, West Berkeleyans voted it down. Political differences were again highlighted in 1911, when Socialist J. Stitt Wilson was elected Mayor on the strength of winning every precinct west of Shattuck Ave.



The Depression of the 1930's reversed industrial growth—production employment in manufacturing shrank. But to compensate for the economic slowdown, the federal government sponsored many important public projects. Aquatic Park was created this way, as was the Eastshore Highway and the Ashby Ave. extension and University Ave. overpass which accessed it.



#### 4. 1941-45 World War II Boom

World War II was a critical event in the Bay Area generally, and West Berkeley specifically. The War vastly increased the population of the Bay Area, brought large numbers of African-Americans to the region for the first time, and greatly strengthened its industrial base. West Berkeley participated in this boom as an integral part of an East Bay industrial belt now stretching virtually unbroken from East Oakland to Richmond. Berkeley, however, did not suffer the massive overcrowding and strain on public facilities that plagued mushrooming cities such as Richmond and Vallejo. A new "Shoreline Railway" from West Oakland to the Richmond shipyards was opened, using recycled New York City elevated train cars to carry its passengers. The War resulted in the development of the last undeveloped areas of West Berkeley—generally north of Gilman St. and around the newly extended (to the Eastshore Highway) Ashby Ave., where Potter Creek was still open.

The War produced instant industrial and residential growth in West Berkeley. The building which now houses Weatherford BMW at the foot of Potter St. was built in 1942 by the U.S. Navy as a foundry making parts for the Richmond shipyards. Other already established industries—such as Pacific Steel Castings and Berkeley Steel Construction (now Berkeley Forge & Tool) near 2nd and Gilman—expanded dramatically to meet wartime needs. West Berkeley's manufacturers generally boomed on the strength of wartime orders.

West Berkeley's population jumped from 6,100 in 1940 to over 8,200 in 1944, with much of the gain being in Codornices Village<sup>1</sup>, wartime housing adjacent to Albany Village. The war's presence was also felt at 9th & Ashby, where Camp Ashby was established as a training site for Black soldiers in their segregated units. More permanently, the War established West Berkeley's first large African-American community. West Berkeley's 1940 population was only 2% Black, and still had substantial contingents of "foreign born Whites", especially Italians, Mexicans, and Finns. Codornices Village where many of the blacks lived was originally to be closed to blacks (as many wartime projects were). However, pressure from the Berkeley Interracial Committee, backed by Governor Earl Warren, opened it to them. Blacks faced equally difficult conditions in the private housing market, where then legal restrictive covenants prevented blacks from buying, and many landlords openly discriminated against black would-be renters. By 1950, the area was 30% Black, a proportion it has more than maintained ever since.

### 5. 1945-1978 Post War Stability and Decline

The post-war era brought stability to West Berkeley manufacturing, but change to its population. West Berkeley was now a mature area—not part of the (then) declining regional core, but certainly no longer on the suburban fringe. Manufacturing employment and (real dollar) value added would continue to rise through the Census of Manufactures of 1972. There was substantial industrial building in the late 1940's and 1950's, though by the 1960's construction had declined. West Berkeley's residential population became increasingly African-American, with a Black majority found in 1970 and 1980. In this period, the City Council (and some others) increasingly perceived West Berkeley as blighted and in need of redevelopment, occasioning many political struggles.

Throughout this period, there were battles over what parts of West Berkeley would be designated for industry, what parts for residences. These battles were presumably spurred by the fact that—for the first time in West Berkeley—there were no more undeveloped areas. The relative economic strength of industry in the period, and economic weakness of the residential sector also probably spurred the calls for industrial expansion.

From the late 1940's through the mid 1950's West Berkeley manufacturers sought to have parts of the residential area south of University Ave. zoned for manufacturing. In 1955, when Berkeley's first Master Plan was passed, the City opted for a more modest approach—designating the area between 4th and 6th Streets as a Special (light) Industrial zone. At the same time, however, the Council approved the demolition of Codornices Village's wartime housing, removing over 1,000 rental units with over 3,500 residents. The Council argued that the land was needed for industrial expansion, but some felt the fact that Codornices tenants were largely Black spurred the demolition. The issue was again joined in 1967 when the City, led by manufacturer Mayor Wallace

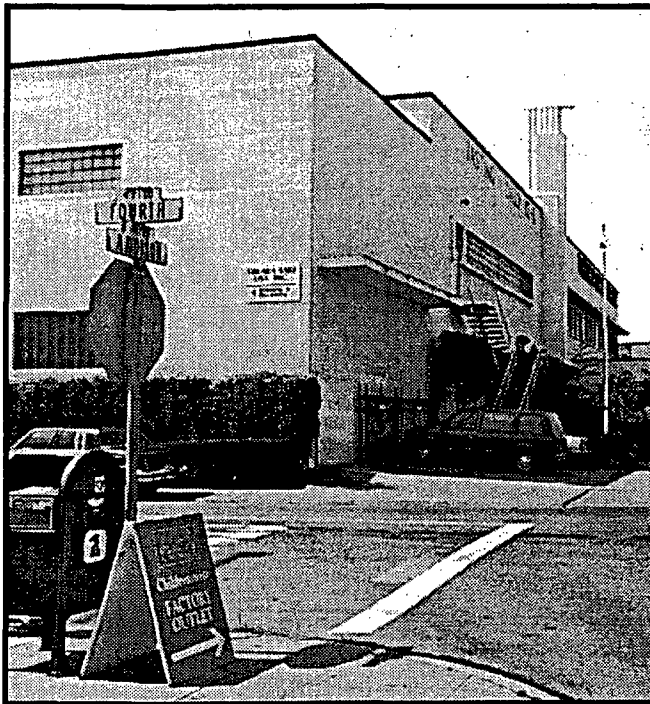
<sup>1</sup>Codornices Village was built in part on a site mapped for development around a small oval-shaped park, analogous to South Park in the South of Market area of San Francisco. The only remaining trace of this proposal is the block-long street named Park Way in the Manufacturing District (between Gilman and Harrison, 3rd and 4th) which was to lead into the park. One notable resident of Codornices Village (in his childhood) was Bobby Seale, later a leader of the Black Panther Party.

Johnson designated the "West Berkeley Industrial Park". This issue continue to play itself out into the 1980's and is discussed under the next historical period.

The strength of manufacturing in Berkeley was apparent in this period. The number of plants grew from 187 in 1947 to 263 in 1963, declining to 231 by 1972. In 1967, the peak year for large plants, 86 reported employing 20 or more. In 1964, Berkeley geographer James Vance wrote that the region's growth industries were the East Bay's industries.

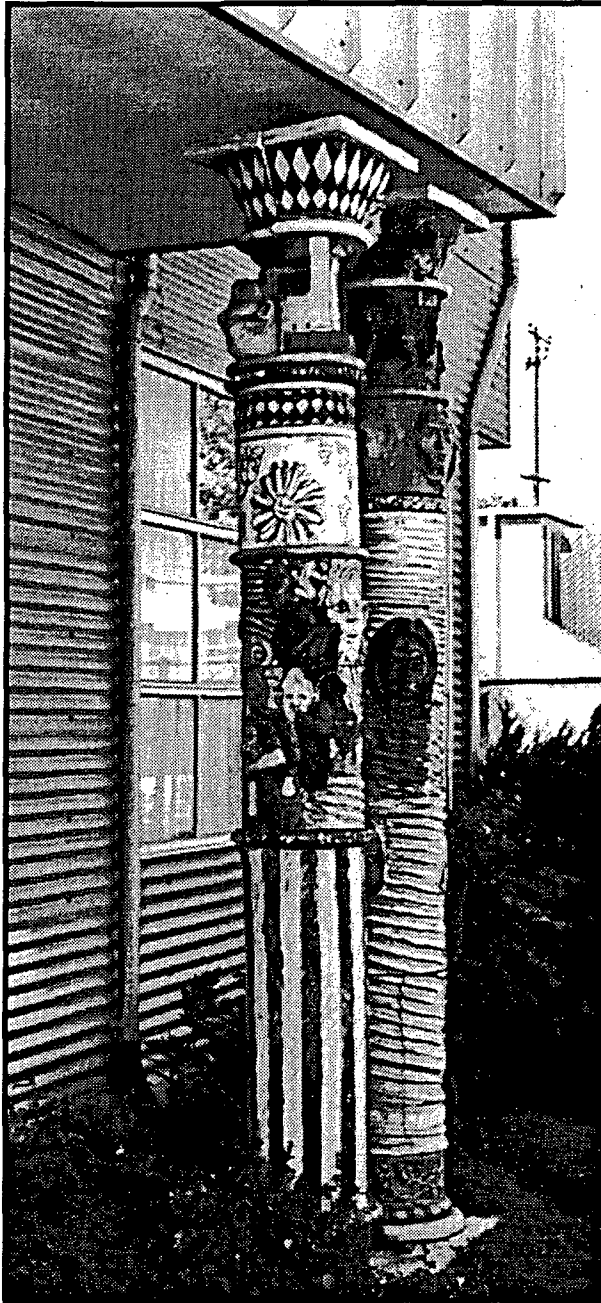
Residentially, small (often 5-9 unit) apartment buildings dominated constructed in this era. West Berkeley was in part reshaped by the wave of low rise apartment building which swept the East Bay between roughly 1955 and 1965. In 1967, West Berkeley's residential core was downzoned from R-4 (multi-family) to R1-A (limited two-family). Rezoning to R-2 as part of a Flatlands wide downzoning had been recommended in 1962 by the City Planning Department, but action here was delayed. The area between Delaware St. and Dwight Way, from 6th St. to San Pablo Ave. had the most apartment construction. Ethnically, West Berkeley was 46% Black in 1960, more so in 1970 (Census errors invalidate West Berkeley's statistics in that year). The West Berkeley Neighborhood Plan proposed in 1967 called for creation of service facilities such as the West Berkeley Senior Center and placement of traffic diverters. Much of the plan was realized.

This era was architecturally dominated by "modernist" ideas. Stylistically, buildings were radically simplified in the effort to achieve the pure functionality much valued



in this era. One notable industrial building is Takara Sake's off 4th & Addison, built for Challenge Butter & Cream in 1947 in streamline moderne style. Other industrial building examples from the period include the reinforced concrete buildings on the Colgate site, constructed between 1946 and 1960. The unusual round building occupied by Berkeley Equipment Rental (2747 San Pablo Ave., near Grayson) was built in 1952 as a Mel's Drive In. Allston House at 2121 7th (near Addison) is a 1967 publicly-assisted (but privately owned) apartment house.





## 6. 1979 — Contemporary Restructuring and Resurgence

The most recent phase of West Berkeley's history has been marked by major changes in the nature of the area, although many continuities remain. This "period" brings us to the circumstances which generated the need for the *West Berkeley Plan*. The manufacturing base has shrunk, though it remains substantial with many strong firms. New commercial areas, largely catering to regional shoppers arriving by Freeway, have developed. West Berkeley has increasingly gained an image as a desirable place to live, with predictable effects on housing prices. In this context, unsubsidized housing development has largely shifted to owner-occupied housing, although some live-work rental units have been created. Clearly, the "history" of this period is not over — the *West Berkeley Plan* itself will be a part of it.

Changing political, social, and economic conditions changed the directions of City policy. In 1979 (and again in 1982) the City Council amended the *West Berkeley Redevelopment Plan* from a strictly industrial to a mixed-use orienta-

tion. New low income housing was built, and most remaining historic housing in the Redevelopment Area was rehabilitated, although not without generating new industrial-residential issues. This era's issues increasingly became how vacated industrial sites should be reused, rather than what non-manufacturing areas should be designated for industrial expansion. Indeed, the mid-1980's reuse of the large former Durkee Foods site near 7th & Heinz primarily for office and laboratory uses pointed up the need for area-wide planning policies, and led to the initiation of this *West Berkeley Plan*.

The volume of new building in the last 15 years has not been as large as in the preceding decades. Perhaps future historians will judge it to be of higher quality — certainly contemporary architects have had more complex, decorative, and historically

mindful intentions than their immediate predecessors. One notable public building is 1981's West Berkeley Senior Center. San Pablo Avenue received a rare infusion of new retail space with the development of a gourmet food "mini-mall" at the corner of Cedar. Industrial development has been relatively limited, though a number of companies have added to their facilities. Two major examples have been Pacific Steel Casting's Plant #3 (1979) at 2nd & Camelia, and a research and development facility at Miles (1985). Much of the period's architectural activity has been in the reuse of old buildings at sites such as 4th St. Center (4th north of Hearst), Parker Plaza (9th & Parker), in the remaining Durkee Building (Heinz west of 7th) and Acme Bakery at 9th & Pardee.

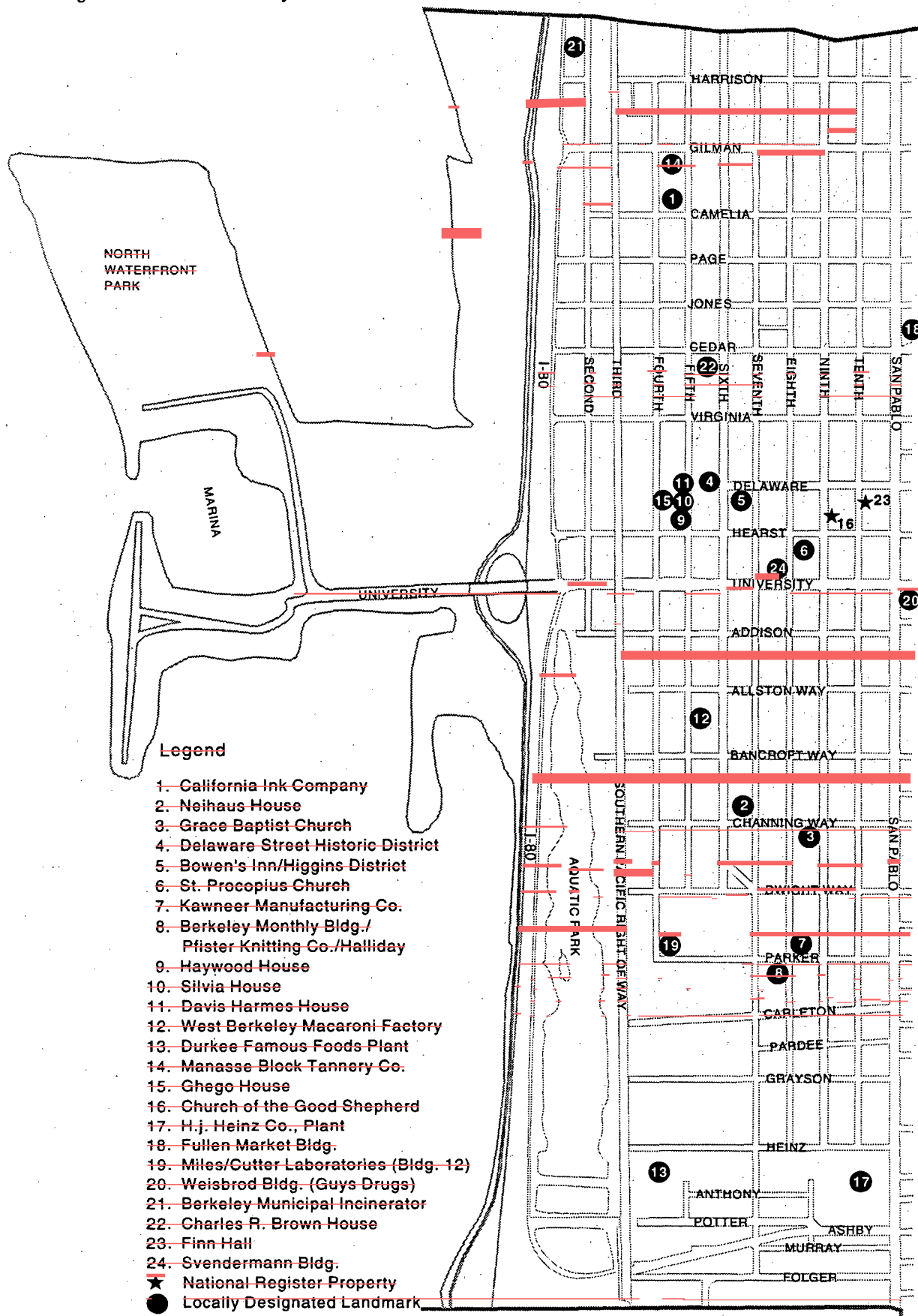
By historical standards, there has been relatively little residential building in this period. Publicly assisted housing and live-work have been the leading forms. Live-work spaces were initially created by conversion of industrial buildings, but are increasingly created through new construction. There have also been a few conventional residential condominiums built.

This Element now looks at what the juxtaposition of these variegated buildings, the streets they are on, and the open spaces between them have made as the physical form of contemporary West Berkeley.

### **Major Historic Documentation**

- Berkeley Architectural Heritage Association
  - State Historic Resources Inventory (unpublished, Berkeley, 1979)
- Berkeley Architectural Heritage Association
  - Discovering West Berkeley—A Self-Guided Tour (Berkeley, 1987)
- Warren Campbell
  - Berkeley Downzones the Flatlands (Syracuse, 1973)
- Warren Campbell
  - Berkeley Initiates a Master Plan (Syracuse, 1973)
- City of Berkeley, Planning Department
  - Historical Trends in Population and Housing Characteristics, Berkeley, 1940, 1950, 1960, 1970 (Berkeley, 1972)
- Lawrence Crouchett, Lonnie G. Burke III, Martha Kendall Winnacker
  - Visions Toward Tomorrow—The History of the East Bay Afro-American Community, 1852-1977 (Oakland, 1989)
- Karen Jorgenson-Ismaili
  - A History of West Berkeley (Berkeley, 1983)
- Harriet Nathan & Stanley Scott, editors
  - Experiment and Change in Berkeley, Essays on City Politics, 1950 to 1975 (Berkeley, 1978)
- George Pettit
  - Berkeley: A History (Oakland, 1977)
- W.J. Rorabaugh
  - Berkeley at War (New York, 1989)
- Sanborn Map Company
  - Berkeley Fire Insurance Maps (Chicago, 1903, 1911, 1929)
- United States Bureau of the Census
  - 1940 Census of Population and Housing (Washington)
- United States Bureau of the Census
  - Census of Manufactures, Census of Manufacturing (various years, 1899 to 1987)
- James Vance
  - Geography and Urban Evolution in the Bay Area (Berkeley, 1964)
- Mark Wilson with photographs by Monica Lee
  - A Living Legacy—Historic Architecture of the East Bay (San Francisco, 1987)
- Charles Wollenberg
  - Vista College Berkeley history lectures, 1988
- Writers Project of the Works Projects Administration
  - Berkeley—The First 75 Years (Berkeley, 1941)

Figure 4-1: West Berkeley Landmarks





## ***B. West Berkeley's Places — An Overview of Subareas and Strategic Locales***

The various land uses, scales of building, street grids, histories, and levels of traffic, and density of tree cover in different subareas of West Berkeley give them distinctly different urban design characters. These existing conditions form the context for both public and private development of buildings, street improvements, and other constructions. This analysis now highlights some of the major conditions and issues throughout West Berkeley by looking at 5 types of areas. Obviously, there are internal differences within the areas — this section seeks to capture the major features and issues in each. It is acknowledged that, because the conscious shaping of all of West Berkeley as a physical unit is a relatively new activity, and because this Plan divides West Berkeley in a new way, there remains much analytical work to be done for these areas. The 5 major area types are:

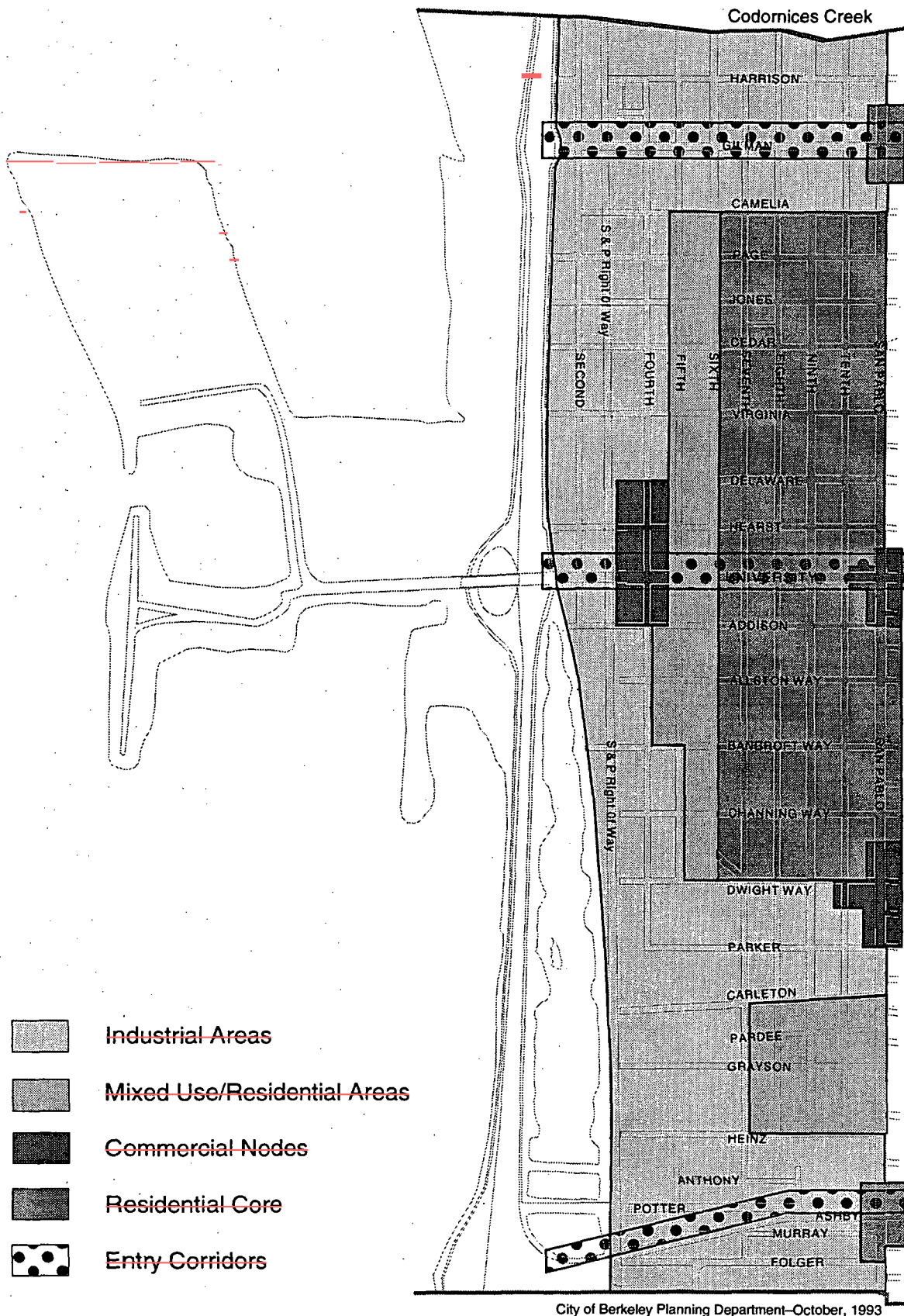
1. **Commercial nodes** — Areas of commercial concentration such as 4th & Hearst, University & San Pablo
2. **Entry Corridors** — such as the University Ave. gateway and other Freeway exits
3. **Mixed use/Residential** — districts along 5th St. and around Grayson St.
4. **Industrial areas** — general industrial districts (the Manufacturing and Mixed Manufacturing Districts) and the Mixed Use/Light Industrial districts.
5. **Residential Core** — The districts with Residential (R) zoning.

This section describes existing physical conditions and suggests problems or issues, and opportunities for physical action in various of the subareas of West Berkeley. Because of the large size of West Berkeley and the many distinct areas within it (described below), this section does not attempt to describe existing physical conditions across the whole of West Berkeley. However, the Goals and Policies section does develop concepts to link all of West Berkeley together as a physical unit (without losing subarea distinctiveness). These concepts are based on the issues and opportunities identified for specific areas in this section of the Element.

### **1. Commercial Nodes**

The commercial nodes — the concentrated retail districts and those locations which could become such — are undoubtedly special places within West Berkeley. A commercial node is defined as a commercial area small enough for people to comfortably walk around in (thus we treat University at 4th and at San Pablo as 2 separate nodes). The nodes serve as places where West Berkeley residents gather, and which attract non-residents to the community. For many people, they symbolize the physical character of West Berkeley. Developing concentrated, compact commercial districts serves both the Plan's land use goals — creating a district that can be served by transit and centralized parking, preventing retail from sprawling into areas needed by industrial uses — and physical goals such as creating areas enjoyable for people to walk around in. In addition, most of the commercial nodes have important historic elements, giving them the potential to be places where large numbers of people can learn of West Berkeley's history. The commercial nodes are thus deserving of special attention in crafting an urban design concept for West Berkeley.

Figure 4-2: Physical Form Subareas of West Berkeley



One proposal this Element makes — building off the Preferred Land Use Concept — for all nodes is to require retail as the ground floor use in the nodes, allowing a variety of upper story uses. This requirement will strengthen the nodes and prevent the intrusion of uses (e.g. a monolithic office building) which break up the node's streetlife.

#### a. San Pablo & University

San Pablo and University is the crossroads of West Berkeley — where its 2 busiest streets, its 2 busiest bus lines come together. Yet the blocks around this busy intersection also form the one true neighborhood-oriented commercial district in West Berkeley (although many stores also attract a regional clientele). Developed initially in the early 20th Century trolley era, the district has often suffered difficulty competing and social problems in the automobile age.

There are no precise borders to the district, since commercial zoning stretches in both directions for blocks along San Pablo and University. Uninterrupted retail stores reach north along San Pablo to Hearst, south to Addison and just past, east perhaps 1/2 block along University (to the West Berkeley Library) and west to about 9th St. (Freight & Salvage is an outlying "retail" site on Addison east of San Pablo). Within the area one finds a small general grocery, groceries specialized by ethnicity, groceries specialized by type of food sold (cheese, canned goods), a post office, a drug store, a bank and a check cashing company, low-priced restaurants and thrift stores, as well as a stationery store and an artists supply store. The University to Addison block of San Pablo has continuous 1 to 2-story retail frontage, is the heart of the neighborhood serving business district, and clearly attracts the most pedestrian traffic. Property owners have made little attempt to highlight the distinctive brick and wood facades, even on the landmark drug store at the southeast corner of University and San Pablo. Scattered properties have upper story







uses—an apartment building at 1970 San Pablo, upstairs offices on University between 9th and 10th, but these are relatively rare.

Perhaps nowhere else in West Berkeley is the physical gap between the real and the ideal more clear. Yet the challenge for redesigning the district will be to make it physically more pleasant, without driving away the low-moderate income clientele it largely serves. One recent important interior improvement was made by the bulk grocer Smart & Final, which removed the false ceiling covering the magnificent 1920's theatre ceiling of what was then the Rialto Theatre. Developing further appropriate approaches for the area will take careful analysis, but some preliminary ideas can be suggested. Plugging the "hole" at the northeast corner of University & San Pablo (left by the vacation of the Chevron station and the scuba shop) with a strong, street oriented building is a clear priority. As of August, 1993, retail development has been approved for the site, but construction is projected to proceed in phases. Encouraging new housing through methods such as modified parking requirements will be important at this node.<sup>1</sup> Slowing traffic on these major arterials will be difficult, but if any methods (through additional traffic signals or other means) could be found, it would no doubt improve the "ambience" of the area. Improved bus shelters—perhaps with historical or artistic posters—would be very valuable at this main transfer point. Facade improvement projects could be quite important here. Billboards which loom over the intersection could perhaps be removed.

<sup>1</sup> It is instructive to note that virtually none of the mixed-use retail/residential buildings anywhere on San Pablo Avenue meet current parking standards, and that they could not be built if they had to meet them. Some provide no parking whatsoever. In other cases, parking falls well below current requirements. For example, 2501-07 San Pablo (illustrated above), the brick-faced building built in 1925 at the southeast corner of San Pablo & Dwight has 6 residential units above a restaurant and 2 storefronts, totalling some 4,700 commercial square feet. The site currently has 4 parking spaces in the rear, and could probably accommodate a total of 6 if an on-site shed were demolished. However, current parking requirements would require that 15 spaces be provided.

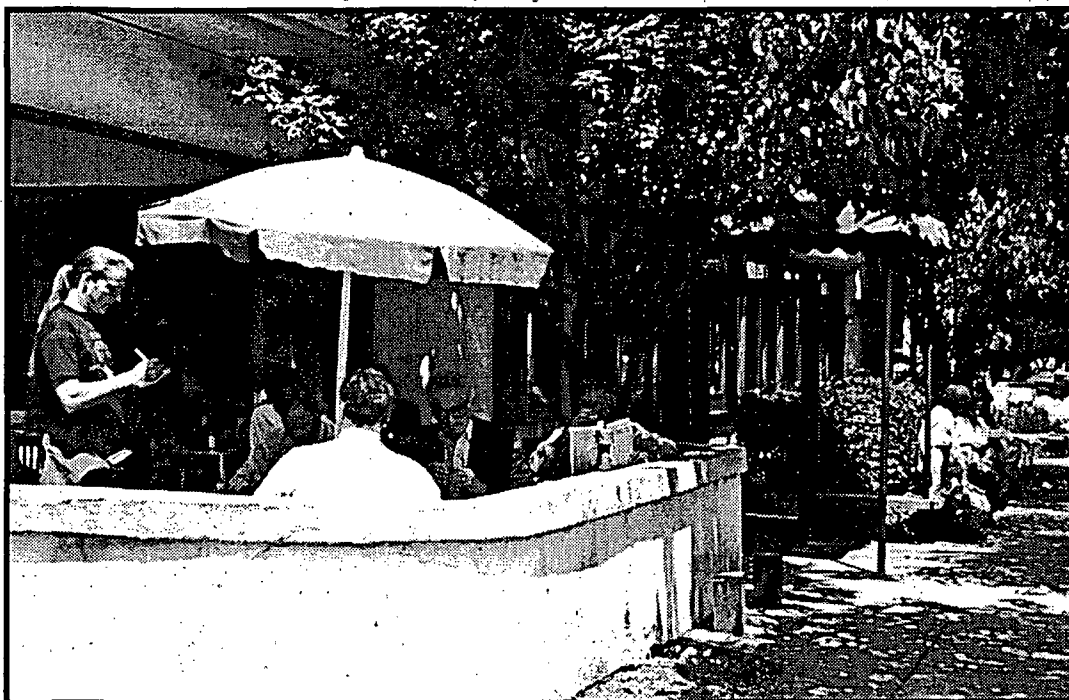
### b. 4th & University/Hearst

The 4th & University/Hearst commercial area sits at Oceanview's historic center, but has been substantially renewed in recent years. Although the area is functionally an "island", largely surrounded by industrial uses, it is internally a quite pedestrian friendly shopping area. Its mix of old and new buildings, small and large shops, many with comfortable "street furniture", has proven very attractive to shoppers and diners from throughout the East Bay.

Locationally, retail and restaurant uses of various types are strongly present along both sides of 4th St. from the former right of way of Delaware St. (and just beyond) across University Ave. to Addison St. The West Berkeley Plan seeks to also "loop" the retail district down Addison St., past tourist attracting Takara Sake, and across the railroad tracks to the entrance to Aquatic Park. In addition, the Truitt & White lumber sales complex along 2nd St. between University and (old) Delaware seems linked to 4th St. economically.

Each main retail block of 4th St. has a different commercial and physical character. The Delaware-Hearst block is largely taken up by a complex of small boutiques, restaurants, and home goods stores, with offices above them. The 2 story stucco-sided buildings are a carefully designed blend of rehabilitated and new structures. The neo-classically styled Ghego House on this block, built by the politically prominent Heywood family in 1877, has been rehabilitated for retail and housing use.

The next Hearst-University block is almost totally dominated by the centenarian Spenger's Restaurant on one side, its full block parking lot on the other (with the modern Nature Company occupying one corner). Although Spenger's has several building styles—as the complex has been expanded over the decades—and entrances, it is a large scale use, listed as one of the 10 largest restaurants in America. To the west of this block, at the 3rd St. railroad track & University, is the shelter structure currently serving as



Berkeley's train station, and terminus for 3 bus routes (and soon to be a stop on the Gateway employee shuttle). The City is seeking funds to improve, and ultimately replace the train station.

To the south, past a rather discouraging passage under the University Ave. viaduct, is the University Addition block of generally mid-sized stores and restaurants set amidst parking lots. The west side houses the stucco box of Brennan's, a decades-old bar and along the train track the Mission Revival style China Station restaurant, built in 1913 as Southern Pacific's Berkeley mainline station.

Despite the success of the area, physical improvements here are possible and useful. One example is a revived train station. With the current expansion of rail service on the San Jose-Sacramento corridor, it is possible to build a new train station which will be an anchor and itself a gateway to West Berkeley. The Redevelopment Agency is planning to highlight a pedestrian path from the district up 5th St. to Cedar, to more closely link the area to surrounding residential uses. There is little travel between 4th St. and the Delaware St. Historic District, only one block, where commercial activity has been much lower. Signs for historic buildings and sites would help highlight the past of this oldest of West Berkeley districts. The area is close to the Waterfront and Marina, but it is very difficult to reach them except by car, since the pedestrian/bicycle path is circuitous and even dangerous.

#### c. 7th & Ashby

The 7th & Ashby area is the newest, and perhaps most unconventional, commercial node in West Berkeley. Dominated by just 2 major retailers (Whole Earth Access and Weatherford BMW) with Ashby Lumber just across Ashby Ave., the area has begun to attract smaller retailers and is linked to San Pablo & Ashby by the massive Heinz Building. Retailing here functions not in the purpose built structures found on San Pablo Ave. or even 4th St., but in converted industrial buildings creating such unusual features as an auto dealership with vast high ceilings. 7th & Ashby to date has provided little in the way of amenities, and has indeed lacked even such usual basics as sidewalks (with public rights of way normally used for sidewalks devoted to parking here). Nonetheless, with its strategic location, and despite traffic problems worse than those experienced at any other West Berkeley node, the area seems poised for future growth.

Functionally, the borders of the 7th & Ashby commercial area is still being determined. The West Berkeley Plan defines the commercial district as extending from roughly 9th St. on the east to the 3rd St. railroad tracks on the west, from Anthony St. on the north to Ashby Ave. on the south (not all of that area is designated commercial). The building materials merchants south of Ashby Ave. (such as Macbeath Hardwood) identify themselves as primarily wholesalers, and thus preferred to be in the more appropriate Light Industrial district, though there is presumably some relationship with such businesses as Orchard Supply Hardware north of Ashby. The "Durkee" Aquatic Park office complex is on the fringe of the retail district.

Since 7th & Ashby is now, in name and in fact, a commercial district, it should be appropriately equipped as one, and no longer viewed as an industrial area. Analysis is beginning to see if consolidated parking is need for the area, and where such parking

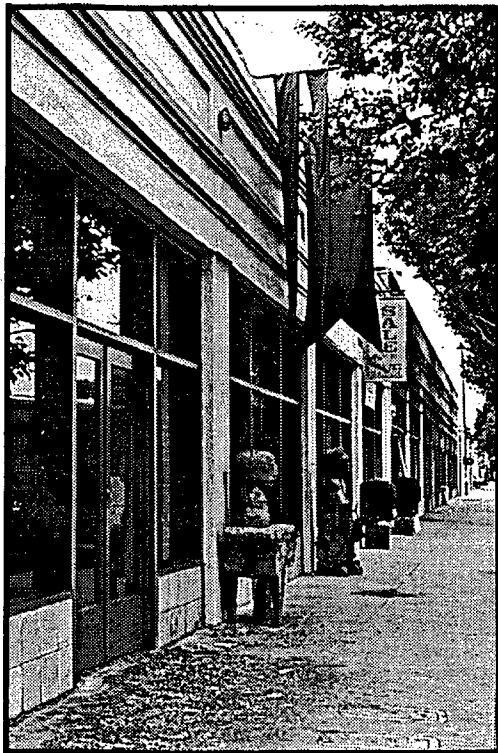


should be if needed. A traffic signal is being installed at 7th & Anthony, with another planned at 9th & Ashby, to improve traffic circulation in the area. Pedestrian movement across 7th St. at Potter typically from one part of Whole Earth Access to another must be improved. Basic sidewalks through the area to encourage pedestrians to walk from one place to another (and "external" destinations such as the Heinz Building) must be created. In another vein, a historic marker for Camp Ashby—the all-Black World War II training camp—would be appropriate.

#### d. Other San Pablo Ave. nodes

Along San Pablo Ave., the intersections of Gilman St., Dwight Way, and Ashby Ave. are commercial nodes—to some extent actual nodes, to some extent potential ones. Each of these major streets has a bus line serving it, has commercially designated area to the west of San Pablo Ave. (although none to the east beyond the 100-foot-wide commercial zone.) and has existing commercial uses and buildings. Gilman and Ashby have freeway exit traffic. Dwight is close to the concentrated office-based employment along 9th St. of Parker Plaza and Fantasy Records. In the context of the San Pablo Ave. "strip," each already represents an upwelling of retail stores amidst generally non-retail uses (although the distinction is least clear at Gilman). Ashby and Dwight are far from competing retail nodes (with 7th & Ashby apparently complementing San Pablo), while Gilman has a small one east of Santa Fe Avenue. These nodes are thus good sites to encourage further retail, housing, and office use.

The nodes extend roughly 1 block north and south of their main intersection on San Pablo, and 1 to 2 short blocks west on the east-west street. The precise configuration varies—at Dwight, for example, continuous retail frontage extends almost 2 blocks south on the west side of San Pablo Ave., but is blocked almost immediately to the north by auto



repair and residential buildings without commercial uses. The Ashby node arguably extends across the Heinz building towards the 7th & Ashby concentration. Uses at the nodes vary—Dwight and Gilman have several restaurants, Ashby and Gilman now have drug stores. Gilman has entertainment uses of various kinds. None have a full range of neighborhood serving uses—for example none has a full-line grocery store of any size (though Gilman does currently have a fish market and Dwight a produce market).

Many of the same measures which could aid University & San Pablo could aid these nascent nodes as well. Facade improvement programs, improved street furniture, and improved linkages to their retail "watersheds" (through means such as routes planted with "signature" trees) would aid these dis-

tricts as well. Gilman and Ashby are likely to provide the most opportunities for positive new developments, while Dwight has the most buildings which already contribute.

## 2. West Berkeley's Entry Corridors

The points of entry and the passages leading from them (by road or other means) into a city or an area are critical in establishing a locality's identity. These gateways and entry corridors are the first sight a visitor arriving in the city sees. They are areas of transition, places which communities use to highlight their identity. Doing so can build community pride and strengthen community image, which perhaps can be translated into retail sales and other economic activity in the community. The ways communities mark their gateways are various. San Leandro has built a monumental gateway structure at the entrance to the city on East 14th St., while Oakland has erected oversized Welcome to Oakland signs (with the City's logo) at various entry points. The Lorin District signs and historic African-American figures banners on Adeline St. mark both a gateway and a commercial area. The multilingual "Welcome" banners which were hung on University Ave. are in part a gateway-marking effort. In the 1920's, San Pablo Ave. just north of University sported a gateway arch, with arrows pointing east towards Downtown Berkeley and west towards "Industrial District".

This section discusses West Berkeley's major entry corridors, which also serve as the entrances into Berkeley as a whole, and how they might be improved. The ideas expressed on specific actions to improve the corridors are preliminary, and are expected to change.

### a. University Ave. — The Major Gateway

University Ave. has almost always been the primary western gateway into West Berkeley and Berkeley. With the viaduct over the railroad tracks giving one an aerial view of central West Berkeley, it is easy to gain a sense of entry on University Ave. With a railroad station, University is the only western gateway for the non-motorized traveler. University leads into old Oceanview, to the University & San Pablo node, and beyond through central Berkeley.

University as a gateway clearly divides at 6th St., the westernmost intersection where overpass users can turn off into West Berkeley (the viaduct "touches down" just east of 5th St.). East of 6th, University Ave. becomes one of the denser commercial stretches in West Berkeley, with a new 2-story "shopping center" between 7th and 8th on the north side, a large scale motel on the south side of that block, and the UA Homes (residential hotel) between 9th and 10th, among other uses leading to the San Pablo commercial node. Beyond San Pablo, development on the street thins out, although there is not the sharp "industrial" to single-family residential transition found on Gilman and Ashby.

University is clearly the aesthetically strongest of the 3 major gateway streets. Strengthening the streetwall of buildings as additional properties redevelop is one design consideration. Coordinated tree planting could also reinforce University's image. If the historic San Pablo/University gateway were restored it would point out University's gateway role, although less grandiose signage could also serve this purpose.

### b. Ashby Ave. Southern Entry

Ashby Ave. is an increasingly important route, especially into West Berkeley. Yet, other than glimpses of Aquatic Park and dramatic buildings like Weatherford BMW and the Heinz Building (sharing space with some undistinguished ones), there is little to highlight this gateway into the city. There is no landscaping along the street, have never been any banners, and are many buildings which turn their backs to the street. Ashby has the longest route across Berkeley of the 3 entry streets, and connects to other regional routes. Yet much of West Berkeley Ashby is in an underpass (from the railroad tracks to just west of 7th St.), limiting its power as a portal there.

The only entry corridor with different land use districts on its northern and southern sides, Ashby presents unusual problems in developing a coherent character. Ashby probably presents more difficulties because it is not part of the oldest street grid of West Berkeley, but was extended in the late 1930's, giving it less time to develop character, and creating oddly shaped blocks. Despite these problems of physical setting and contrasting uses, there is potential for visual and physical improvement of the street. This work should clearly proceed in conjunction with work in the 7th & Ashby district.

### c. Gilman St. Industrial Entry Corridor

Gilman St. is an important route into West Berkeley for the Manufacturing District, and a large part of the Light Industrial district, as well as for North Berkeley generally. The West Berkeley Plan's land use concept designates Gilman St. west of 10th primarily for industrial (and secondarily for office) uses. Likely to become more important in the future, with the development of the University's 12 acres of Harrison lands, Gilman must be recognized as a key industrial/corridor. The Gilman Freeway exits, unlike University or Ashby deposit the driver at street level, in a somewhat confused intersection. Crossing the tracks is followed by the landmark and visually distinctive Tannery complex. This "gate" is the entry to "West Berkeley." It is followed by a series of generally industrial buildings which in their utilitarian lack of obvious effort to appeal to passers by, may seem monotonous, but actually vary in materials used, height, roofline, window treatment, and other aspects. At San Pablo Ave., one passes from the industrial zone to an area of small houses.

How can Gilman be improved as an entry corridor, while recognizing that it is to remain an industrial corridor? Many of the answers may simply involved improved design of both private sites and the public right-of-way. New buildings can come forward on their properties to strengthen the "street wall" of buildings where it exists and shape a new one where it does not. This can be done without a loss of industrial utility (as the many existing "street-holding" industrial buildings demonstrate). Buildings need not be retail sites to "turn their faces"—their doors and windows—to Gilman St. They need not present a blank wall or parking lot on Gilman, as some of the newer buildings east of 6th St. do. Even industrial buildings can at least in part "turn their faces" to Gilman St. rather than side streets or parking lots. Gilman may be a situation where greater design uniformity—similar setbacks, heights, landscaping, etc.—may improve the image of the street, since present diversity is not perceived positively.

### 3. The Mixed Use/Residential Districts

The Mixed Use/Residential districts are among the most urbanistically and historically interesting and complex in West Berkeley. They consist primarily of a highly unusual mix of moderately scaled light industrial uses (with occasional larger scale plants) with residential ones. Their complexity is the product of successive periods of predominantly residential development, followed by mostly industrial development, and most recently residential and live/work development again. Once thought of as among the city's least desirable locales, these areas are becoming increasingly sought after. This complexity, along with the renewed sense of desirability of the area, means that the area requires particular sensitivity in new development (see Goal D).

Most of the area designated Mixed Use/Residential (MU/R) is within the existing Special Industrial (SI) district, a fact which has shaped its development. The MU/R district stretches from Camelia St. to Dwight Way (interrupted by University Avenue's commercial zone), from 4th St. or the 4th / 5th midblock line to 6th St (covering all or part of 23 blocks here). Between Camelia and Dwight, 5th St. is the one street almost entirely zoned Mixed Use/Residential and best reflects its character. The other MU/R district takes in all or part of 12 square blocks between 7th and the San Pablo commercial strip, Carleton and Heinz St.'s (currently zoned M). The portion of the MU/R between University and Cedar St. is in the West Berkeley Redevelopment Area.

The area is characterized by intense of lots in the context of modestly scaled development. Buildings—especially industrial buildings—typically cover most of their (usually rather small) lot, with no or minimal front yards. Even many houses have essentially no front yard or only a few feet of setback. Building heights are most commonly 1 and 2 stories, although such structures as De Soto, Libby Labs, and some large houses are taller. Most blocks have a mix of uses and periods of building such that no single building style predominates. Exceptions are the Victorian buildings that have been regathered on the Delaware Street Historic District on Delaware St. between 5th and 6th





St. (though these have modern housing behind them) and small groups of Victorian/Edwardian houses in locations such as Camelia St. near 5th.

The area's physical character is generally perceived as pleasant, though opportunities for improvement remain. In the Redevelopment Area (as noted above), 5th St. is scheduled to be improved as a strengthened pedestrian axis to the 4th St. commercial area, with installation of missing sidewalks and intensified tree planting. The pedestrianization of the street is also designed to buffer the effects of those "heavier" industries whose properties span the block from 4th to 5th St. The area also abuts heavy industry along 7th St., and while its scale is much lower than west of 7th St., few actual residents are on or near 7th St. The physical form of new development—especially live-work buildings—is an important concern in the area. While residents have access to James Kenney Park, Aquatic Park, and San Pablo Park, there is no public open space within the area itself. Development of such a space seems unlikely, but added tree planting (many blocks have few or no trees) and new accesses to Aquatic Park at Channing and Heinz would improve landscaping and open space conditions there.

#### 4. Industrial Districts

Despite the changes of recent years, most of West Berkeley's economically active area continues to be in districts which are predominantly industrial. The West Berkeley Plan designates two general industrial districts—the Manufacturing District in the north and the Mixed Manufacturing district in the south. It also designates much of the area as Mixed Use/Light Industrial (green) covering light industrial areas from Harrison St. near Albany to Folger St. near Emeryville. Most of these industrial areas are not seen or used by people who do not work or do business there, although 7th St., Ashby Ave., and Gilman St. are major streets which pass through or alongside them.

The industrial districts illustrate almost the full range of 20th Century industrial development—in building and lot size, building age, materials used, building/roof shape and height. Landscaping and setbacks are almost universally absent, although some of the larger sites (such as Miles) and a few of the newer sites (such as General Parametrics at 9th & Gilman) devote much of their land to parking. The Mixed Manufacturing district is dominated by large, multi building sites (Miles, Colgate, Temescal), whose development was initiated in the early 20th Century. 4th St. south of University is typified by post-War concrete "warehouse" type structures, though there are exceptions (e.g. the 1910 brick building—now used for auto repair—at 4th & Dwight). Tall metal "sheds" for working metals are common around Gilman St. in the Manufacturing district. Industrial area landmarks include the Kawneer building at 8th & Parker, the City's original garbage incinerator near 2nd & Harrison, and the Durkee Building on 7th St. west of Heinz. Ironically, West Berkeley's only open creek—Codornices Creek—edges the industrial area.

Usefulness has generally been the chief design criterion in these areas, as is appropriate in districts whose primary users are workers and people doing business there. Thus, new buildings (and building rehabilitations) here should first of all be functional for the businesses and comfortable for their employees. However, there are instances



where building decisions in these areas can affect the broader public. The “edges” of these districts — such as Dwight Way, 7th St., Heinz St. — are places where they meet less intense ones — buildings and sites should be landscaped and scaled accordingly. Particular care is required where general industrial districts meet areas which are wholly or partially residential (see Goal 4). The role of Gilman St. and Ashby Ave. as corridors through and along the districts has been noted. Tree planting and landscaping along these edges and corridors provides far more benefit to the general public than it does on streets interior to the general manufacturing districts (Manufacturing and Mixed Manufacturing) although such interior plantings would presumably be seen as amenities by area workers. Development on major sites of an acre or more in these districts are key in shaping the overall character of their districts and West Berkeley, and should thus aim for both internal coherence and integration with the broader fabric of West Berkeley (see Goal 5).

Policies towards older buildings in these districts, particularly in the relatively small general manufacturing districts (where non-industrial uses are deliberately limited) can present painful choices. City policy seeks to maintain historic buildings, and most historic industrial structures have been preserved in recent decades. What is termed “adaptive reuse” of buildings (i.e. change of use from industrial to another use) is often possible, particularly in the Mixed Use/Light Industrial zone — although this must be balanced against the district’s central purpose of maintaining light manufacturing sites. In other cases there is market demand to reuse older industrial buildings for industrial purposes. The City should certainly support the reuse of existing industrial buildings for manufacturing and other industrial purposes, and should explore how such reuse can be encouraged. However, there are cases, particularly on “heavier” industrial sites, where buildings have become obsolete for industrial purposes. In some cases, buildings may be moved (if sites and users are available), in other cases they are too fragile to survive a move. In these cases, there may be no choice but demolitions if the industrial use of the site is to be maintained.





## 5. The Residential Core

The core residential areas of West Berkeley have been physically quite stable, even as they have struggled with the social problems of poverty, crime, and drugs. The core areas are built up almost exclusively with single family and small multi-family buildings, with the occasional church, or the even more occasional corner grocery breaking the pattern. Along with the evidence of poverty, there is much evidence of care for the environment.

The residential core area covers some 60 square blocks (some only partially) between Camelia and Dwight, 6th St. and San Pablo. The University and San Pablo Ave. commercial frontages are in commercial zoning districts, although the uses there obviously influence the character of the blocks they are on. Generally zoned R-1A (limited 2 family), portions of the blocks north and south of University are zoned for multi-family construction, although opportunities to do so are limited.

The residential core can be subdivided for analysis in different ways. Apartment buildings are almost exclusively concentrated in the blocks between Delaware St. and Dwight Way (except for a cluster around 7th & Camelia), although even in this area there are large numbers of single family homes. Thus these blocks tend to mix early 20th Century single and 2 story homes, with 2-3 story mid-20th Century apartments, although apartments are somewhat more common towards the corners than at mid-block.

The historically oldest parts of the residential core are the areas between roughly Addison St. and Delaware St., although the blocks surrounding Channing Way also saw significant development in the 1880's and 1890's. The area developed last is that north of Cedar St., which was largely built up with cottages and bungalows in the 1920's and 1930's. Major landmarks of the area include the Niehaus House at 7th & Channing, built

in 1889 by the owner of West Berkeley's then leading planing mill (and currently abandoned, along with 10 attached apartments). Two strong Gothic style churches on Hearst are Church of the Good Shepherd at 9th St. (1878) and Saint Procopius' Church (built as Westminster Presbyterian Church at 8th St. However, much of the historical/architectural significance of structures here comes from groupings of houses, rather than from individual structures.

A full block of open space, as well as a recreation center, exists in the northern residential area at James Kenney Park (7th to 8th, Delaware to Virginia) bought by the City before it was developed. The southern area has no such large park, but has playground equipment and playing fields at Columbus School, and a mini-park (G. Florence Park) on 10th between Addison and Allston. In recent years, both desire for additional open space, and concern about the crime and drug activity that sometimes occur there have been expressed by neighborhood residents.

There has been little physical change in recent years in the residential core, and there is little reason to expect much in upcoming years. One reason for this is that most of the area is built close to or more densely than the density permitted by current zoning. Some of the apartments were poorly built in the 1950's and 60's and will require rehabilitation to maintain them as affordable housing stock such work provides an opportunity to improve some of their aesthetic qualities as well. Similar conditions exist in some units occupied by elderly homeowners. While some blocks have magnificent stands of trees, others are relatively barren, tree planting could beautify these blocks through community based effort.

### III. AN URBAN DESIGN VISION FOR WEST BERKELEY

What threads together this Element's proposals for various areas—its goals and policies, its implementation measures—is an urban design vision for West Berkeley. It is not a vision of stasis—of keeping all buildings and sites exactly as they are, and assuming that nothing ever need be changed or removed. Nor is it a vision of clearance—of recklessly blasting away existing buildings or existing uses in search of what is believed to be “modern.” It is rather a vision of conservation, creativity, and integrated development—of maintaining West Berkeley's historic, architectural, and use character(s) while welcoming suitable new development (which can sometimes be formally innovative development). West Berkeley's rich past has given it a wealth of historical and architectural resources which should be preserved; its future should give it buildings and places that will be landmarks for future generations.

The urban design vision seeks to link the many diverse elements of West Berkeley various areas of West Berkeley. A resident, a worker, a visitor should know when she passes from the Commercial to the Mixed Use/Residential to the Manufacturing district. Yet there should be features which link this large and diverse collection of places together and give it a sense of overall “West Berkeley” identity. Some of the most important linking features (which are discussed in greater detail in the Goals and Policies Section) are:

- **Enhancement of commercial nodes and corridors:** The commercial nodes and corridors are the places in West Berkeley used by the most people. It is important to improve the visual character and physical layout of key commercial corridors, and encourage nodal development along these corridors.
- **Entry Corridors:** The entry corridors are important in setting the tone for West Berkeley. Defining the image and character for the city's major gateway—University Ave.—and for the other entry corridors which lead into West Berkeley—Ashby Ave., and Gilman St., and the northern and southern ends of San Pablo Avenue—is a major urban design task.
- **Greening of the Streets:** Trees provide green relief amidst the concrete and asphalt of West Berkeley. Expanding street tree planting to additional streets in West Berkeley will further this task. Street tree planting can be designed to address specific needs or conditions, such as enhancing residential areas, visually connecting residential and commercial areas, framing views, or improving the visual appearance of commercial streets and major roadways.
- **Connections to existing public parks:** West Berkeley's open spaces resources are not used to their fullest extent. Improving the pedestrian, bicycle and vehicular access to existing public parks, especially to the Marina area and Aquatic Park, will help West Berkeleyans (and Berkeley residents generally) enjoy their parks and will also help link the area together.

## IV. GOALS AND POLICIES

### ~~Urban Design Goals and Policies for West Berkeley~~

#### ~~Rationale:~~

~~See the Urban Design Vision for West Berkeley above, for the overall rationale tying together these goals.~~

#### ~~Goal 1~~

~~Preserve and enhance the vital commercial corridors, particularly San Pablo and University Ave., with intensification of commercial and mixed-use development at key intersections or "nodes".~~

#### ~~Policies for nodes~~

~~1.1 Encourage nodal development, to intensify commercial at major intersections along commercial streets. Nodal development should be encouraged at and around the intersections of: San Pablo at University, San Pablo at Dwight Way, San Pablo at Gilman, San Pablo at Ashby, 4th and University/Hearst, and Ashby at Seventh.~~

~~1.2 Provide consolidated parking as needed to serve commercial nodes, and encourage concentrated rather than dispersed parking.~~

~~1.3 Focus pedestrian improvements at nodes, including cross walks, adequate sidewalks, night lighting, transit stops, telephones, disabled accessibility improvements, consolidated newsracks, public clocks and other features.~~

~~1.4 Require retail as the ground level use in nodes, with residential or office uses above the ground floor.~~

~~1.5 Encourage neighborhood-serving retail business to locate at these nodes.~~

#### ~~Policies for commercial corridors, including nodes~~

~~1.6 Develop standards and incentives for facade and signage improvements along the commercial corridors. Encourage signage and facade design to improve the appearance of the street, and to minimize the appearance of strip commercial development. Signage and facade design should be urban instead of suburban in character, and pedestrian in scale. This can be done through the design of signs, building materials, storefront windows, and other exterior features.~~

~~1.7 Insure that new construction along the corridors maintains and strengthens the urban character of the street by locating new buildings at the front property line to reinforce the streetwall, locating parking at the side or rear of the lot, and designing street facades and ground level doors and windows to include elements of pedestrian scale and three-dimensional interest.~~

~~1.8 Develop incentives to encourage new construction to be 2-4 stories in height (and to incorporate residential and office uses above the ground floor) along these corridors, especially at nodes.~~

~~1.9 Encourage conservation and active utilization of existing buildings which contribute positively to the character of the streetscape.~~

~~1.10 Encourage infill buildings on vacant and low intensity use sites along these corridors. Residential and/or office uses should be encouraged, where appropriate.~~

~~1.11 Develop incentives to encourage housing along these corridors, such as a reduction in parking and other site development standards.~~

## ~~Goal 2~~

~~Use the interrelationship between the urban design and transportation goals to improve accessibility between jobs, homes, commercial, recreation and educational centers to minimize dependence on the automobile. (Also see goals in Transportation Element.)~~

## ~~Policies~~

~~2.1 Coordinate transit routes and transit improvements with the commercial nodes, to provide transit in key areas, and to integrate the transit so as to reinforce pedestrian circulation and support the design and function of the node.~~

~~2.2 Improve transit amenities at bus stop locations by providing bus shelters, improved bus signage, maps, telephones and benches, and other transit improvements as needed.~~

~~2.3 Evaluate construction of one or more consolidated parking lots or parking structures, to be located in West Berkeley with good access to the freeway and to mass transit, and the train station, to be used for West Berkeley businesses, and pursue their development if they are needed/ Seek to integrate the design of these structures with their areas as much as possible.~~

~~2.4 Take aggressive action to develop an adequate train station in West Berkeley, near University Avenue, for commuter and long-distance train service.~~

~~2.5 Encourage consolidated locations for shared parking facilities, where several different uses would share parking in a consolidated location.~~

~~2.6 Promote bicycle usage by providing adequate, safe bicycle lanes throughout West Berkeley, which connect to the existing network of bike paths in Berkeley and connect to parks, schools and commercial areas.~~

~~2.7 Provide adequate sidewalks and other forms of pedestrian connections to nodes and key locations throughout West Berkeley.~~



### Goal 3

~~Visually improve the University Ave. gateway and the other entry corridors into West Berkeley, so as to provide a positive image as one enters Berkeley. In addition to the University Ave. gateway, the entry corridors into West Berkeley are Ashby Ave. and Gilman St., and the northern and southern ends of San Pablo Ave.~~

#### Policies

~~3.1 Explore ways to improve the visual character of these entry corridors, to highlight the sense of place and image of Berkeley along these corridors.~~

~~3.2 Encourage new construction and renovation of existing buildings (those that contribute significantly to the streetscape) and restoration of historic structures to address in a positive manner their location along an entry corridor. New buildings should generally be placed along the front property line to strengthen the urban character of streets, and maintain or strengthen the "streetwall" of buildings along these corridors, while parking should be placed at the side or rear of the lot. Signage and facade design (of features such as doors and windows) should be urban instead of suburban in character, providing visual interest while remaining appropriate to the use(s) of the building.~~

~~3.3 Encourage landscaping and screening of existing parking along these entry corridors, adjacent to the streets (in the right-of-way) and on private property.~~

~~3.4 Consider special lighting on the gateway corridors to enhance them at night.~~

~~3.5 Encourage high-quality, urban style, cohesive signage along these streets. Monument signs with appropriate bases are encouraged, instead of pole signs. Remove both ground level and building-mounted billboards whenever possible.~~

~~3.6 Support and reinforce University Ave. as the primary gateway to West Berkeley and Berkeley generally. Explore reconstruction and replication of the historic gateway structure which was located on San Pablo Ave., near University Ave. Assure that any changes to the University Ave. viaduct are consistent with the street's role as gateway.~~

### Goal 4

~~Development in locations where there is a juxtaposition of uses and building scales — particularly when concentrations of residential uses are adjacent to more intense uses — should be sensitive to the character of both the less intense and the more intense uses. This will be particularly important in the Mixed Use/Residential zone and on the "edges" where industrial zones (especially general manufacturing zones) meet zones which permit residential uses.~~

#### Policies

~~4.1 Developments in such "edge" locations should seek to minimize — to the greatest degree possible — abrupt changes of building scale.~~



~~4.2 Developments in these locations should use tools such as increased building setbacks or upper story stepbacks, landscaping, and other means to reduce the impacts of differences in scale, style, and site plan.~~

~~4.3 Developments in these locations should be generally respectful of existing architectural styles in their location, but need not simply imitate these styles.~~

### ~~Goal 5~~

~~Development on major sites of 1 acre or more should be both internally cohesive and sensitively designed on the site's publicly used edges.~~

### ~~Policies~~

~~5.1 Development on major sites should use building scale, architecture, building placement, landscaping, and other site elements to create the sense of a cohesive development which is integrated with its surroundings.~~

~~5.2 Such major projects should to the greatest degree possible reinforce the existing street pattern, development pattern, and overall fabric of an area, rather than being isolated from these patterns.~~

~~5.3 Major developments should to the greatest degree possible be compatible with existing development on the edges of their sites, particularly on those edges which are heavily used by the public.~~

## ~~Historic Preservation Goals and Policies for West Berkeley~~

### ~~Rationale:~~

~~Historic preservation is an integral part of the West Berkeley Plan. Much of West Berkeley's distinctiveness is in its history. The Plan seeks to preserve both the physical forms—the buildings—history has bequeathed the area, and the substantive activities which have historically occurred in West Berkeley. Conserving the greatest possible number of historic buildings is part of the Plan's overall approach of working to conserve and improve the existing fabric of West Berkeley. Taken together, Goals 6, 7, and 8 set out a policy framework for a broad historic preservation approach in West Berkeley. The goals call for greater education on West Berkeley's built and human heritage, and on historic preservation (Goal 6). They seek to identify under clearly understood criteria and designate the historic structures of West Berkeley (Goal 7). They encourage maintenance and appropriate rehabilitation of historic buildings (Goal 8).~~

~~The West Berkeley Plan's historic preservation approach encourage the City to support preservation of buildings whenever possible, in the framework of other planning policies. In addition, the Plan seeks to integrate new development into the older, existing fabric (see especially Policy 7.4). This Element's goals and policies are formulated within the context of the Plan and its Land Use Concept, which seek to preserve the longstanding~~

~~use character of several residential and industrial districts. This Physical Form Element with its historic preservation goals and policies proposes a wholistic approach to design and preservation in the context of a Plan which seeks such approaches generally.~~

### ~~Goal 6~~

~~Develop and disseminate an understanding and appreciation of West Berkeley's heritage.~~

### ~~Policies~~

~~6.1 The City should develop criteria to identify and designate heritage areas—particularly strong concentrations of historically and architecturally significant buildings—in West Berkeley and educate the public about these areas. If the residents come to support doing so, the City should formulate guidelines for development in these areas.~~

~~6.2 The City should support preservation efforts by private organizations in West Berkeley.~~

~~6.3 The City should innovate programs to educate the public concerning West Berkeley's architectural, ethnic and industrial history.~~

### ~~Goal 7~~

~~Preserve West Berkeley's existing architectural and historic resources in the context of the district goals, permitted uses, and other goals of the West Berkeley Plan. Seek to develop the built environment as a whole in a way consistent with this Goal.~~

### ~~Policies~~

~~7.1 The City should review each of the 112 West Berkeley buildings on the State Historic Resources Inventory (SHRI) and the Landmarks Preservation Commission Priority List for Landmark Designation. Designations should be according to criteria which are clear, specific, understood and supported by the community and reflect the balance of preservation and other goals in the West Berkeley Plan.~~

~~7.2 The City should facilitate the completion of the West Berkeley Historical Survey and designate further landmarks in accordance with the findings of this Survey. Designations should be according to (new or existing) criteria which are clear, specific, understood and supported by the community and reflect the balance of preservation and other goals in the West Berkeley Plan.~~

~~7.3 To improve the economic feasibility of preserving historic buildings, the City should creatively use the tools which the West Berkeley Plan Preferred Land Use Concept provides, and should explore the possibilities for changes in development standards, fees, or placement of uses, without, however, violating Plan policies, district purposes, or district permitted uses. In situations where a whole building cannot be preserved, preservation of facades should be explored. In very exceptional cases, where all Variance~~

~~findings can be made with particular reference to the Finding that the variance not be detrimental to people working in the neighborhood or to property in the neighborhood—allow use Variances.~~

~~7.4 The City should encourage infill development to be sensitive to the character and scale of existing development in areas which are architecturally or historically cohesive.~~

~~7.5 The City should encourage the University of California—particularly if the University acquires any additional buildings in West Berkeley—to preserve and maintain these buildings to the greatest possible degree.~~

### ~~Goal 8~~

~~Preserve West Berkeley's architecturally and historically valuable buildings.~~

### ~~Policies~~

~~8.1 The City should encourage building maintenance and rehabilitation in West Berkeley and if possible offer financial incentives or assistance.~~

~~8.2 The City should encourage the sensitive reuse of existing buildings in West Berkeley and offer incentives such as permit streamlining and other assistance.~~

### ~~Open Space Goals and Policies for West Berkeley~~

#### ~~Rationale:~~

~~West Berkeley has the advantage of being an urban district which sits adjacent to major open space resources—Aquatic Park, the Marina, the Waterfront. West Berkeley's residential population—largely low income, many with children, many living in apartments—is precisely that which most needs public open space. In this context, the Plan seeks to develop a broad vision for open space as well. The existing parks in West Berkeley—Aquatic Park, James Kenney Park, G. Florence Park—are clearly a central part of the open space strategy. So is Columbus School, with its adjacent playground and park space. The parks outside West Berkeley which West Berkeley residents can most easily access—especially the parks currently being developed on the Waterfront—are also visual and functional open space resources for West Berkeley and are therefore discussed generally. The bicycle lanes and sidewalks which allow non-vehicular access to the parks, and even the rows of trees which do (or could) link neighborhoods to them are also open space resources. Tree plantings also give character to many West Berkeley neighborhoods, especially residential neighborhoods, and provide environmental relief. Formally, the Aquatic Park Master Plan is incorporated into the West Berkeley Plan by reference.~~

### ~~Goal 9~~

~~Provide an accessible, aesthetically pleasing network of green spaces and corridors—that is functional for varied types of users—to visually and physically link parks, creeks, and shoreline to residential and commercial, and light industrial areas.~~

## Policies

- ~~9.1 Promote extensive tree planting along major streets in West Berkeley, by individuals and organizations in West Berkeley. Focus on long lived and drought-resistant trees.~~
- ~~9.2 Develop pathways and protected lanes for bikes which link to the existing bicycle lanes in Berkeley and link to parks, commercial areas, and community facilities.~~
- ~~9.3 Provide sidewalks for pedestrians which provide adequate, safe access to parks.~~
- ~~9.4 If community residents are supportive at the time opportunities arise, acquire additional neighborhood parks if possible, especially south of University Avenue.~~
- ~~9.5 Promote the utilization of school playgrounds as neighborhood serving parks, to the extent consistent with their functions for schools.~~
- ~~9.6 Upgrade facilities, maintenance, and security in existing neighborhood parks to improve utilization.~~
- ~~9.7 Encourage early implementation of the Aquatic Park Master Plan, especially improving access to the Park for pedestrians and bicycles.~~
- ~~9.8 Design the sound wall along I-80 to allow views toward Berkeley and from Berkeley toward San Francisco, if feasible, while still buffering the noise of the freeway from Aquatic Park.~~
- ~~9.9 Improve physical and visual access to the Marina area, to Aquatic Park, and to shoreline parks.~~
- ~~9.10 Improve the visual character of Berkeley as seen from the Freeway in a manner suitable for the adjacent industrial districts and parks with additional landscaping and controlled signage.~~
- ~~9.11 Improve the usability of and access to Codornices Creek and explore opportunities for uncovering other creeks in the area.~~
- ~~9.12 Encourage the retention of existing trees in front yards in residential areas in West Berkeley.~~

## ~~V. IMPLEMENTATION MEASURES~~

### ~~A. Urban Design Implementation Measures~~

~~Note: Please see the Transportation Element for implementation measures related to transportation projects and programs, such as those outlined under Goal 2.~~

#### ~~Activities Already Underway~~

~~1.1 Redevelopment Area Public Improvements Improve sidewalks, street trees, and streets within the Redevelopment Project Area, with the goal of linking area residents to the 4th St. commercial district. The project is underway, with some sidewalk work and wells for tree planting having been done.~~

~~Goals and Policies Implemented: Goal 2, Policy 2.7; Goal 8, Policy 8.2; Goal 9, Policy 9.1~~

~~Responsibility: Berkeley Redevelopment Agency with City Planning Department~~

~~Funding Sources: Redevelopment Tax Increment~~

~~1.2 Soundwall Design and Construction Monitoring Work with CALTRANS to assure that the soundwall planned along Aquatic Park to buffer it from the Freeway is constructed in a timely and aesthetically pleasing manner. The City Council has conceptually approved this activity.~~

~~Goals and Policies Implemented: Goal 9, Policies 9.7, 9.8~~

~~Responsibility: City Planning Department with Public Works (Traffic Engineering)~~

~~Funding Sources: CALTRANS~~

~~1.3 Newsrack Ordinance Explore the feasibility given both aesthetic and First Amendment concerns of an Ordinance regulating the placement and design of newsracks. Implement the Ordinance in commercial districts which have newsrack congestion. The City Council has requested that such an Ordinance be developed.~~

~~Goals and Policies Implemented: Goal 1, Policy 1.3~~

~~Responsibility: Finance Department (License and Collections)~~

~~Funding Sources: Existing operating funds.~~

~~1.4 Train Station Design Concept (see Transportation Element for description) City has applied for state funding to upgrade existing facility.~~

~~Goals and Policies Implemented: Goal 2, Policy 2.4~~

~~Responsibility: City Planning Department, with Redevelopment Agency~~

~~Funding Sources: Capital funds from state rail bonds.~~

~~1.5 Facade Improvement Program Seek funding to develop a facade and signage improvement program, particular for commercial streets such as San Pablo Ave., perhaps similar to programs which have operated in South Berkeley. Funds for this program on~~

~~University Ave. have been set aside by the City Council. This program could operate in conjunction with overall small business assistance programs.~~

~~Goals and Policies Implemented: Goal 1, Policies 1.6, 1.9; Goal 8, Policies 8.1, 8.2~~

~~Responsibility: Community Development Department with City Planning Department~~

~~Funding Sources: None currently identified. Possible sources include Redevelopment Tax Increment (in Redevelopment Areas), Economic Development Administration, State Historic Preservation Office (see item 2.1)~~

### ~~Other Recommended Urban Design Activities~~

#### ~~Studies and Plans~~

~~1.6 4th St. Area Strategic Plan—Develop a Strategic Plan for the 4th & Hearst/University commercial node. This Plan should provide an economic development strategy linked various elements planned for the district, including consolidated parking, an improved train station and additional retail stores. It should also discuss how these elements should fit together physically, relate to existing uses, and to other new facilities, such as possible new access to the Marina/Waterfront.~~

~~Goals and Policies Implemented: Goal 1, Policies 1.1, 1.2, 1.6, 1.7, 1.8, 1.10; Goal 2, Policies 2.1-2.5~~

~~Responsibility: City Planning Department~~

~~Funding Sources: Not yet identified. Redevelopment Tax Increment may fund partially.~~

~~1.7 Development of Design Guidelines for various areas—Develop design guidelines to provide direction to builders, and to provide a framework of policies for implementation of the Design Review Ordinance in various locations. Treat San Pablo Ave. especially commercial nodes—as the first priority locale for these guidelines.~~

~~Goals and Policies Implemented: Goal 1, Policies 1.1, 1.4, 1.6-1.11;~~

~~Responsibility: City Planning Department~~

~~Funding Sources: Not yet identified.~~

~~1.8 Gateway Improvement Studies—Study the gateway and entry corridors, to assess how their character might be best highlighted.~~

~~Goals and Policies Implemented: Goal 3, Policies 3.1-3.6~~

~~Responsibility: City Planning Department~~

~~Funding Sources: Not yet identified.~~

~~1.9 I-80 Corridor Visual Improvement Study—Develop a plan to improve the appearance of the Freeway (especially north of University Ave.) from West Berkeley, and West Berkeley from the Freeway, recognizing the industrial character of the area.~~

~~Goals and Policies Implemented: Goal 9, Policy 9.10~~

~~Responsibility: City Planning Department~~

~~Funding Sources: Not yet identified, possible partial funding from Redevelopment Tax Increment.~~



~~1.10 Billboard Amortization~~ Analyze the legal framework for, and assess the cost of, removing billboards from San Pablo Ave., and possibly other locations.

~~Goals and Policies Implemented:~~ Goal 1, Policy 1.6

~~Responsibility:~~ City Planning Department

~~Funding Sources:~~ Not yet identified.

### ~~Ordinance and Regulatory Changes~~ Urban Design

~~1.11 Zoning Ordinances Changes for and between Nodes~~ Amend the Zoning Ordinance to require ground floor uses on commercial street frontage in West Berkeley be retail and to provide incentives for residential/retail construction. Explore whether there are appropriate locations between commercial nodes where San Pablo Ave. could be zoned exclusively for residential use, without creating extensive non-conformities.

~~Goals and Policies Implemented:~~ Goal 1, Policies 1.1, 1.4, 1.8

~~Responsibility:~~ City Planning Department

~~Funding Sources:~~ Part of West Berkeley Plan Zoning Ordinance revision.

~~1.12 Sign Ordinance Amendments~~ Amend the Citywide sign Ordinance so that it is consistent with current design review policies on permissible and appropriate signs.

~~Goals and Policies Implemented:~~ Goal 1, Policy 1.6

~~Responsibility:~~ City Planning Department

~~Funding Sources:~~ Not yet identified

### ~~Ongoing Activities~~

~~1.13 Review of Major Public Improvements~~ Review the design impacts of any major public improvement projects (e.g. changes to major streets) to assure that they support West Berkeley Plan design goals.

~~Goals and Policies Implemented:~~ Goal 1, multiple policies

~~Responsibility:~~ City Planning Department, Public Works Department

~~Funding Sources:~~ Project Funding

## ~~B. Historic Preservation Implementation Measures~~

### ~~Activities Already Underway~~

~~2.1 Designation as Certified Local Government~~ Apply to State Historic Preservation Office for certification as a Certified Local Government. Gives City greater role in applications for National Register of Historic Places, can make City eligible for funding sources.

~~Goals and Policies Implemented:~~ Goal 1, Policy 1.9; Goal 5, Policy 5.2, Goal 8, Policy 8.1

~~Responsibility:~~ City Planning Department

~~Funding Sources:~~ No funding required for application, however, designation may require City expenditure to undertake historic surveys—funding sources not yet identified.

**Priority for Initiating Action**

~~2.2 Completion of West Berkeley Historic Survey~~ Assist Berkeley Architectural Heritage Association in the completion of the West Berkeley Historic Buildings Survey.

~~Goals and Policies Implemented:~~ Goal 5, Policy 5.2

~~Responsibility:~~ City Planning Department

~~Funding Sources:~~ Not yet identified

**Other Recommended Activities**

~~2.3 Research for Landmark Designation on State Historic Resources Inventory buildings~~ As a priority for West Berkeley landmark designation, research and review information on the 112 buildings on the Inventory, and determine which should be designated as landmarks.

~~Goals and Policies Implemented:~~ Goal 5, Policy 5.1

~~Responsibility:~~ City Planning Department

~~Funding Sources:~~ Staff time from Landmarks staff. Interns and volunteers possible source of additional assistance.

~~2.4 Historic signs program~~ Install signs at historic buildings and sites, particularly those in commercial nodes.

~~Goals and Policies Implemented:~~ Goal 4, Policies 4.2, 4.3

~~Responsibility:~~ City Planning Department

~~Funding Sources:~~ Not yet identified

~~2.5 Elementary educational program~~ Work with Berkeley Unified School District to develop programs for students on Berkeley architectural and social history, to complement existing curricula and raise student awareness of Berkeley history.

~~Goals and Policies Implemented:~~ Goal 4, Policies 4.1, 4.3

~~Responsibility:~~ City Planning Department

~~Funding Sources:~~ Not yet identified

~~2.6 Heritage Area Designation~~ Designate appropriate areas as Heritage Areas. Develop guidelines for rehabilitation and new construction within them if and when residents support such an effort.

~~Goals and Policies Implemented:~~ Goal 4, Policy 4.1; Goal 6, Policy 6.3

~~Responsibility:~~ City Planning Department

~~Funding Sources:~~ Not yet identified

**C. Open Space Implementation Measures (see also Aquatic Park Master Plan)****Activities Already Underway**

~~3.1 Codornices Creek Regulation and Improvement~~ Work with the University of California and private developers on its site and others which abut Codornices Creek to assure that the City's Creek Ordinance regulating development along creeks is respected.

and to gain improvements to the Creek and adjoining properties.

~~Goals and Policies Implemented: Goal 9, Policy 9.11~~

~~Responsibility: City Planning Department, University of California, private developers~~

~~Funding Sources: Private developers, as part of site developments.~~

### **Priority for Initiating Action**

~~3.2 Tree Planting Program—Facilitate the planting of trees in residential areas, along major traffic corridors, in areas needing additional identity highlighting, and in other appropriate locations. Work with neighborhood and civic organizations through the provision of technical assistance, information, and other means—churches, businesses, and other interested parties to implement planting. Trees used in various locations should be carefully selected for appropriateness, and should not impair security efforts.~~

~~Goals and Policies Implemented: Goal 8, Policies 8.1, 8.2; Goal 9, Policy 9.1, 9.10~~

~~Responsibility: Community Development Department with City Planning Department~~

~~Funding Sources: Ongoing City program, Redevelopment Tax Increment, private foundations~~

### **Other Recommended Activities**

~~3.3 Aquatic Park Access Improvements: Improve access to Aquatic Park, both at existing entrances (such as Addison St.) and recommended new entrances, such as Channing Way and Heinz St. Work with parties such as the Southern Pacific Railroad to overcome obstacles to creating crossings across the railroad.~~

~~Goals and Policies Implemented: Goal 9, Policy 9.7~~

~~Responsibility: Public Works (Parks/Marina) with Public Works/Traffic Engineering and City Planning~~

~~Funding Sources: Not yet identified~~

~~3.4 Other Aquatic Park Master Plan Improvements—Implement the other recommendations of the Aquatic Park Master Plan including creation of a children's play area, improvement of the bird/wildlife refuge, introduction of concessions, expansion of marshes, and other actions.~~

~~Goals and Policies Implemented:~~

~~Responsibility: Public Works (Parks/Marina)~~

~~Funding Sources: Not yet identified.~~

~~3.5 Neighborhood park Improvements/additions—Plan and seek funding to improve facilities and services at neighborhood parks, including parks on School District land, particularly G. Florence Park. If opportunities and funding arise, develop additional neighborhood parks, particularly south of University Ave., paying careful attention to residents concern about security problems in parks.~~

~~Goals and Policies Implemented: Goal 1, Policies 9.4-9.6~~

~~Responsibility: Public Works (Parks/Marina), Berkeley Unified School District~~

~~Funding Sources: Not yet identified~~

# 5

## TRANSPORTATION

### I. STRATEGIC STATEMENT

As West Berkeley grows and evolves, its need for efficient and environmentally sound transportation increases. Intensification of land uses—the conversion of formerly industrial sites to other uses—has strained the West Berkeley street and road system. Traffic congestion has become a serious problem along some streets and at some major intersections. Parking is adequate in many areas, but newly developed commercial and retail areas are beginning to experience shortages. The level of transit ridership in West Berkeley is lower than other parts of the City, reflecting both the historical ease of parking there and the relatively poor transit service. As an area with a high rate of solo commuting, the West Berkeley industrial and commercial area contributes more than its “share” to automobile-generated air pollution.

This Element, in conjunction with the Land Use and Environmental Quality Elements, presents a strategy for maintaining and improving both the efficiency and environmental soundness of transportation in West Berkeley. The Element foresees a West Berkeley where the automobile is less dominant. The Element seeks a balance between the moderate growth policies of the Preferred Land Use Concept and the City's long term goals to limit street expansion and to accommodate growth through expanded transit use and other non-automobile transportation. The Economic Development Element's goal of increasing the proportion of Berkeley resident workers would if successful also reduce the proportion of single occupant auto drivers. This Transportation Element seeks:

- First of all to reduce the use of single occupant automobiles, with improvements in public transit and private transit like employer shuttles, bike routes, and pedestrian access. This is both a transportation and an air quality strategy.
- Minimize traffic congestion without creating the incentive for additional auto travel.
- Sensitively improve the street system to reduce congestion and to accommodate current traffic patterns and changes in land use patterns.

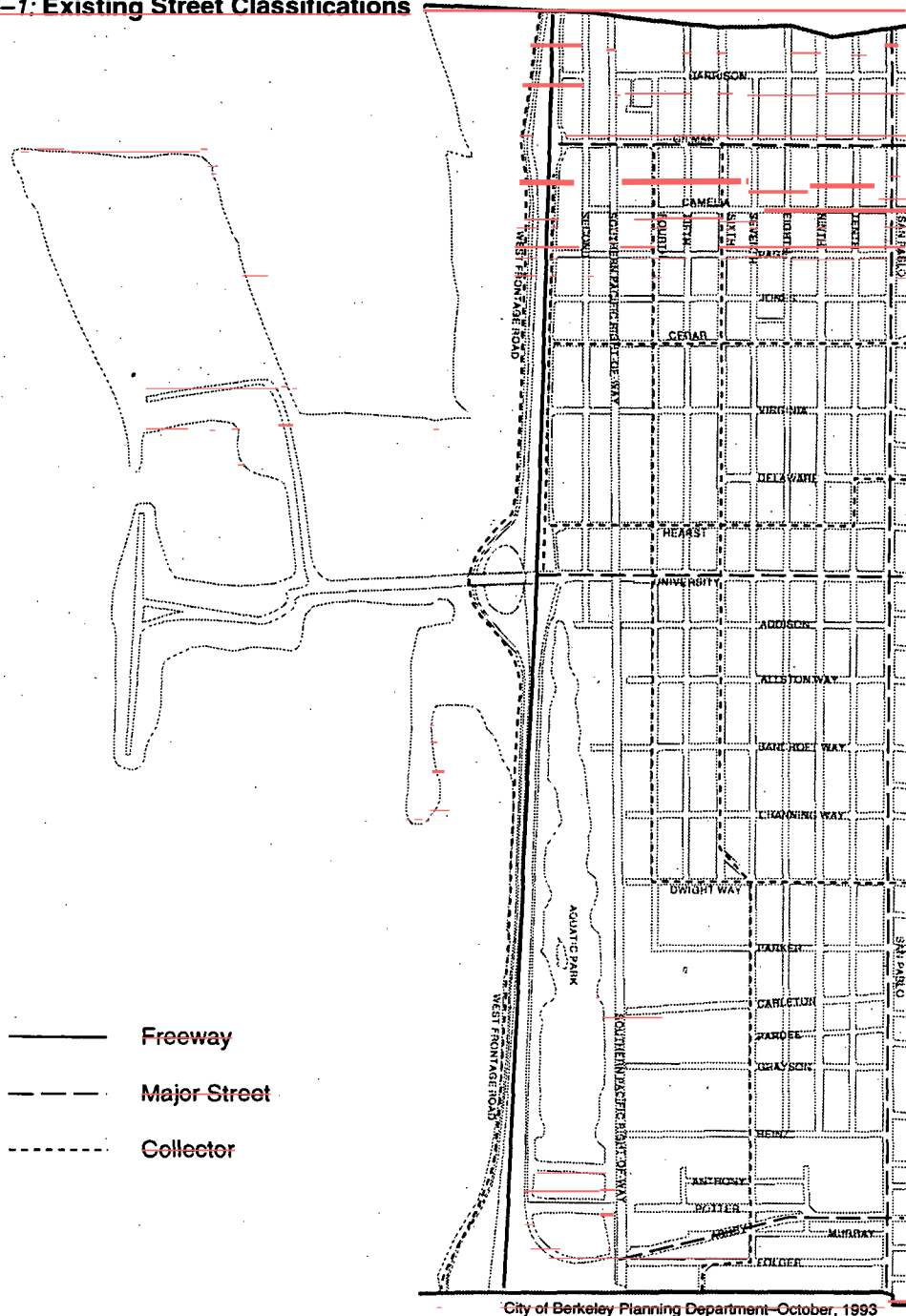
- Protect local residential streets from through traffic.
- Maintain adequate parking consistent with the goal of reducing commuting by automobile.



## II. BACKGROUND

The goals and policies in this element are best understood in the context of the current transportation situation in West Berkeley. This section discusses the circulation system, including both streets and other transportation networks, the travel patterns of West Berkeley commuters, traffic growth and the causes of congestion, and anticipated changes which will have an impact on the West Berkeley transportation system. This section also discusses the concept of "Level of Service", one of the principal ways the City and community can keep track of changes in the transportation system.

Figure 5-1: Existing Street Classifications





## A. The West Berkeley Circulation Network

West Berkeley has the most varied circulation system of any area of the city. Within the limits of West Berkeley are a major freeway, two state highways, major and minor local streets, a rail line carrying both freight and passengers, as well as many local spurs, sidewalks and bikeways. In addition to automobiles, the street system serves a substantial volume of truck traffic, buses and transit vans. The numbers of pedestrians and bicyclists, although small compared to other sections of town, are growing as West Berkeley changes.

### Streets and Roads

West Berkeley's roadways are classified as follows:

Freeways—Interstate 80,

Major streets—San Pablo Ave., Gilman St., University Ave., Ashby Ave., Dwight Way.

Collectors—Eastshore Hwy., 4th St., 6th-7th-Hollis, Cedar St., and Hearst-Delaware

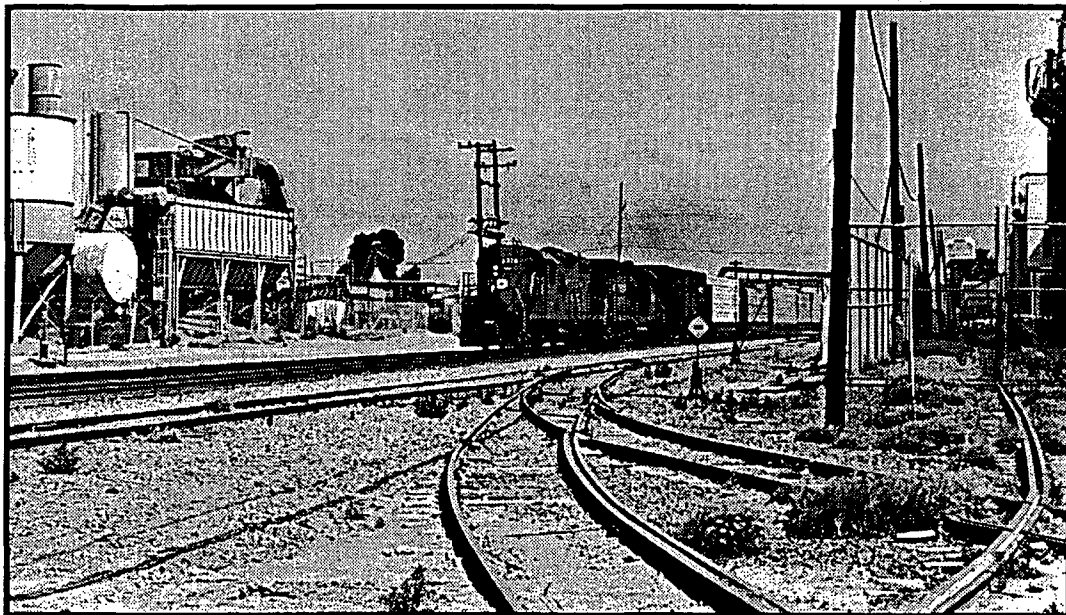
Local streets—remaining streets.

The Freeway, major streets, and collectors are mapped on Figure 1. In addition to their status as major streets in the City's classification system, San Pablo Ave. and Ashby Ave. are both designated State Highways. San Pablo is State Route 123, Ashby is State Route 13. Because they are State Highways, the California Department of Transportation (Caltrans) controls many key decisions affecting these streets, such as the installation of signals and crosswalks. As state highways, the state pays for the maintenance and improvement of 123 and 13. The removal of Ashby from the State Highway system was a stated goal of the City's 1977 Master Plan and is currently the subject of a feasibility study to determine the long term costs and benefits to the City.



## Parking

Parking is not technically part of the circulation network, but is obviously necessary if an automobile circulation network is to function. The historic absence of a parking problem is suggested by the fact that until the 1980's there was no parking requirement for West Berkeley development. Recently, however, with intensified retail and other development, areas with potential parking shortfalls have been identified in West Berkeley. These are 2 very successful retail areas—4th & University and 7th & Ashby, along with the 7th & Parker industrial/office area. The City, along with property owners in the effected areas, has begun to explore possible solutions to the shortfalls. As West Berkeley continues to develop, City policy must balance reasonable parking needs with pursuit of a policy which will not attract excess cars, exacerbating traffic congestion.



## Rail Service

The Southern Pacific railroad tracks are an important non-highway circulation element in West Berkeley. They serve primarily as a freight route, but also carry S.P.'s passenger trains running north to Oregon and Washington, east to Chicago, and South to Southern California. In addition to long haul trains to these destinations the line serves several short haul services to Sacramento. Only the short haul services stop in Berkeley, near 3rd and University.

The railroad restricts access in the northern part of West Berkeley, with University, Hearst, Virginia, Cedar, Camelia, and Gilman being the only streets that cross it, while other streets do not. West Berkeley is also filled with rail spurs once serving individual plants and industries. Now many, but not all, of the spurs are unused, but the abandoned tracks present a real hindrance to pedestrian and bicycle travel, and an inconvenience to cars and trucks.

## Transit and Shuttles

West Berkeley's transit service has improved, but it remains among the poorest of any economically active area of Berkeley. AC Transit operates frequent service along University Ave. (route 51) and San Pablo Ave. (#72). Other lines run less frequently — Gilman/6th St. (#9), Ashby Ave. (#6), Dwight Way (#65), and San Pablo/Cedar St. (#52). There is no all day bus along job rich 7th St. south of Dwight. Routes 9, 51, and 65 converge at the Berkeley rail station, though waiting arrangements are poor. There is no BART station in West Berkeley and no bus line which goes from West Berkeley to the North Berkeley BART station, the station closest to much of West Berkeley. There are buses from (south) West Berkeley to Ashby BART and (north and central) West Berkeley to Downtown Berkeley BART. To go from most West Berkeley locations to most other East Bay locations by transit requires at least one transfer and sometimes more. In addition, recent gains in AC Transit service may erode, as the agency faces a funding shortfall of up to \$18 million in its 1992/93 budget of \$100 million.

There is some privately provided transit service in West Berkeley. A few large employers (for example, Kaiser and Miles) provide shuttle service for their employees to BART stations. A voluntary organization of employers, the Gateway Transportation Management Association (TMA) is working to expand and improve this service and well as to find other ways for employers to work cooperatively to solve transportation problems. In August, 1993, the City received a grant from the Air Quality District to initiate a shuttle that would connect several large employers to BART.

Frequent transit service geared toward commuters is currently limited to buses although business travelers are beginning to use the new San Jose-Sacramento service which stops in Berkeley.

## Bicycle and Pedestrian Circulation

Outside of a few enclaves (notably around 4th & Hearst, and San Pablo & University), West Berkeley could not be called bicycle or pedestrian friendly. Large streets with heavy traffic and (generally) few street trees do not invite the walker or the

cyclist. The entrances to Aquatic Park are somewhat obscure, and the pedestrian/bicycle crossing to the Marina across I-80 is difficult to follow and potentially hazardous. In some cases sidewalks are narrowed or absent. Paving is often poor, and negotiating railroad tracks (abandoned or operating) can be difficult.

At present, designated bikeways are limited to 9th St. north of Dwight, Bancroft and Channing Way, and Gilman St. The 1977 Master Plan envisions the existing bikeway network expanded to Aquatic Park, as well as linked by shore-





line trails to North Waterfront Park. A study proposing revisions of the bikeway system in West Berkeley and throughout the city is expected in late 1993.

The City has begun to take action, particularly in the Redevelopment Area (bounded by University, Cedar, I-80, and 6th St.), to improve the pedestrian environment. The Agency plans to plant street trees along those major streets in the Area which do not already have them. It is also planning to designate parts of 5th and 4th St. as a "pedestrian pocket", and will install sidewalks on the parts of 5th St. which do not have them.

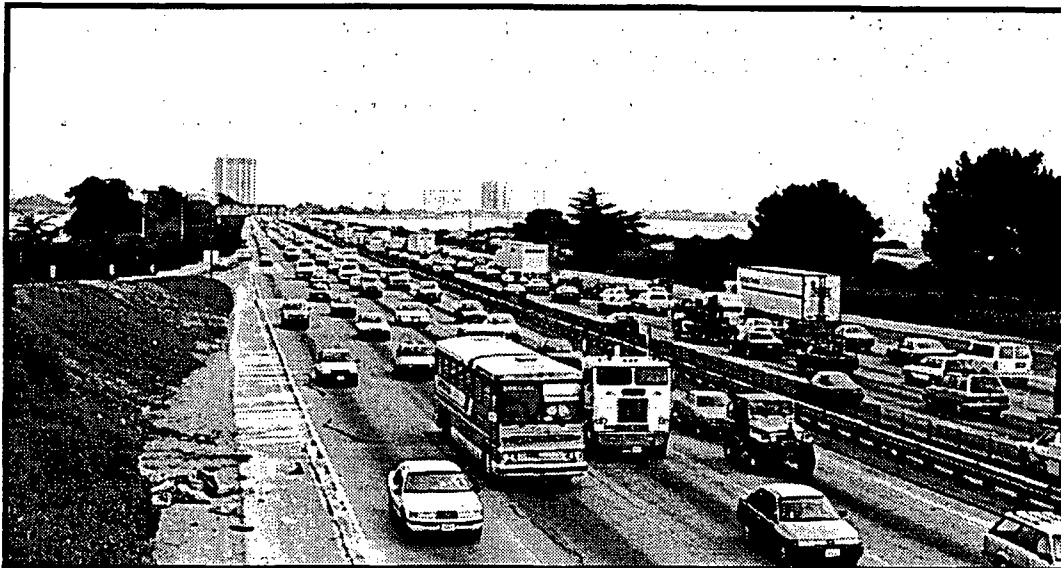
### ***B. Potential Changes to Transit Service and the Circulation Network by Regional Agencies***

Several important changes can be anticipated around West Berkeley in the next few years. First, Caltrans has begun a major project to add a High Occupancy Vehicle (HOV) lane on I-80 in each direction from the Bay Bridge to Route 4 in Richmond. Although the City has not succeeded in forcing Caltrans to redo the 1984 EIR studying the impacts of the project, the City's continued pressure has caused major changes in the project. One significant change is that the lanes are to be designated for high occupancy vehicles all day—not just at the peak hours. Construction on I-80 may require San Pablo Ave. to take additional load during a 3-4 year construction period, although no freeway lanes will be closed during the construction. Caltrans has worked with the cities and counties on the corridor to develop improvements and expanded transit service to help mitigate any negative impacts the construction will have. In addition a "mobile commute store" along the lines of a catering truck will be providing transit information and tickets to West Berkeley workers as part of the I-80 mitigation's.

West Frontage Road will be significantly changed in the next few years. It will be reduced from three lanes to two and the extra space used to create a bicycle/pedestrian path completely separate from traffic. The intersections at Ashby, University, and Gilman with West Frontage Road will remain largely unchanged so it should be capable of carrying as much traffic as it does now—although at a slower speed.

Rail service on the Southern Pacific line has increased. The "Capital Rail Service" recently added four daily trips between Sacramento and San Jose. There is interest in establishing frequent service aimed toward commuters on this line, although there is no current funding for it. Frequent commuter trains would have both a positive and negative impact on West Berkeley, in that it would provide transit service to West Berkeley but would also further disrupt the existing street system.

Two developments at AC Transit may have an effect on West Berkeley. First, as discussed above, AC's precarious operating budget may mean that there will be cutbacks on current bus service to West Berkeley. This would make it difficult to achieve the plan objective of reducing auto traffic. On the other hand, AC is also studying eventual electrification of some of their more heavily used corridors—San Pablo Ave. among them. Electrification could offer more frequent and convenient service but it is unlikely to be implemented within the next decade even if found to be feasible. Some kinds of electrification (like the light rail line recommended for San Pablo Ave. might require replacing one or more auto lanes. In addition to the electrification of AC's lines, regional



~~agencies will be looking at the possibility of re-electrification of lines across the Bay Bridge.~~

~~The Metropolitan Transportation Commission in a region wide study of potential ferry routes recommended that ferry service be established from West Berkeley (Gilman St.) to San Francisco. The study in fact cited Berkeley as the location which has the greatest potential for ferry commuting of any new site in the Bay Area. Gilman St. was chosen because of the presence of Caltrans owned parking lots, and because the proximity of Golden Gate Fields would encourage "reverse commuter" ridership to the horse races. A great deal of fundraising, planning, and environmental assessment will need to be done if this recommendation is to become a reality.~~

~~Not all of these projects and ideas will come to fruition. However, if only a few do it will change the transportation system in West Berkeley significantly.~~

### **~~C. West Berkeley Commuting Patterns~~**

~~Analysis of West Berkeley commute patterns is hampered by the fact that the most recent available comprehensive data for West Berkeley specifically is from the 1980 Census (1990 data is available for the city as a whole). That data suggests that people working in West Berkeley live farther away from their jobs than other Berkeley workers, and that they are more likely to drive alone to their jobs than other Berkeley workers. While slightly over half of all Berkeley workers (54%) drove alone to work in 1980, in West Berkeley over 2/3 did (68%). Berkeley and Albany residents represented a mere 18% of the West Berkeley workforce, but 39% of the Citywide total. West Berkeley conversely drew a greater proportion of its workforce (than the city as a whole) from other parts of the Bay Area—Western Contra Costa County, Southern Alameda County, San Francisco, etc. West Berkeley workers were more likely to carpool than overall Berkeley workers (21% vs. 16%). Thus only 11% of West Berkeley workers took transit, biked, or walked to their jobs, compared to 30% of Citywide workers.~~

~~This difference in residence in significant part explains the greater propensity to drive alone to West Berkeley. Local residents are far more likely to walk, bike, or take~~

transit to work than are residents of farther away cities. However, this difference is not as great in West Berkeley as in better transit served parts of the city such as Downtown. West Berkeley is also relatively easy to drive to—just off the freeway, with free parking often awaiting the worker at the jobsite. Transit is relatively difficult—no BART station, transit lines connecting only to a few points. Thus efforts to improve the West Berkeley commute pattern must seek to both increase local employment, and shift the mode of commuters.

#### **D. Traffic and Congestion**

##### **Traffic Growth**

Traffic in West Berkeley has increased in recent years. Between 1977 and 1987, traffic increased in varying amounts along virtually every West Berkeley Major Street. In addition demolition of the Cypress structure has changed traffic patterns, apparently adding traffic on San Pablo Ave. and other major north-south routes. Traffic generally increased faster in West Berkeley than in other parts of Berkeley, both because streets in other parts of the City were already full and because West Berkeley is changing faster than other parts of town.

There are several reasons for the growth of traffic in West Berkeley. Car ownership and auto use have increased everywhere in California, including all of Berkeley. These effects are related largely to social and economic factors, including such diverse changes as increased household income, the entrance of women into the workforce, and the dispersal of workplaces to the suburbs.

Simple population growth in the Bay Area—in Emeryville, in Richmond, and other cities, especially those along the I-80 corridor—is another cause of increased traffic. The approximately 35% increase of traffic along I-80 is a particularly clear indicator of





The map displays a grid of streets in San Pablo. A legend in the bottom left corner identifies three types of roads: Freeway (solid line), Major Street (dashed line), and Collector (dotted line). The map includes several percentage values at specific intersections, indicating traffic volume or speed changes. Key streets shown include Harrison, Gilman, Camelia, Fourth, Fifth, Sixth, Seventh, Eighth, Ninth, Tenth, and Eleventh. Other streets include West Frontage Road, Southern Pacific Highway, Hearst, University, Edison, Edison Way, Chandler Way, Chandler Way, Dwight Way, Parker, Parkside, Parkside, Grayson, Heinz, Anthony, Potter, and Murray. The map also shows Aquatic Park and a large body of water on the left side.

| Intersection / Location                       | Percentage |
|-----------------------------------------------|------------|
| West Frontage Road / Harrison                 | +34%       |
| West Frontage Road / Gilman                   | +73%       |
| West Frontage Road / Camelia                  | +25%       |
| West Frontage Road / Fourth                   | +4%        |
| West Frontage Road / Fifth                    | +21%       |
| West Frontage Road / Sixth                    | +100%      |
| West Frontage Road / Seventh                  | +128%      |
| West Frontage Road / Eighth                   | +43%       |
| West Frontage Road / Ninth                    | +24%       |
| West Frontage Road / Tenth                    | +35%       |
| West Frontage Road / Eleventh                 | +148%      |
| West Frontage Road / Southern Pacific Highway | +35%       |
| West Frontage Road / Hearst                   | +27%       |
| West Frontage Road / University               | +65%       |
| West Frontage Road / Edison                   | +2%        |
| West Frontage Road / Edison Way               | +104%      |
| West Frontage Road / Chandler Way             | +2%        |
| West Frontage Road / Chandler Way             | +21%       |
| West Frontage Road / Dwight Way               | +18%       |
| West Frontage Road / Parker                   | +2%        |
| West Frontage Road / Parkside                 | +2%        |
| West Frontage Road / Parkside                 | +2%        |
| West Frontage Road / Grayson                  | +2%        |
| West Frontage Road / Heinz                    | +2%        |
| West Frontage Road / Anthony                  | +2%        |
| West Frontage Road / Potter                   | +2%        |
| West Frontage Road / Murray                   | +2%        |
| West Frontage Road / Schuler                  | +2%        |

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regional effects, although other streets are impacted by it as well.

Intensification of land use in West Berkeley is another reason, particularly for traffic growth in local areas such as 4th & Hearst. As figure 2 indicates, Hearst St. west of 6th experienced an 128% increase in traffic from 1977 to 1987, far above the increase on most streets. The doubling of traffic on 7th St. south of Dwight presumably results from both commercial growth around 7th & Ashby and activity in Emeryville, particularly along the Hollis St. corridor.

Regional growth is likely to continue to contribute to traffic growth. Between

**Table 5-1: Level of Service, Major West Berkeley Intersections, P.M. Peak Hour**

| Intersection              | Type of Traffic Control | Level of Service |
|---------------------------|-------------------------|------------------|
| 7th & Ashby               | Traffic Signal          | E                |
| Ashby & San Pablo         | Traffic Signal          | F                |
| 7th & Dwight              | Traffic Signal          | D                |
| Dwight & San Pablo        | Traffic Signal          | C                |
| 6th & University          | Traffic Signal          | D                |
| Eastshore & Gilman        | Stop Signs              | E                |
| 6th & Gilman              | Traffic Signal          | B                |
| Gilman & San Pablo        | Traffic Signal          | D                |
| I-80 southbound & Ashby   | Ramps, Stop Signs       | F                |
| West Frontage & Ashby     | All Way Stop Signs      | F                |
| I-80 southbound at Gilman | Ramps, Stop Signs       | F                |
| I-80 northbound at Gilman | Ramps, Stop Signs       | A                |
| 6th & Cedar               | Traffic signal          | B                |

Source: West Berkeley Plan EIR

1985 and 2010, the Association of Bay Area Governments (ABAG) projects a 39% increase in regional population (223,000 additional residents) along the I-80 corridor from Berkeley to Fairfield. Over the same period, ABAG projects a 43% increase in employment (96,000 additional jobs) in this corridor. In Berkeley's immediate vicinity, Emeryville plans to add hundreds of thousands of square feet of retail and office space immediately south of Powell St. Plaza and on Catellus land in southern Emeryville (and West Oakland), and hundreds of housing units at the former Del Monte Cannery on Powell St. The Albany Waterfront, currently largely occupied by Golden Gate Fields, is a very large site which may well experience more intense development, although plans are not yet determined. Figures 5-3 and 5-4 relate to the growth in traffic in Berkeley since 1977.

### Operation of West Berkeley Intersections

Whenever a major project is proposed, whenever Caltrans proposes changing signalization on a state highway, whenever an EIR is done (including for the West Berkeley

WEST BERKELEY PLAN

Figure 5-3: 24 Hour Traffic Volumes, 1977

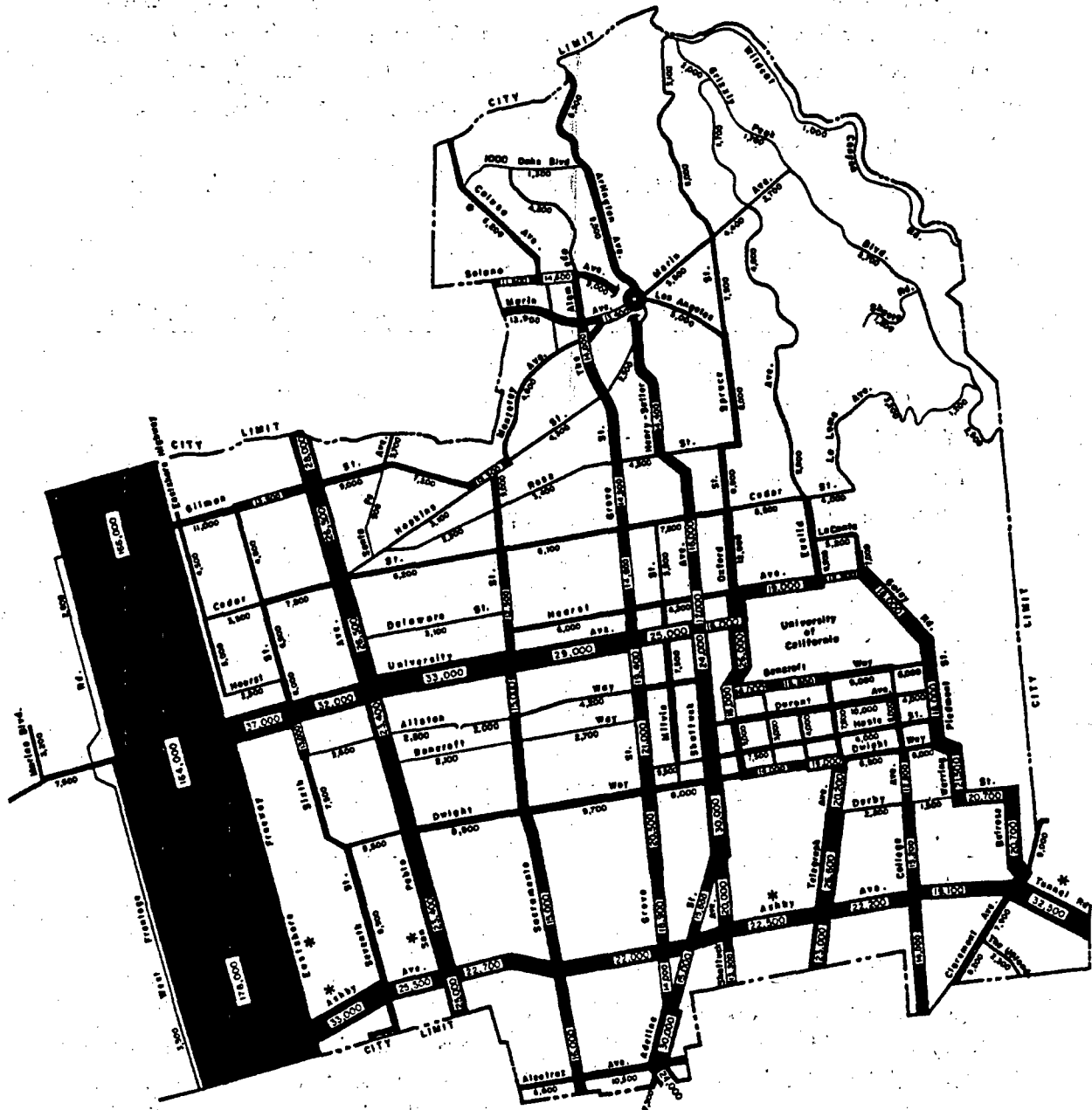
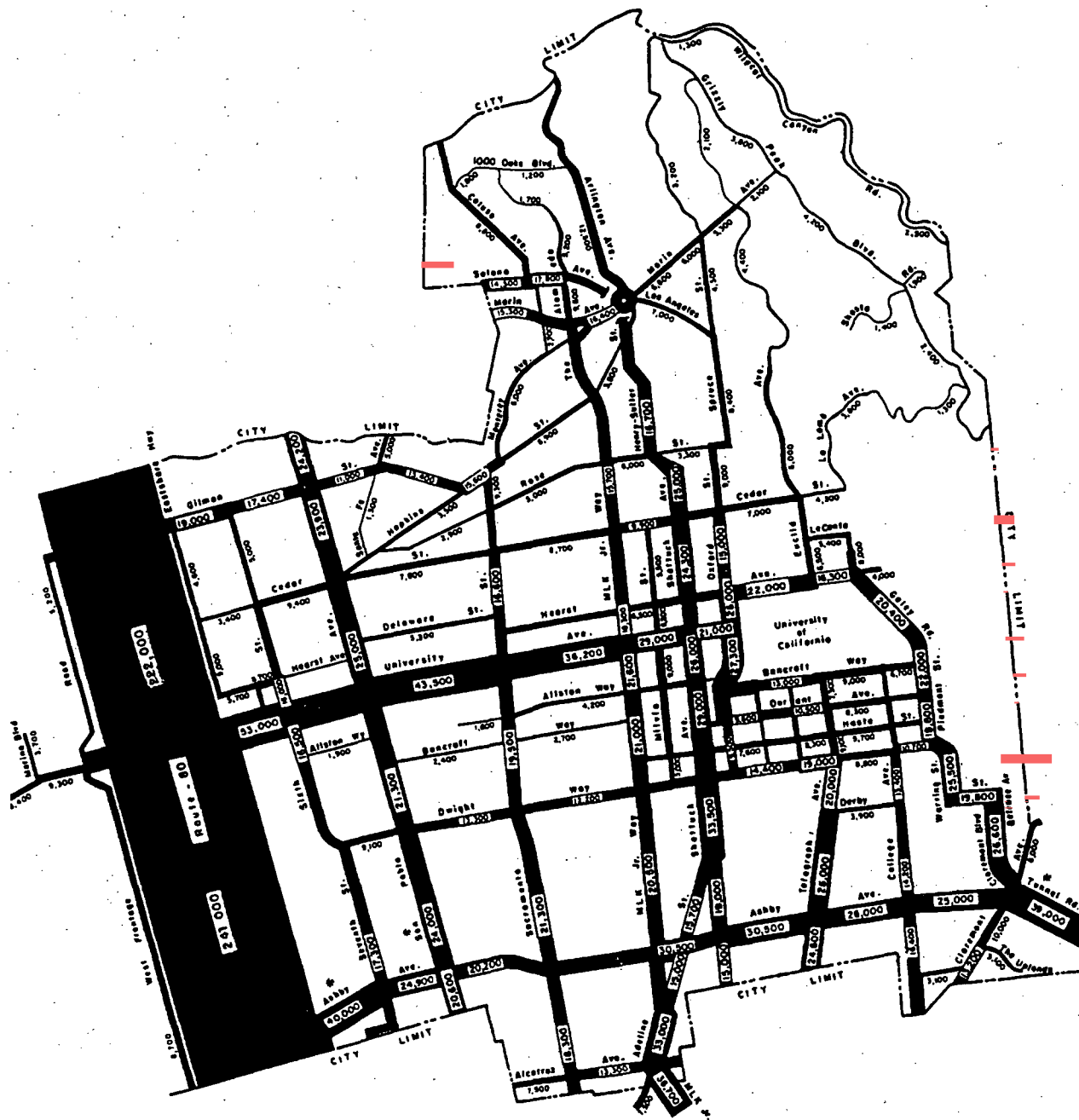


Figure 5-4: 24 Hour Traffic Volumes, 1987





Plan), Level of Service Calculations are made for affected intersections. Through information gathered in this way we know that there are a number of intersections in West Berkeley which are already operating below the desirable Level of D (see next section for explanation), at least at their peak hour of afternoon traffic (although not necessarily other times). There may be others, as yet unstudied, which are also operating at E or F.

#### City Action against Congestion Opportunities & Constraints

While the City can and does seek to minimize traffic congestion, there are important limitations on its ability to do so. The City has the most direct control over the portion of traffic growth which comes from new development in Berkeley. Control over traffic growth resulting from development elsewhere or from increasing levels of car ownership and usage is very indirect.

There are several ways municipalities attempt to control congestion. One way is to control congestion by increasing the capacity of the street system to keep up with projected increases in traffic or development. Another way is to seek to limit traffic growth through limiting development either in quantity or in type to that which produces little or no traffic. Lastly, municipalities can secure "mitigations" from development in the form of agreements to influence employee or client travel behavior away from automobile travel. For West Berkeley, all methods have potential drawbacks.

Increasing street capacity to deal with congestion has soon lead many East Bay communities to create giant intersections—often eight to ten lanes across a single leg since multiple turn lanes are a common congestion reliever. The size of these intersections makes pedestrian use impossible or unpleasant and can mean the destruction of surrounding buildings in order to gain space for them. Measure S—a citizen passed advisory measure—opposed street widening as a way to reduce congestion. Berkeley has been very restrained in increasing street capacity through widening.

The City can attempt to check traffic congestion by controlling the level of development in West Berkeley. Indeed, the Preferred Land Use Concept lays out a moderate growth scenario for West Berkeley. The Plan's projections site a potential net



increase of some 1,800,000 square feet (residential and non-residential), on an existing base of over approximately 12,000,000 built square feet. The major traffic impact would come from the 680,000 square feet of projected office and laboratory growth, and the 325,000 square feet of added retail space.

In addition, the City will attempt to mitigate the impact of all traffic producing development through encouraging West Berkeley travelers to use alternatives to the solo automobile. Mitigation agreements are incorporated into new development in several ways through the EIR process, through permit conditions, or through development agreements. The City's efforts have been strengthened and extended to existing employers through the adoption of a "Trip Reduction Ordinance" requiring that all employers conduct information campaigns about alternative travel modes. In addition, regional air quality regulations will soon require all large employers in the Bay Area to meet goals related to reducing the number of commuters traveling by auto.

### Measuring Traffic Congestion the Concept of Level of Service

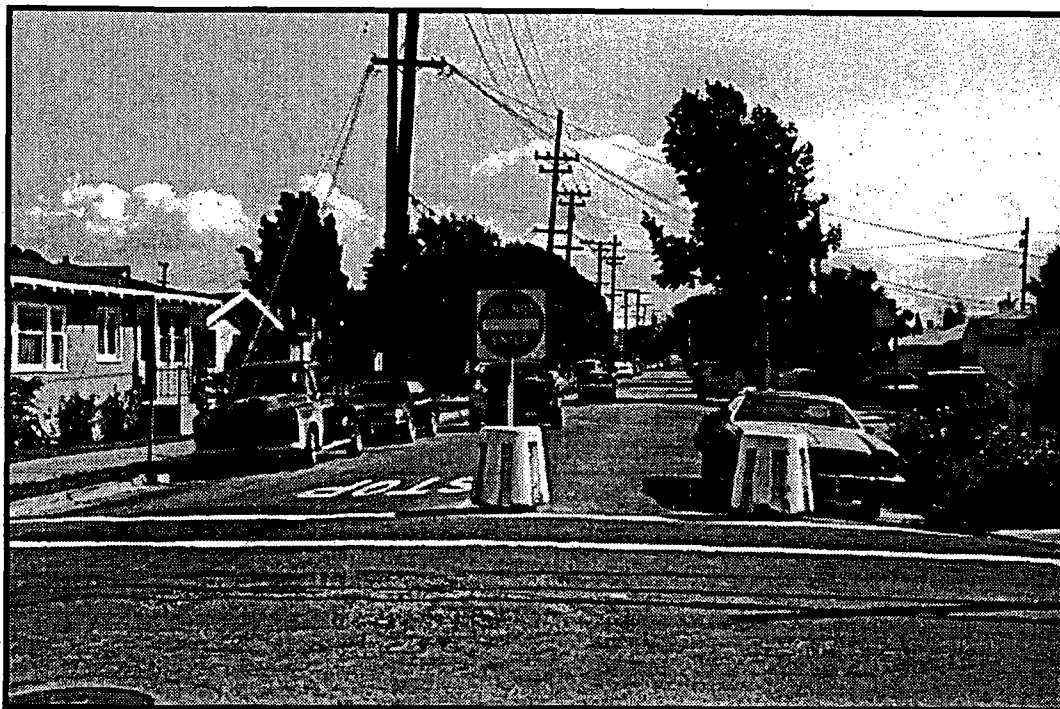
Level of Service (LOS) has become the commonly accepted method for cities and other agencies to keep track of congestion. LOS calculations can be used in many ways including to compare congestion at the same location over time, to compare two locations, to anticipate the operation of a street in the future, and to compare how alternative projects will impact a street system. LOS is analogous to grades in school. Like grades Levels of Service range from A to F (but with E added). Also like grades, there are several different ways to compute Levels of Service and without knowing how two particular Levels Of Service were computed, one cannot know how they really compare.

The interpretation of the meaning of A, B, C, D, E, and F in level of service is less straightforward than the interpretation of school grades.

LOS A represents completely free flow — no impediment to speedy travel. On a freeway it would mean a nearly empty lane; at an intersection it would mean sailing through on the green light nearly all the time. LOS B and C represent slightly more crowded conditions. In all but the least crowded rural areas and suburbs, or least successful commercial districts, it is difficult to build major streets large enough to operate at A, B, or C, at least at the rush hour. LOS D is often cited as a desirable "minimum operating condition" for intersections or streets, and was recommended as a city-wide standard for collectors, arterials, and key intersections in advisory measure S, passed by the voters in 1988. LOS D might be considered the most cost-effective balance between an investment in street capacity and the inconvenience of some delay in travel. LOS E is where an intersection or traffic lane is handling all the traffic it can. In a sense it is the most "productive" Level of Service, although to the individual traveler it can be frustratingly slow. For example, on a freeway, LOS E occurs when traffic is traveling at a steady speed of about 35 miles per hour. LOS E is also unstable and can degenerate to LOS F quickly. Level F is failure, just as in a normal grading system. It represents jammed conditions — stop and go on the freeway, or waiting through several lights to get through an intersection.

In order to make comparisons, traffic engineers have codified the calculation of





Level of Service into equations which include a number of factors, commonly and principally the volume of traffic on a lane or through an intersection, and the configuration of the street or intersection. It is important when making comparisons across time or location that the same equations be used and the factors be interpreted consistently.

It is also important to remember that LOS is a moving target. Automobile drivers are continually seeking uncongested routes. Left to their own devices they soon find alternatives to intersections or road operating at LOS E or F. Thus, roads operating at A, B, C, or D may attract enough traffic to become E or F themselves.

### LOS Standards and Measuring Success against Congestion

When the Preferred Land Use Concept was drafted, the goal of the West Berkeley Plan Committee was to maintain intersection performance at or above Level of Service D. However, further analysis demonstrated that this goal was infeasible, and not necessarily desirable. Restoring the 9 intersections known at that time to rate below LOS D to a D rating was estimated to cost at least \$3.1 million in 1991 dollars. If other intersections were to be found to be performing poorly, additional costs would be incurred. Most of these projects, since they relieve existing congestion, would have to be paid for with City funds or an assessment on current landowners. In general developers are required to pay to mitigate their contribution to future congestion, or to maintain an existing level of service.

In addition, the likely increases of traffic originating in Emeryville and other communities outside Berkeley may also make it difficult to maintain LOS D. In this regard however, the City will be helped by new state "congestion management" requirements which will require communities to report anticipated traffic impacts on other communities to county Congestion Management Agencies.

~~For these reasons, the Plan moved to a more nuanced approach. It uses LOS D as a standard for those intersections which are currently performing at or above that level. For intersections already performing below that level, it uses the standard that these intersections not be degraded below LOS E as a result of development in Berkeley, and that intersections performing at F be upgraded to at least E.~~

### III. GOALS AND POLICIES

#### Goal 1:

~~Improve traffic flow and air quality by reducing reliance on single-occupant automobiles, by encouraging use of alternatives means of transportation~~

##### ~~Rationale:~~

~~West Berkeley is one of the most automobile-dependent parts of the city. People working in West Berkeley are 30% more likely than their counterparts citywide to drive alone to work. There is no BART station within the area, and no direct transit connection to the nearby North Berkeley BART station. This is a particular problem because of the high proportion of long distance commuters into West Berkeley. AC Transit has improved service, but it is still less extensive in West Berkeley than in other parts of the city. Improvements in transit service, the use of carpooling, and other means of transportation can reduce single-occupant automobile trips and air emissions, and perhaps ultimately free land used for parking for other purposes.~~

##### ~~Policies:~~

~~1.1 Seek trip reduction—reduction of single-occupant automobile trips—through a variety of education and regulatory efforts including implementation of a City of Berkeley Trip Reduction Ordinance, cooperation with the Air Quality Management District's transportation control measures, conditions on development and other mechanisms.~~

~~1.2 Monitor and regulate (in the policy framework established by the West Berkeley Plan) the amount and location of added development, intensified land use, and added parking in West Berkeley so that development in West Berkeley does not exceed transportation system capacity.~~

~~1.3 Seek the improvement of AC Transit service to and within West Berkeley, with one objective being the creation of a transit hub at the Berkeley train station.~~

~~1.4 Encourage AC Transit to reduce bus emissions~~

~~1.5 Encourage transit usage and improve amenities for riders by providing bus stop benches and bus shelters.~~

~~1.6 Through the Transportation Management Association, individual companies, and other appropriate mechanisms, improve shuttle service from West Berkeley to BART stations and to Downtown Berkeley.~~

~~1.7 Find ways to make information about transit, carpooling, and other alternatives to driving more easily available to West Berkeley workers and residents.~~

~~1.8 Take aggressive action to develop an adequate Berkeley train station near University Ave. for San Jose—Sacramento and other long distance service.~~

~~1.9 Over the long run, cooperate with Caltrans, the Alameda County Congestion Management Agency, and the Metropolitan Transportation Commission to create direct bus access from Berkeley freeway entrances to any HOV (high occupancy vehicle) lanes it builds.~~

~~1.10 Support programs to increase the share of West Berkeley jobs held by Berkeley resident workers, as a means of reducing automobile use (see Economic Development Element).~~

## ~~Goal 2:~~

~~Minimize traffic at West Berkeley intersections to the extent consistent with other plan goals and city policies.~~

### ~~Rationale:~~

~~Traffic congestion has worsened in West Berkeley in recent years. Deteriorating "Levels of Service" at intersections—showing longer times to pass through the intersection—are indicators of this problem. The deterioration is unsurprising, given that more traffic is attempting to flow through a street system which has received little improvement in recent decades. This traffic stems from Berkeley development and development in neighboring cities, as well as in large part from a regionwide increase in the use of cars. In future years, Berkeley can seek to control congestion through controlling its own development (and seeking to influence to our neighbors'). Street system improvements, however, are constrained both by cost and by long term city policies including our Master Plan and Measure S. Level of Service goals are set for signalized intersections—at unsignalized intersections cars on side streets seeking to turn (particularly left) onto the main street almost inevitably experience waits, generating low LOS ratings. Congestion management must be handled carefully, however, to assure that it does not induce more people to drive alone to and through West Berkeley than otherwise would have.~~

### ~~Policies:~~

~~2.1 At those signalized intersections where intersection performance is currently rated at Level of Service (LOS) "D" or better, do not allow intersection performance to fall below LOS D.~~

~~2.2 At those signalized intersections where intersection performance is currently rated below LOS "D", prevent these intersections from falling below LOS "E" as a result of development in Berkeley. If intersections are already below "E", take necessary measures to improve performance to at least LOS "E".~~

~~2.3 Install and improve traffic control devices such as signals, turn lanes, and turn arrows which will speed and smooth traffic flows along major streets.~~

~~2.4 Improve the street maintenance program as a means of facilitating traffic flow.~~

~~2.5 Seek to reduce the impact of regional traffic on West Berkeley, by working with Albany, Emeryville, and other cities and agencies.~~

**Goal 3:**

~~Improve the circulation system where necessary, particularly around Ashby Ave.~~

**Rationale:**

~~With streets that were laid out many years ago and properties largely built up, there is little room or reason to change the basic features of West Berkeley's circulation system, the streets themselves. One area where change may be possible is around Ashby Ave., where there is an unusually thin network of streets handling heavier and heavier traffic.~~

~~The area surrounding 7th & Ashby, especially the area north of Ashby, has developed rapidly in recent years. The growth of retail stores such as Whole Earth Access, and the creation of offices and laboratories (along with background regional traffic growth) has generated congested conditions in the area. While recent improvements (such as a left turn light at 7th & Ashby) have improved conditions, the circulation system remains poor. 7th St. is the only through street (and the only signalized street) which intersects Ashby between the Freeway and San Pablo, placing a heavy burden on it. Therefore, diverting traffic onto streets such as 5th St. and 9th St., and possibly extending them, should be explored. The emphasis on the Ashby Ave. vicinity is not meant to exclude the possibility of improvements elsewhere. Rather it implies that plans and possibilities for street improvements have been more solidly identified here than elsewhere.~~

~~More remotely, the area between Gilman St. and the Albany border, Eastshore and the railroad tracks (3rd St.) may bear reexamination. The City of Albany views its lands to the north of this area (but which are accessed by Gilman St.) as important potential development sites, which may generate more traffic.~~

**Policies:**

~~3.1 Develop and implement strategies to reduce traffic congestion at the intersection of 7th & Ashby.~~

~~3.2 Assess the implications of opening 9th St. between Heinz St. and Anthony St. Consider the possible impacts of this on local streets in the Grayson area and on rail service on the 9th St. rail spur, and how these could be mitigated.~~

~~3.3 Actively explore the extension of 5th St. on some alignment from Potter St. to Ashby Ave.~~

~~3.4 Work with the City of Albany to review existing circulation conditions and potential impact of projects in the area west of the railroad tracks and north of Gilman.~~

**Goal 4:**

~~Create and maintain adequate parking to support West Berkeley land use without creating increased incentives for single occupant automobile use.~~

**Rationale:**

Historically, parking was not a major problem in West Berkeley, but this has changed in recent years. Originally industrial buildings, often initially built with little or no parking space, have been converted to retail and office use, intensifying parking demand. These areas may well need centralized parking facilities. While meeting expanding parking needs is important, it is also important not to provide so much free parking that people are encouraged to drive more than they would otherwise (a la suburban shopping malls). Therefore, the policies call for consideration of parking charges in some instances.

**Policies:**

4.1 Actively pursue opportunities for the creation of centralized parking facilities in the 4th & University, 7th & Parker, and 7th & Ashby areas, and other locations in which they prove to be needed.

4.2 Seek to preserve needed parking in and near commercial districts for short term, rather than long term parking.

4.3 If necessary, protect the availability of parking in residential neighborhoods through Residential Permit Parking programs.

4.4 Where necessary and feasible, work with developers of new buildings to institute charges for parking.

4.5 Where necessary and feasible, work with owners and managers of existing businesses to institute charges for parking.

**Goal 5:*****Protect local residential streets from through traffic*****Rationale:**

Local residential streets are streets dominated by residential land use which are not major streets or collectors. Because of the proximity of West Berkeley residential areas to industrial and commercial areas, local streets here are somewhat more vulnerable to intrusive through traffic than in other parts of the city. Such through traffic can cause safety problems for pedestrians and bicyclists, and could conceivably lead to a spill of hazardous materials. The City has already taken some action to improve the situation by amending the Truck Route Ordinance to prohibit large trucks on local residential streets in the northern part of the residential core.

**Policies:**

5.1 Adopt and implement a revised Truck Route Ordinance.

5.2 Improve and install traffic control devices—such as traffic signals, stop signs, full or



~~partial barriers, and others which will inhibit through traffic on local residential streets, while providing bicycle access where needed.~~

### **Goal 6:**

~~Improve pedestrian and bicycle access in and around West Berkeley~~

#### **Rationale:**

~~From the environmental standpoint of reducing single-occupant autos, good pedestrian and bicycle access is key. Yet many parts of West Berkeley are unnecessarily "unfriendly" for pedestrians and bicycles. Some streets with significant numbers of residents have no sidewalks. Bikeways are little known and poorly marked. These conditions need to be improved.~~

#### **Policies:**

~~6.1 Develop and implement a bikeway plan for West Berkeley, using information developed during the West Berkeley Plan development, which would define bike routes and suggest needed capital improvements to make these routes bikeways.~~

~~6.2 Complete the sidewalk system in locations where sidewalks would be used.~~

~~6.3 Require appropriate levels of bicycle parking in new developments.~~

~~6.4 Develop an improved bicycle/pedestrian connection across I-80 from West Berkeley to the Marina~~

## IV. Implementation MEASURES

### ~~1. Ordinance and Regulatory Changes~~

~~Note: Please see the Appendix for recommended changes in parking standards.~~

~~Funding Sources are possible sources.~~

~~1.1 Trip Reduction Ordinance— Pass Citywide Ordinance to decrease the percentage of people driving alone through programs at larger employers, initially through the provision of information on commute alternatives to employees. The Ordinance should implement the Bay Area Air Quality Management District program when that program is developed.~~

~~Goals and Policies Implemented: Goal 1; Policies 1.1, 1.6, 1.7, 1.10~~

~~Responsibility: City Planning Department, Berkeley TRIP (contract agency)~~

~~Funding Sources/Status: Employers, Motor Vehicle Registration fees (AB 434), Measure B funds. Ordinance and BAAQMD Regulation passed.~~

~~1.2 Bikeway Redesignations— Revise the system of bikeways in and around West Berkeley so that they more effectively and safely serve residents and workers.~~

~~Goals and Policies Implemented: Goal 6; Policies 6.1, 6.4~~

~~Responsibility: City Planning Department with Public Works (Traffic Engineering)~~

~~Funding Sources/Status: Miles Development Agreement, TDA Article 3 for capital improvement, Prop. 116 grants. Bikeway study recommending route changes is being completed.~~

### ~~2. Projects— Capital Improvements and Other~~

~~2.1 Employee Shuttles— Work with the West Berkeley Transportation Management Association to increase shuttle service from West Berkeley companies to BART, and other employer-based transit options.~~

~~Goals and Policies Implemented: Goal 1; Policies 1.1, 1.5~~

~~Responsibility: City Planning Department, Transportation Management Assn. (TMA)~~

~~Funding Sources/Status: Caltrans funding for start-up phase of TMA. BAAQMD has provided operational grant for shuttle, to be matched by West Berkeley employers. Shuttle to start-up in late '93.~~

~~2.2 Transit improvements— Work with AC Transit to maintain and improve transit service in West Berkeley. Objectives for transit service provision include:~~

- ~~Frequent service (every 15 minutes or more during weekday daytimes) on San Pablo Ave., 6th/7th St., Gilman St., University Ave., Dwight Way, Ashby Ave.~~
- ~~In conjunction with employee shuttles, improved transit from West Berkeley employment centers to BART stations.~~
- ~~Shopper-oriented service from West Berkeley to Downtown Berkeley~~

~~The need and demand for additional service from other areas (such as the Berkeley Hills) should be explored. The City should work with AC Transit in whatever assessments (and subsequent implementation) it makes concerning the feasibility and desirability of ferries to West Berkeley and light rail service on San Pablo and/or University Ave.~~

~~Goals and Policies Implemented Goal 1; Policy 1.3~~

~~Responsibility: City Planning Department, AC Transit, BART~~

~~Funding Sources/Status: Costs not yet analyzed, funds not yet identified~~

~~2.3 Freeway reconfiguration—Work with Caltrans to reconfigure entrances to I-80 at University Ave. to improve bicycle/pedestrian access to the Marina and at Ashby Ave. to reduce the impact on Aquatic Park. When High Occupancy Vehicle (HOV) lane is constructed, work with Caltrans to assure that buses have direct access from streets to HOV lane.~~

~~Goals and Policies Implemented Goals 1,6; Policy 1.9,6.4, also Urban Design, Historic Preservation & Open Space Element goals and policies)~~

~~Responsibility: City Planning Department, Caltrans~~

~~Funding Sources/Status: State of California on application by Alameda Co. Congestion Management Agency, MTC. City beginning discussions with Caltrans on Aquatic Park access.~~

~~2.4 Bikeway improvements—Improve the visibility and usability of existing and proposing bikeways by adding markings and signs, repairing pavement, and removing abandoned railroad spurs.~~

~~Goals and Policies Implemented: Goal 6, Policy 6.1~~

~~Responsibility: City Planning Dept., Public Works (Traffic Engineering)~~

~~Funding Sources/Status: Miles Development Agreement, TDA Article 3 for capital improvement, Prop. 116 grants. No comprehensive program of improvements underway.~~

~~2.5 Bicycle facilities—Install bicycle facilities, such as storage racks and/or parking lockers at key destinations such as major retail areas, public facilities, and recreational sites. The Train Station would be a likely installation area in West Berkeley.~~

~~Goals and Policies Implemented Goal 6, Policy 6.1~~

~~Responsibility: City Planning Department and Public Works (Traffic Engineering)~~

~~Funding Sources/Status: Miles Development Agreement, TDA Article 3 for capital improvement, Prop. 116 grants.~~

~~2.6 Improvements for pedestrians—In order to improve the West Berkeley environment for pedestrians, in situations where there is or could be significant pedestrian use, install sidewalks where none exist and improve sidewalks, crosswalks, and wheelchair ramps where they are inadequate. Eliminate sidewalk parking. Concentrate on reinforcing commercial districts and nodes such as 4th & University, 7th & Ashby, San Pablo & University, San Pablo & Dwight, and San Pablo & Ashby. As a first step, install pedestrian improvements in the Redevelopment Area (see also Urban Design Element)~~

~~Goals and Policies Implemented Goal 6, Policy 6.2~~

~~Responsibility: City Planning Department, Public Works (Engineering), Redevelopment Agency~~

~~Funding Sources/Status: Redevelopment tax increment, outside Redevelopment Area TDA Article 3. Redevelopment Area improvements being constructed, no comprehensive program outside Redevelopment Area.~~

~~2.7 5th St. Extension—Seriously assess the possibility of extending 5th St. from Potter St. to Ashby Ave. as a congestion relief measure, particularly in the context of development proposals on the Oscar Krenz site.~~

~~Goals and Policies Implemented Goals 2,3; Policy 3.3~~

~~Responsibility: Public Works (Traffic Engineering) with City Planning Dept.~~

~~Funding Sources/Status: Costs not yet analyzed, funds not yet identified~~

~~2.8 Street System Improvements—Identify and implement street system improvements necessary to achieve and maintain Plan traffic congestion and Level of Service goals. Actions could include changes to signal timing, traffic controls, turn lanes, and elimination or reduction of curbside parking.~~

~~Goals and Policies Implemented Goals 2,3,5; Policies 2.1,2.2,2.3,5.2~~

~~Responsibility: Public Works (Traffic Engineering) with City Planning Dept.~~

~~Funding Sources/Status: Miles Development Agreement for southern area, future development mitigation's. 7th & Parker projects under development.~~

### **3. Studies**

~~3.1 Train Station Design Concept—Develop design concept in order to gain construction funding for a new train station in the vicinity of 3rd & University. The station should serve as a transit hub, as well as a gateway to West Berkeley and the Marina. Design should occur in the context of the Central West Berkeley Specific Plan (see Land Use Element)~~

~~Goals and Policies Implemented Goal 1, Goal 6; Policies 1.2, 1.7~~

~~Responsibility: City Planning Department, with Redevelopment Agency~~

~~Funding Sources/Status: Capital funds from state rail bonds.~~

~~3.2 Centralized Parking Demand and Cost Analysis Analyze the physical and financial feasibility (including demand, traffic patterns, conceptual design) of creating centralized parking structures/facilities, initially concentrating on 3 areas: 1) 4th & University; 2) 7th & Parker (per Miles Development Agreement); and 3) 7th & Ashby.~~

~~Goals and Policies Implemented:~~

~~Responsibility: Community Development Department, with City Planning Department, Public Works (Traffic Engineering)~~

~~Funding Sources/Status: Study underway, fall 1993.~~

~~3.3 Aquatic Park Access Study Study and assess alternatives for improving vehicular, bicycle, and pedestrian access to Aquatic Park, particularly the southern end of the park. This would be an implementation study for the Aquatic Park Master Plan. Alternatives could include extension of streets across the railroad right-of-way and/or creation of grade-separated (e.g. elevated) crossings for pedestrians and bicyclists (see also Urban Design, Historic Preservation and Open Space Element~~

~~Goals and Policies Implemented: Goal 6, Policy 6.1~~

~~Responsibility: Public Works (Parks/Marina, Traffic Engineering) and City Planning Departments~~

~~Funding Sources/Status: Not yet identified, funding from developers of adjacent sites possible.~~

~~3.4 9th St. Connection Study Study the feasibility of connecting 9th St. between Anthony St. and Heinz St., so as to provide a connection to Ashby Ave. Consider how this would be compatible with existing railroad spur operations, and how this connection would relate to the Grayson Mixed Use/Residential area.~~

~~Goals and Policies Implemented Goal 3, Policy 3.2~~

~~Responsibility: City Planning and Public Works (Traffic Engineering) Departments~~

~~Funding Sources/Status: Miles Development Agreement, Study not yet initiated~~

## 6

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HOUSING & SOCIAL SERVICES

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I. STRATEGIC STATEMENT

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West Berkeley houses only 7% of Berkeley's population, but its role in Berkeley's housing is nonetheless vital. West Berkeley continues to have some of the lowest cost rental and owner-occupied housing in Berkeley. This low cost largely explains why West Berkeley is home to many households with special needs—such as single mothers—and why it remains the most racially integrated area of Berkeley. West Berkeley's reservoir of lower cost housing is likely to become increasingly important over the West Berkeley Plan period, if inflationary forces continue to quickly drive up house prices and rents elsewhere in the city. West Berkeley also provides unconventional housing, such as live-work units for artists and craftspeople. The West Berkeley Plan seeks (in the context of citywide policies) to maintain housing affordability in West Berkeley, and to add housing units in appropriate locations. In particular, it seeks to strengthen retail concentrations ("nodes") by adding housing there and to reinforce residential concentrations in the Mixed Use/Residential zone.



Because a great many of West Berkeley's residents are low income they require a high level of publicly aided social services, such as childcare and low cost health care from non-market sources. These services are vital for maintaining and improving the quality of life for West Berkeley residents. Since many West Berkeley residents are not native English speakers, providing bilingual services is often necessary. Because many West Berkeley residents are likely to remain low income, despite economic development efforts, City and other agencies should maintain and augment West Berkeley's services, both in West Berkeley itself and in locations accessible to West Berkeley residents.



## II. HOUSING BACKGROUND

### A. Berkeley's and West Berkeley's Role in the Regional Housing Market

Berkeley plays a distinctive role within the Bay Area housing market, as does West Berkeley within Berkeley. For the 1990 Census, Berkeley has, for the first time, been designated a central city within the San Francisco-Oakland-San Jose metropolitan area. In many ways, Berkeley does function in the manner expected of a central city within the regional housing market. Berkeley has one of the highest proportions of renters of any Bay Area city, even with recent (smaller than expected) loss of rental units. Berkeley is the 3rd most densely populated city in the Bay Area (after San Francisco and Daly City), although there are massive variations in density from area to area within Berkeley. (However, Berkeley is only 14th in the Bay Area in percentage of units in buildings with 10 or more units) With thousands of students in dormitories, fraternities, and sororities (an important factor in raising citywide density figures)—Berkeley has the Bay Area's 3rd highest proportion of residents in group quarters.

Berkeley, like other cities along the East Bay shoreline and in the core of the region, has a very ethnically/racially mixed population. Non-Hispanic whites make up 58% of Berkeley's population, slightly below the regional average of 61%. Berkeley's 18% black population is double the regional average, and gives Berkeley the 7th highest proportion of African-American population among the 98 Bay Area cities. At 14%, Berkeley's Asian proportion, mirrors the regional average of 15% Asian. Latinos are the only non-Anglo group less represented in Berkeley (8%) than in the region as a whole (15%).

West Berkeley, largely in conjunction with South Berkeley, has its own place within Berkeley's population. For planning and analytical purposes, the city has been split into 5 subareas (see map).<sup>1</sup> Subarea 1, the Hills, is a high income, high cost, heavily white (84%) area, which some have characterized as "the suburb of Berkeley." Subarea 2, Central Berkeley, has relatively even mixes of single family homes and other housing types, owners and renters, whites and non-whites. Subarea 3, Campus/Downtown, is dominated by multi-family units and group quarters, houses almost 1/3 (32%) of the city's population, and has a population which is 2/3 below 30 years old. Finally, South and West Berkeley (subareas 5 and 4) together have a black plurality (48%), a renter majority, and relatively modest home prices. However, as will be discussed below, West Berkeley differs from South Berkeley, notably in its ethnic mix.

### B. The Housing Stock—Small Homes in a Moderate Density Neighborhood

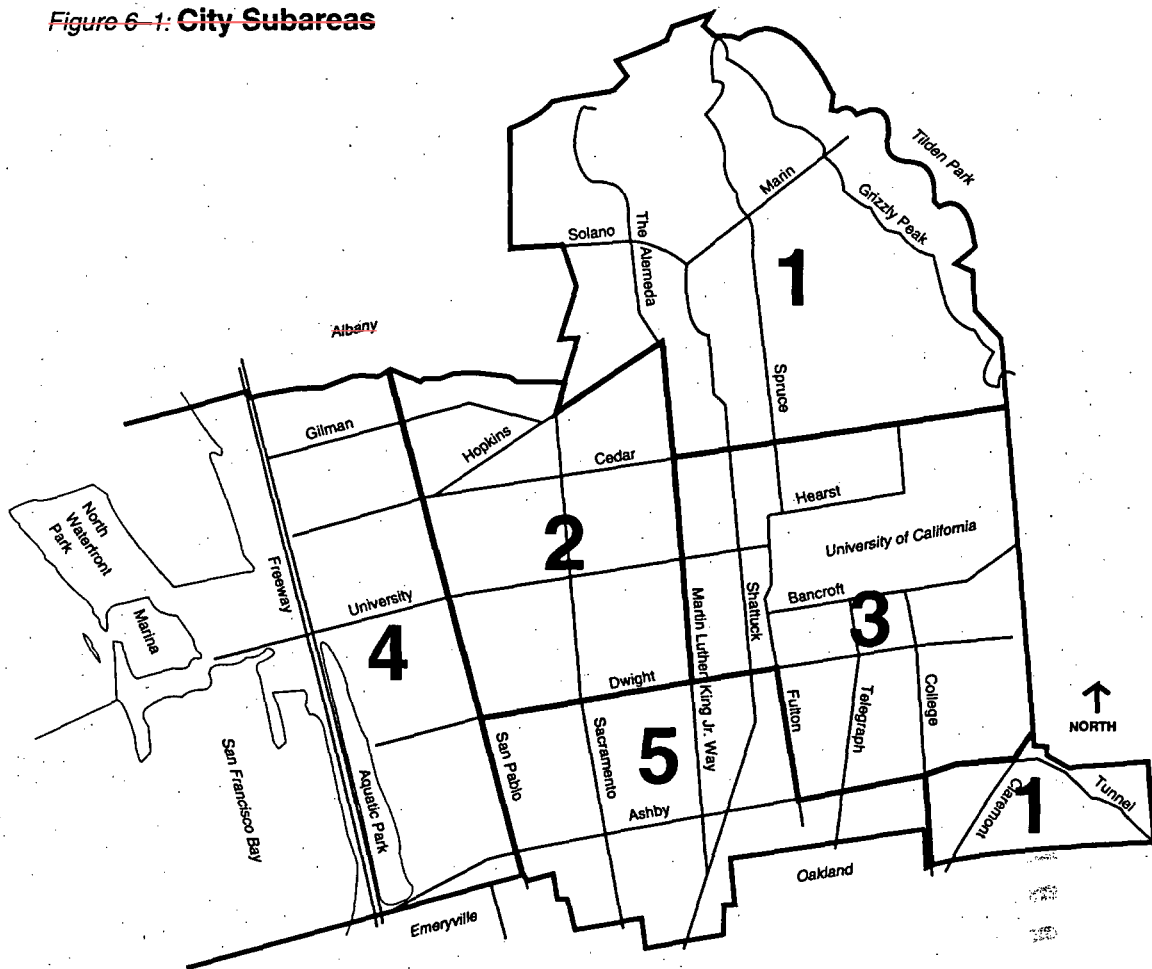
Small single family houses are the most characteristic form of West Berkeley housing. Single family units account for 44% of West Berkeley's housing (according to the 1989 Housing Stock Changes Report), although they are far from the only housing type.<sup>2</sup> An additional 35% of West Berkeley's 2,970 housing units were in 2-4 unit

<sup>1</sup>The 5 subareas are (see map) the Hills, including the Claremont district; Central Berkeley between MLK and San Pablo, north of Dwight; Campus—the areas around it; South Berkeley—roughly corresponding to the South Berkeley Plan Area and West Berkeley.

<sup>2</sup>It must immediately be cautioned that in West Berkeley single family houses cannot necessarily be assumed to have owner occupants. This is discussed in more detail below.

## WEST BERKELEY PLAN

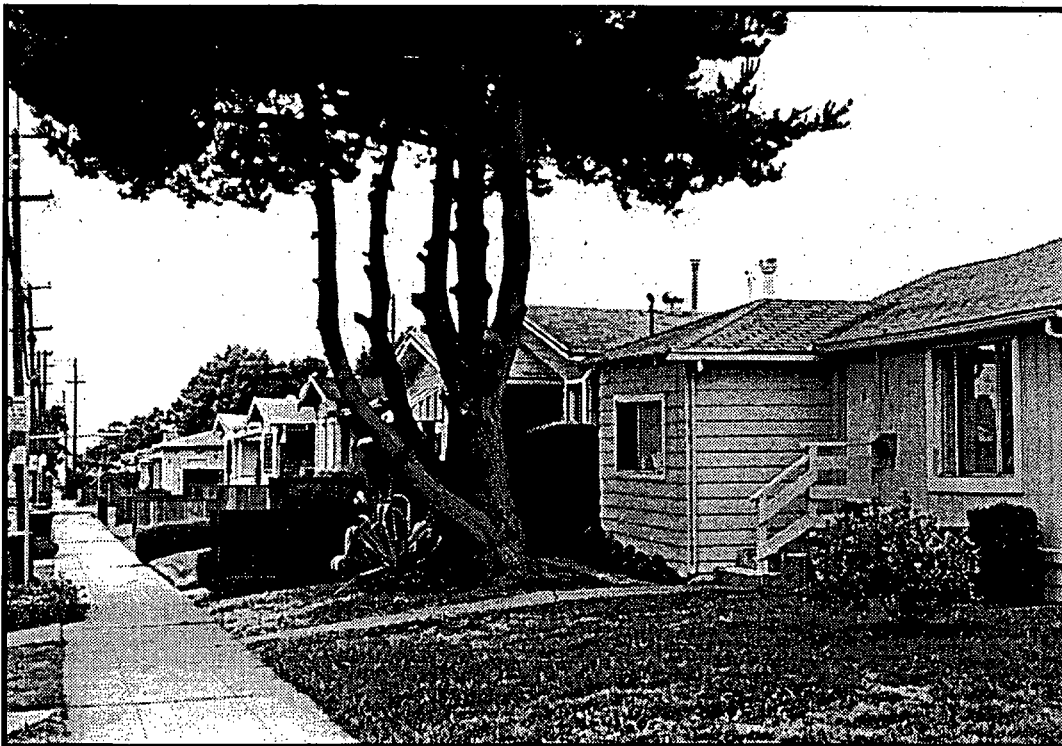
Figure 6-1: City Subareas



structures. Thus only 20% of units were in structures with 5 or more units, compared to 28% citywide. The northern core area (north of University Ave.) was the most heavily single family—single family dwellings accounted for 50% of units there, 47% of housing units outside the residential core, and 37% of units in the southern core area. Single family units and small apartments dominate the residential built environment—the residential core had only 62 structures with 5 or more units (compared to 1,026 single family dwellings—sfd). The southern core area had more units in duplexes, triplexes, and fourplexes than the northern. In land density terms, densities of 10-20 units per acre (or approximately 1 unit per 2,000 to 4,000 feet of land) typify the area, compared to typical densities in urban multifamily areas of 30 units per acre or more.

West Berkeley's housing is both older and newer than the rest of Berkeley's. Some of the oldest housing in Berkeley is here—14 of the 35 "houses" designated Berkeley landmarks are in West Berkeley, far more than its percentage of the stock. However, West Berkeley has a somewhat lower percentage of its stock built before 1939 (42%) than does the city as a whole (53%). West Berkeley saw a surge of building in the 1940's and 50's, when 38% of its stock was built (compared to 30% citywide).

The housing stock in West Berkeley, especially the owner-occupied stock, is relatively small by citywide standards. Owner-occupied units in West Berkeley averaged



2.3 bedrooms, while in Berkeley as a whole they averaged 2.9 bedrooms. Renters, however, enjoyed marginally larger housing, averaging 1.5 bedrooms in West Berkeley as against 1.4 citywide.

Unfortunately, no such statistical data is available for live-work occupancies. There are only a relatively small number of these to date.

### ***C. The Population – The Truly Diverse Part of Berkeley***

In comparison to other parts of Berkeley, West Berkeley's population is:

- The most racially diverse;
- More likely to be non-English speaking;
- The youngest – having the highest proportion of children under 18;
- More likely to live in a single parent household;
- More likely to be unemployed.

The oft-cited diversity of Berkeley's population can best be seen in West Berkeley. This diversity can be seen not only on ethnic/racial grounds, but with regard to children and income groups.

#### ***a. West Berkeley's Racial/Ethnic Composition***

The 1990 Census states that 40% of West Berkeley's almost 7,000 (6,891) inhabitants are black, 29% are non-Hispanic whites, 23% are Latino, and 8% are Asian. This is by far the highest Latino percentage in the 5 subareas of the city, the second highest black percentage after South Berkeley (51%). No other area of the city has 3 groups in such relative parity.

**Table 6-1: Distribution of West Berkeley Housing Units in Structure, 1989**

| Units in Structure | Number of Units | % of Units  |
|--------------------|-----------------|-------------|
| 1 unit             | 1,317           | 44%         |
| 2-4 units          | 1,040           | 35%         |
| 5 or more units    | 589             | 20%         |
| <b>Total unit</b>  | <b>2,970</b>    | <b>100%</b> |

Source: City of Berkeley, 1989 Housing Stock Changes Report

The 1990 figures represent a decline in the black proportion of the West Berkeley population since 1980 (down from 50%), an increase in the Latino proportion (up from 10%) and relative stability in the white and Asian population. The influx of Latinos into formerly more heavily black areas is consistent with trends in the Bay Area and elsewhere in California. However, the lack of growth in the number of non-Hispanic white people must be analyzed in conjunction with the increase in white heads of household in West Berkeley.

The statistics for race of household (head) thus show a different, somewhat whiter picture than those for total population. Blacks head 41% of households, whites head 38% (substantially above their share of the total population), Latinos head 13% (much less than their population share), and Asians 8%. In 1980, whites headed 34% of households, blacks 49%, Asians 5%, and Latinos 11%. Thus the share of white, Asian, Latino headed households all rose, while black headed households declined.

Differences in racial proportions between total population and heads of household occur because some households (e.g. whites) are relatively small (and thus the same number of people group into more households), while other households (e.g. Latinos) are relatively large. Other data suggests that a segment of non-white people were the most stable residents of West Berkeley. In the 1989 Resident Survey, fully 48% of responding black West Berkeley households said they had lived there 10 or more years. This was true





for 37% of Latinos, and 33% of Asians, and for only 21% of whites.

#### b. Children in West Berkeley

Children are prominent in the West Berkeley population. Just under one-quarter (24%) of West Berkeley residents are under 18, compared to 14% of the citywide population. West Berkeley thus not surprisingly had the largest mean household size—2.53 people per unit, versus 2.10 citywide. West Berkeley seems likely to continue to have

Table 6-2: Racial/Ethnic percentages of West Berkeley population, 1980 and 1990

| Racial/Ethnic group | Total Population, 1990 | Total Population, 1980 | Heads of Household, 1990 | Heads of Household, 1980 |
|---------------------|------------------------|------------------------|--------------------------|--------------------------|
| White Non-Hispanic  | 29%                    | 29%                    | 38%                      | 34%                      |
| Black               | 40%                    | 50%                    | 41%                      | 49%                      |
| Asian               | 8%                     | 7%                     | 8%                       | 5%                       |
| Latino              | 23%                    | 10%                    | 13%                      | 11%                      |
| <b>Total</b>        | <b>100%</b>            | <b>100%</b>            | <b>100%</b>              | <b>100%</b>              |

Source: 1980 and 1990 Census of Population

a disproportionate percentage of children, because it has had a disproportionate percentage of births. In 1992, there were 128 births to West Berkeley (in this case zip code 94710) resident mothers. This was some 11% of citywide births, well above the area's share of the city's population.<sup>1</sup>

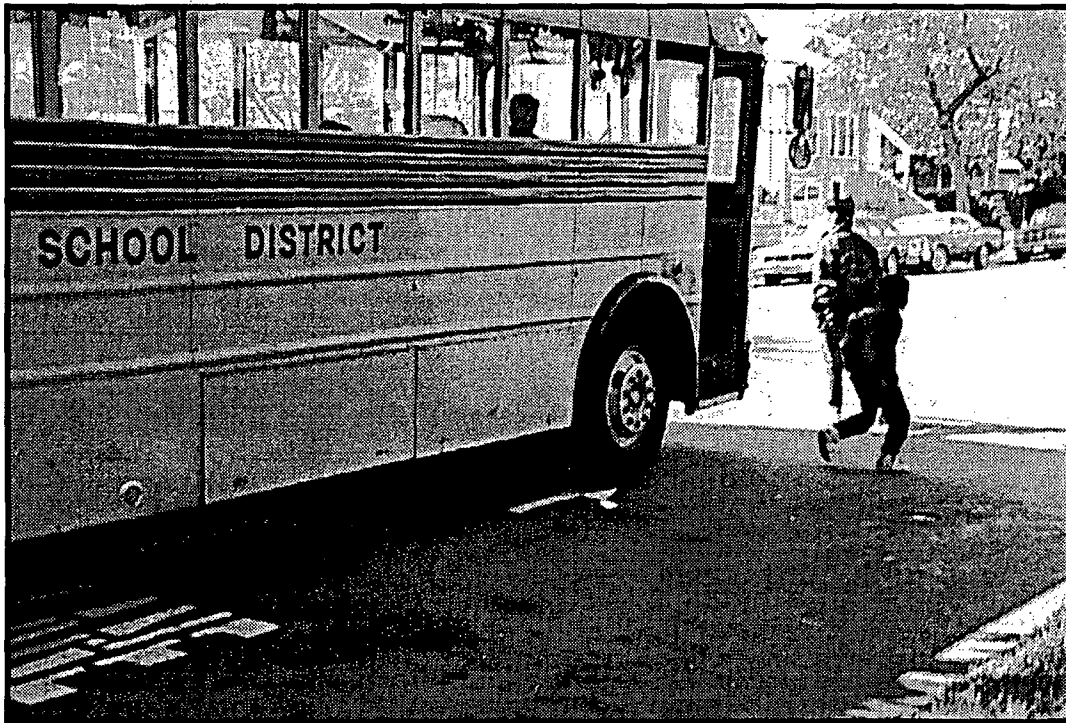
West Berkeley's children do not necessarily live in conventional families, however. Almost 4 in 10 West Berkeley children under 18 (39%) live in single parent, usually single mother, families. Citywide, only 29% of children are in single parent families. Among black West Berkeley families with children single parent families were the norm, not the exception—71% of black West Berkeley families with children were headed by a single parent.

The large number of resident children, especially in single parent families, suggests that West Berkeley has a greater than average need for childcare. The Berkeley Unified School District in fact operates a child development center in the northern residential area. Many of the workers commuting into West Berkeley also have childcare needs, so perhaps childcare sites can be developed which serve both groups. However, locations which are convenient to residents may not be convenient for workers, and vice-versa.

#### c. Income and Unemployment

West Berkeley residents have a broad range of incomes, although the highest income households are less likely to live here. On the 1990 Census, 22% of households reported incomes below \$10,000; 22% reported incomes in the \$10-20,000 range; 24%

<sup>1</sup>Encouragingly, West Berkeley babies seemed to be actually healthier than their citywide counterparts. Perhaps the most commonly used indicator of infant health is low birth weight (there is too little infant mortality in Berkeley to make it statistically usable). Citywide, Health Department statistics indicate that 6.3% of babies over the last 5 years weighed less than 2,500 grams, in West Berkeley the figure was 2.3%.

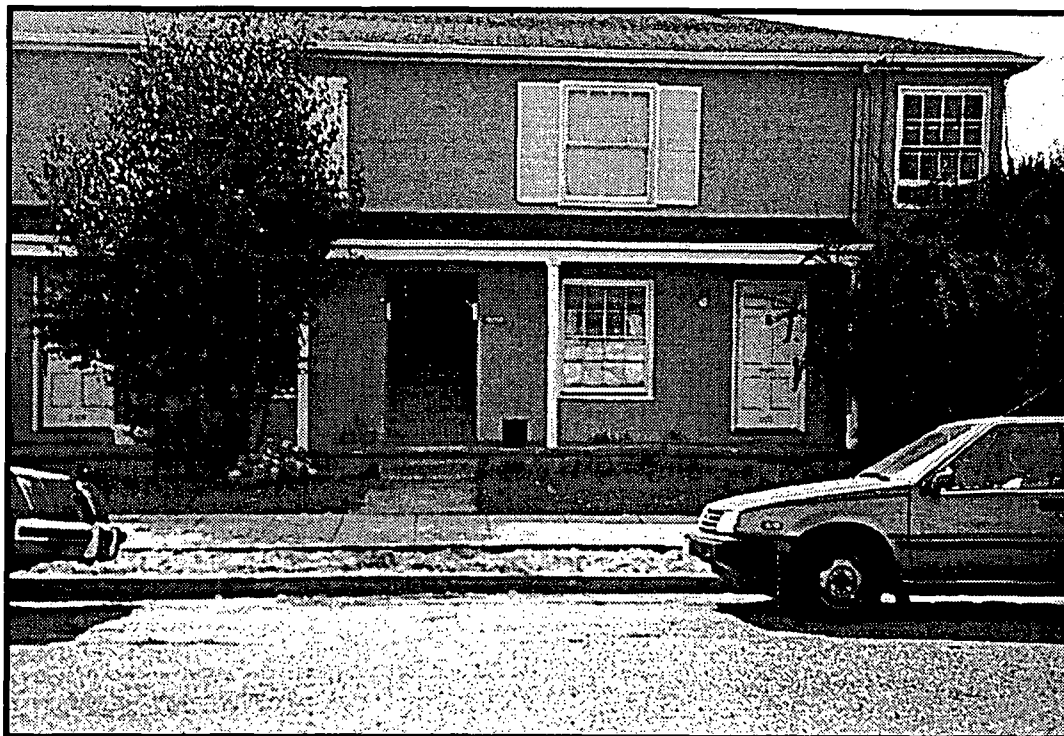


between \$20 and \$35,000, and 17% between \$35 and \$50,000 (see Table 6-4). In the 3 lowest brackets, West Berkeley had a higher percentage than the citywide average. But while 29% of Berkeley households reported incomes above \$50,000, only 15% of West Berkeleyans did. There was a clear distinction between West Berkeley tenants, who reported a mean income of roughly \$22,500 (lower than the citywide \$24,500 mean) and West Berkeley homeowners, whose mean was \$37,000 (itself some 40% below the citywide homeowner median of \$65,000).

There appears to be substantial unemployment among West Berkeley residents. The 1990 Census found an 11% unemployment rate among West Berkeleyans, despite being conducted before the onset of the 1990's recession. West Berkeley had among the highest unemployment rates in the city. African-Americans were the hardest hit, with just over 20% of Blacks in the workforce unemployed. Latinos had an 8.3% unemployment rate. It is almost certain that these numbers are higher today, because unemployment throughout California has increased.

West Berkeley's role as a job center provides an opportunity to aid its unemployed residents. The residents could only fill a small proportion of West Berkeley jobs: the Survey estimated 500 unemployed West Berkeleyans—less than 4% of West Berkeley jobs. However, according to the Housing and Economic Survey, 20% of West Berkeley residents already do work in West Berkeley, a higher percentage than for Berkeley residents as a whole. Therefore, as employment linkage and training programs are developed, West Berkeley residents can be an important target group.





#### ***D. Tenure — Moderate Income Owners, Low Income Renters***

Reviewing the situation of West Berkeley renters and homeowners, West Berkeley renters are:

- A majority of West Berkeley households;
- Predominantly low income;
- Generally Non-white;
- More likely than other Berkeley renters to be overpaying for rent, overcrowded, or dissatisfied with their unit;

West Berkeley homeowners are:

- Generally low or moderate income;
- More racially diverse than other Berkeley homeowners;
- More likely to be white than West Berkeley renters;
- Living in housing that is inexpensive for Berkeley;

West Berkeley has a majority of renters, although the size of that majority has shrunk. The 1990 Census found 1,595 renter occupied units and 1,059 owner-occupied units, making 60% of units rental. The 1980 Census found West Berkeley households to be almost 2/3 renters (64%). However, this small decline in the proportion of renters masks different trends in different parts of West Berkeley. The residential core area north of University Ave. saw a sharp shift to home ownership—from 61% renter in 1980 to only 51% renter in 1990. The residential core south of University moved the same direction, but less strongly—from 71% renter in 1980 to 66% renter in 1990. The remainder of West

Berkeley (Census Tract 4220) — largely in the Mixed Use/Residential districts — saw an increase in the proportion of renters — from 56% in 1980 to 65% in 1990. This can be attributed first to publicly assisted housing — such as the Oceanview Gardens development, rental units at the Delaware St. Historic District, and even the creation of rental units in the “D and E” houses, which were sold for home ownership. A second cause of the increased number of rentals here was the creation of live-work units in the 1980’s.

One major reason for the shift away from rental units — was the high number of rented single family homes. In 1980, the Census found 480 rented single family houses, fully 30% of West Berkeley’s rental housing.<sup>1</sup> By 1990, there remained only 263 rented single family houses. They now account for only 16% of the rental stock in West Berkeley. There has been a citywide (and probably broader) trend for sales of rented to single family houses to owner-occupants. This trend makes it more difficult for renters to find large rental units and may be leading to overcrowding, since single family houses tend to have more bedrooms than apartments.

Table 6-3: Renters and Homeowners in West Berkeley

| Area of West Berkeley                     | Renter Percentage, 1990 | Renter Percentage, 1980 | Homeowner Percentage, 1990 | Homeowner Percentage, 1980 |
|-------------------------------------------|-------------------------|-------------------------|----------------------------|----------------------------|
| Residential core north of University Ave. | 51%                     | 61%                     | 49%                        | 39%                        |
| Residential core south of University Ave. | 66%                     | 71%                     | 34%                        | 29%                        |
| West Berkeley Total                       | 60%                     | 64%                     | 40%                        | 36%                        |
| Berkeley Total                            | 56%                     | 62%                     | 44%                        | 38%                        |

Source: 1980 and 1990 Census of Housing

By Berkeley standards, West Berkeley housing prices are relatively low. In late 1990/91, the average single family home price in West Berkeley was \$157,000. This was considerably lower than in any other section of Berkeley, all of which averaged prices over \$180,000. Since that date, prices have been generally stable in Berkeley, even as they have fallen somewhat in a number of Bay Area communities. Nonetheless, West Berkeley’s average price required an income of some \$52,000 (or another house) to buy, assuming that buyers can afford 3 times their income. The figure also contrasts sharply with the mean purchase price of \$70,000 that in-place owners surveyed on the Resident Survey had paid. The “mean” year of purchase which this price on the Survey reflected was 1975. Unless the 1990’s halt or reverse the housing price increases of the last 15 years, the income needed to buy a home in West Berkeley will continue to increase.

#### a. Owner & Renter Characteristics

Despite these changes, West Berkeley homeowners were largely a low and moderate income group. On the 1990 Census, 46% of owners reported household incomes between \$20,000 and \$50,000, with only 21% reporting incomes above \$50,000

<sup>1</sup>In 1980 rental units were a quite high 42% of the 1,149 single family detached houses the Census recorded. By 1990, rented houses represented only 24% of West Berkeley single family detached houses. Citywide, however, only 16% of single family detached houses are rented. This suggests that there may be further conversions of rented houses to owner-occupancy in West Berkeley.

(while citywide 52% of homeowners had incomes over \$50,000). West Berkeley homeowners are also racially diverse, though somewhat less so than the West Berkeley population as a whole. The 1990 Census shows that 46% of West Berkeley homeowners are white, 35% are black, 12% Latino, and 6% are Asian. Thus, whites are over represented among homeowners, while blacks are underrepresented.

**Table 6-4: West Berkeley and Citywide Incomes—Households, Owner-Occupants and Renters**

| 1989<br>Income<br>Level | All Households   |          | Owner-Occupants  |          | Renters          |          |
|-------------------------|------------------|----------|------------------|----------|------------------|----------|
|                         | West<br>Berkeley | Citywide | West<br>Berkeley | Citywide | West<br>Berkeley | Citywide |
| Under<br>\$20,000       | 44%              | 35%      | 33%              | 15%      | 55%              | 51%      |
| \$20,000-<br>\$34,999   | 24%              | 21%      | 25%              | 15%      | 25%              | 25%      |
| \$35,000-<br>\$49,999   | 17%              | 15%      | 21%              | 18%      | 11%              | 12%      |
| Over<br>\$50,000        | 15%              | 29%      | 21%              | 52%      | 9%               | 11%      |

West Berkeley renters are clearly low income. Over half (52%) of West Berkeley renters had incomes of below \$20,000. While this was similar to the citywide percentage, West Berkeley renter households are larger, their per capita income level is lower. The over 300 Section 8 and publicly assisted rental units make up just under 20% of West Berkeley rental units. The percentage of units in West Berkeley which are Section 8 assisted is more than double the citywide figure. Renters as a whole in West Berkeley are heavily non-white—whites make up only 32% of West Berkeley renters.

West Berkeley renters differ from citywide renters in other ways. Citywide, exactly 1/2 of renters live alone, with the Resident Survey indicating that another 20% of renter households are unrelated adults living together. In West Berkeley, the leading group is single parents, who make up 31% of renter households, more than double the citywide percentage. The large percentage of Section 8 units (which are heavily but not exclusively populated by single mothers) clearly contributes to this figure, but this figure could only be reached with non-Section 8 renters as well. 33% of West Berkeley renters live alone, and 21% are married couples—well above the citywide figure—and indicating that renting can be a long term situation for some West Berkeley households. West Berkeley renter households thus have more people—averaging almost 2.4, as against a citywide average of roughly 1.85.

West Berkeley renters paid lower rents than other Berkeley renters, but because of their lower income, paid a higher percentage of their income in rent. The 1990 Census showed a median rent in West Berkeley of approximately \$335, as against \$392 citywide. This statistic reflects both rent controlled and uncontrolled units. But the Resident Survey showed that median West Berkeley renter was paying more than 30% of her/his income for rent—the usual standard of overpayment. By contrast, in most other sections of the city (including South Berkeley), the median percentage of income paid for rent was 25%



or less. For this reason, any decisions made to increase rent levels in rent controlled units will have a particular impact on West Berkeley tenants, unless measures are taken to mitigate their impacts.

### **b. Conditions in Rental Housing**

West Berkeley renters were often dissatisfied with their housing. In a 1988 survey of rent controlled units, 60% of West Berkeley renters said the condition of their unit was fair or poor, as against 48% of renters citywide. When asked about the condition of their building as a whole, West Berkeley renters were closer to the norm—39% rated their building good or excellent, compared to 44% citywide.

Housing overcrowding is a significant problem in West Berkeley, with its large number of children and larger households generally. Overcrowding is defined as a household having more than 1 person per room (excluding bathrooms). The 1990 Census indicates that 1 in 7 (14%) West Berkeley renter households were overcrowded, double the citywide percentage (citywide less than 2% of owner-occupied units were overcrowded).

### **E. Growing Slowly—Housing Development in West Berkeley**

Despite the largely built-up character of West Berkeley, the amount of housing here has continued to grow. The City's Housing Stock Changes Report, which is derived from building permit records, shows that between 1978 and 1991, there was a net increase of 142 housing units, including live-work spaces. This took the total from 2,856 units to 2,998, a 5% increase. In the 1980's, publicly assisted development accounted for most new housing in West Berkeley. The 1980's (until late in the decade) were a period of little private multi-family housing construction in most of the Bay Area. In West Berkeley, 62 units at Oceanview Gardens, 27 units in the Delaware St. Historic District<sup>1</sup>, and 5 public housing units at 7th & Jones added a total of 94 publicly assisted units. There are no current publicly assisted new construction projects as of August, 1993.<sup>2</sup>

<sup>1</sup>This project is mixed-income (and mixed use) with 8 of the units being low-income units for Section 8 households, and 19 being market rate condominiums.

<sup>2</sup>Public funds were used to restore the 75 room UC Hotel at 10th & University, which was vacated after the 1989 Loma Prieta earthquake, to occupancy as a residential hotel.



### III. HOUSING DEVELOPMENT

#### *Projected Development*

In the 1990's, an increased level of private sector development is likely. In terms of current activity, a live-work project of 17 units is now being completed for the 2100 block of 5th St. and 6th St. (4 units adjacent to it have also been approved), along with a single large live-work unit at San Pablo & Murray.<sup>1</sup> Two live-work units between 9th and 10th off Grayson St. have been approved, along with 7 units (combined new construction and warehouse conversion). The Redevelopment Agency is adding 2 units (one conventional, one live-work) in the 4th St. area. These projects total 33 units.

Prospects for more housing over the 15 year Plan period appear good. Local developers frequently express interest in West Berkeley sites, especially for live-work projects. San Pablo Ave. has yet to attract major housing development interest. The Preferred Land Use Concept notes the existence of 14 potential housing development sites in the Mixed Use/Residential and Commercial zones. These sites could accommodate some 260 units.

Second units in the residential areas could provide an additional source of housing, with minimal neighborhood impact. However, West Berkeley's housing stock—often consisting of small single story houses on small lots—is not always conducive to second unit development. The Mixed Use/Residential zone, which often has somewhat larger lots and houses, may in fact be the most promising area for such development.



<sup>1</sup>This analysis counts live-work spaces as residential units, since they provide living space for people. As of this writing, the City is in the process of developing new zoning regulations for live-work units, which treat these units as primarily commercial.

## **~~West Berkeley's Increasing Contribution to Citywide Housing Development~~**

~~The West Berkeley Plan Preferred Land Use Concept set a goal of adding at least 200 units over the Plan's 15 year life. This goal is based on the 1990 citywide Housing Element middle scenario need figure of 1,200 privately developed (as opposed to University or publicly assisted) units. The West Berkeley Plan area's 17% share of the city's land area is applied to this figure, producing a goal of 200 units. The Preferred Land Use Concept notes the existence of at least 14 potential housing development sites which could accommodate 260 units in the Mixed Residential and Commercial districts.~~

~~The Plan commits to increasing West Berkeley's share of citywide housing development. If West Berkeley provides 17% of citywide housing production, that would be a substantial increase in West Berkeley's historical share of citywide (non-University) housing development. Over the 1972-1991 period, West Berkeley contributed 131 net additional units, or 10% of net citywide growth in legal housing units. West Berkeley's share of privately developed units was even lower.~~

~~The General Plan which is now being developed will identify appropriate locations throughout Berkeley for housing development. Its analysis will review not only the availability of vacant or "underutilized" land, but also consider where housing should be developed in relationship to the availability of transit and other services.~~



## IV. SOCIAL SERVICES ISSUES

### A. Introduction

Analyzing social services generally means analyzing how people—typically low income people—obtain basic human needs beyond the first fundamentals of food, clothing, and shelter. Thus health care, education, recreation, child care, and technical services needed to obtain other services (e.g. legal aid, translation assistance) are major elements of social services. Income maintenance programs from Aid to Families with Dependent Children (AFDC—commonly termed “welfare”) to Social Security are also social service issues, but are completely controlled at higher levels of government and are thus excluded from this analysis. It is beyond the scope of this analysis, and of the West Berkeley Plan overall, to attempt a comprehensive analysis of social service needs. These needs are too many, too various, and served by too many different public and private agencies both inside and outside West Berkeley for comprehensive coverage here (the Community Resources section of the Conditions, Trends, & Issues report for General Plan provides an overview of service provision in Berkeley). Within the West Berkeley Plan, the Economic Development Element discusses issues of (un)employment and job training. The Physical Form Element speaks to open space and recreational needs and facilities. The housing portion of this Element discusses a key service needed by all.

Nonetheless, social service programs are important for many West Berkeley residents. The City of Berkeley has also made a commitment, very unusual for California cities of its size, to seek to provide needed social services to the extent possible. Therefore, this Element generally discusses social service needs and provision, as they can be expected to affect West Berkeley residents.



## ***B. Methods for Obtaining Services—Income, Programs, and the Informal Sector***

In order to assess the adequacy of services for West Berkeleyans, we must consider the various ways such services are obtained by people who need them. There are 3 basic ways people can obtain needed services—1) Buy them (using income); 2) Be formally given them (benefiting from Programs); 3) Be given them informally by relatives, friends, neighbors, fellow church members, etc. (the informal sector). In the case of health care, people are also often given full or partial health insurance as a part of their total compensation. It must be noted that middle and upper class people more commonly buy these services rather than using free ones—e.g. seeing a private lawyer rather than using Legal Aid. Regrettably, purchased services in the United States are often better quality (and more accessible, if one has funds) than free ones, and do not carry the stigma that free services often do. Thus, to a large extent, the best social service program is measures to provide the income to households that allow them to buy the services they need.

It should be noted that West Berkeley households gained 74% of their income through wages and salaries (and self-employment), and only 6% from social security benefits and 3% from public assistance benefits.<sup>1</sup> In this sense job training programs—primarily discussed in the Economic Development Element—if successful can be a bridge to increased access to services. This report will focus on free and subsidized social services available to West Berkeleyans, since many of them do not have and may not gain adequate income to purchase them.<sup>2</sup>

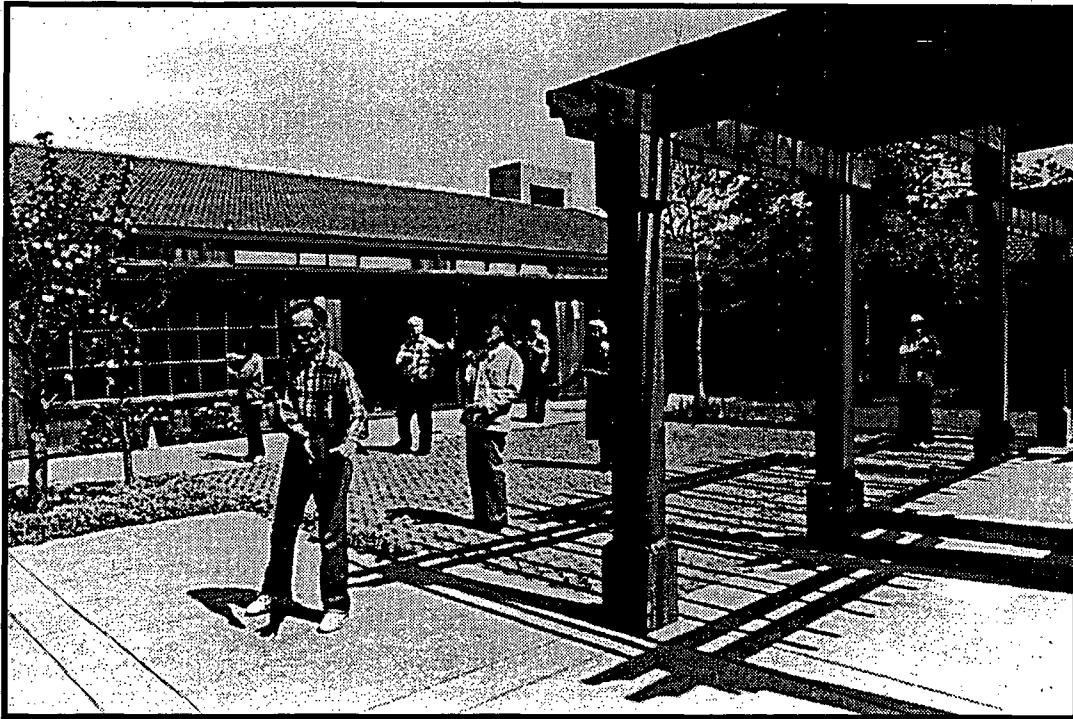
The informal sector will be touched on, but not carefully analyzed, in this report. It is virtually impossible to quantify the services people receive this way, especially through personal contacts. In addition, the sense of “community” and “belonging” that such organizations can generate when they are successful is central to many people’s lives, but certainly unquantifiable. A range of key voluntary service-providing organizations such as churches, ethnic/regional associations, and labor unions will be noted. However, West Berkeleyans do not restrict themselves just to those organizations west of San Pablo Ave. Nor do West Berkeley-based organizations serve only West Berkeley residents. The connections between West and South Berkeley people and organizations—such as churches—are often particularly strong.

## ***C. The City’s Role in Social Service Provision***

Analysis of social service needs in West Berkeley and how adequately formal social service programs fill them should occur in the context of analysis of the City’s role in social service provision. This is done to more accurately describe—in this document which plans for City action—where the City might intervene in the social service system.

<sup>1</sup>This calculation admittedly does not account for non-cash benefits that households received, such as food stamps or Section 8 rent subsidies. Nonetheless, these are relatively modest compared against the \$75 million total cash income West Berkeley households received in 1989. It is also interesting to note that in Berkeley as a whole, in 1989, Wages, Salaries and Self-Employment also accounted for 79% of income, but Social Security was only 3%, and Public Assistance 1% of citywide household income. In 1979, 20% of West Berkeley households—524 households—reported that they received income from AFDC, GA, or Supplemental Security Income (SSI). This was not necessarily the family’s or household’s only source of income).

<sup>2</sup>Access to services is another problem beyond simple availability. Thus social services may be improved by extending a program’s hours, or by improving transit so that people without cars can reach it more easily.



~~The City's role in this arena is different than in the other areas addressed in this Plan. In housing, state law mandates that cities prepare a Housing Element and pursue policies to create adequate housing. The City is the primary regulator for land use and urban design decisions. In transportation, the City controls streets and parking, and has a voice regarding state highways and regional planning. In economic development, the City controls relatively few of the key variables, but has sought like other cities to develop local tools for economic management such as the First Source Program.~~

~~In what are generally thought of social services (e.g. health, education, income maintenance), the City is neither the primary governmental provider nor the primary regulator. Many services are provided/regulated by state and federal agencies (e.g. Social Security), although Alameda County is an important delivery agency for state programs. One very key local agency delivering human services such as education and child care is the Berkeley Unified School District (BUSD). BUSD plans to seismically retrofit and reopen Columbus School in West Berkeley, using funds from a bond issue approved in June 1992. Another important education job training agency is the Peralta Community College District, whose Vista College is roughly 1 mile from the Plan area.~~

~~Nonetheless, Berkeley is very active as a city in social services. It is one of the few California cities to retain a full service Health Department. While other California cities spend an average of .2% of their General Fund on health care, Berkeley spends some 5% on health. Berkeley has distributed clear, usable information on AIDS prevention while the federal government has temporized. Berkeley also operates one of the most active programs for the homeless of any California city. Berkeley uses the maximum permitted amount of its Community Development Block Grant (CDBG) funds for social service agencies. Through CDBG, the Community Services Block Grant (CSBG), the Job Training Partnership Act (JTPA) and other programs, the City of Berkeley in 1990-91 provided over~~



\$3.4 million in funds to 53 community-based agencies working in job training, childcare, youth, senior and other social service fields. Thus, despite its lack of mandate, and despite the serious state and federal funding cuts of the 1980's, Berkeley has sought to fill the breach.

The City has for many years identified West Berkeley (along with South Berkeley) as a target area for social service provision. On the map (see next page) of Community Services Facilities, the central part of West Berkeley is one of the locations where service agencies are clustered, along with Downtown and South Berkeley. West Berkeley's residential areas are part of the Neighborhood Strategy Area (NSA), where CDBG funded programs must concentrate their efforts. Most of the City's affordable housing programs are also targeted to West and South Berkeley, as the city's low income areas.

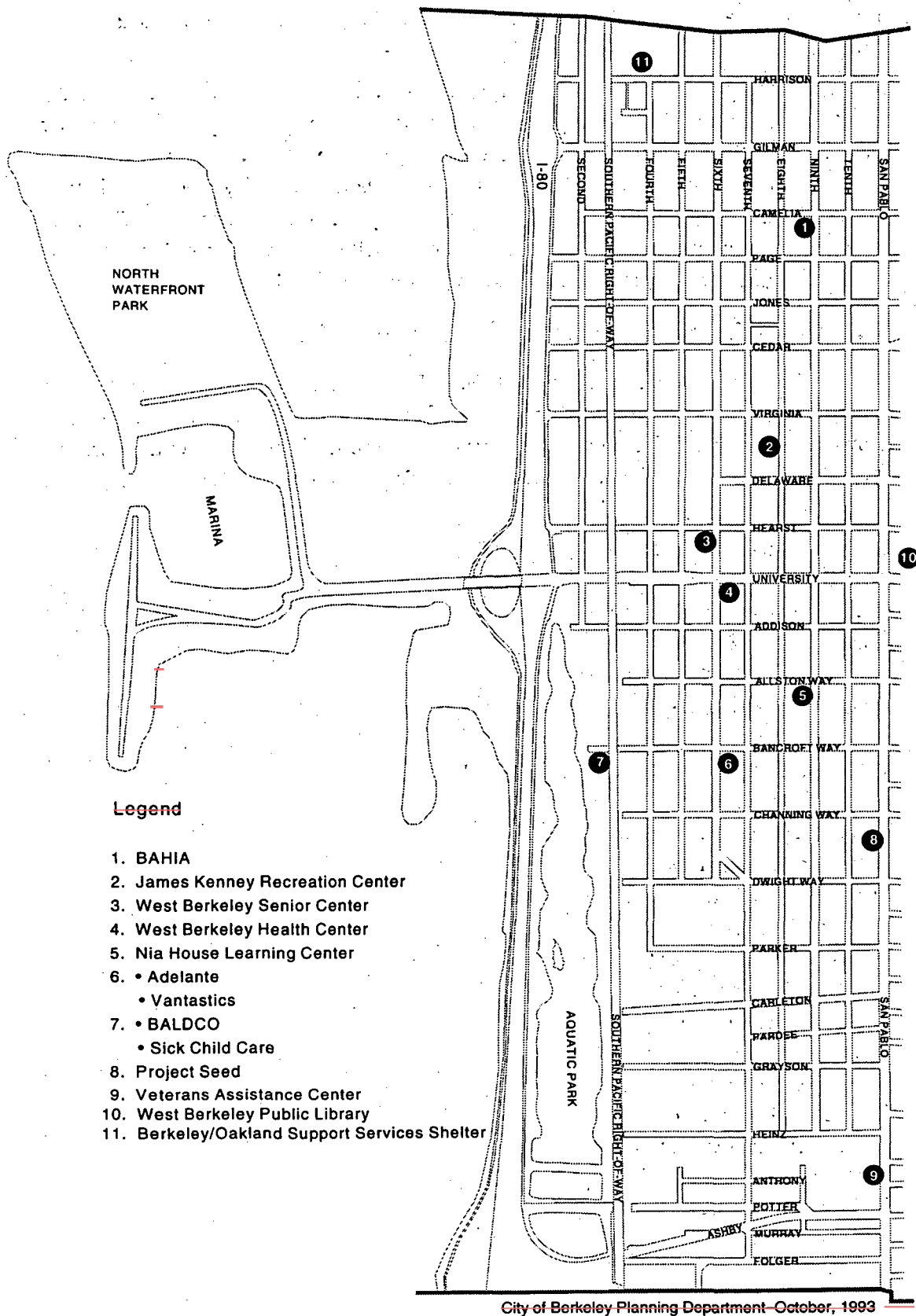
#### ***D. Considering Needs West Berkeley's Population***

The adequacy of social services to West Berkeleyans is based on the needs these services should meet. Unfortunately, a full needs assessment of the vast array of needs—from AIDS care to youth counseling—is beyond the scope of this document. However, the simple demographic facts about West Berkeley's population suggest an above average need for a wide range of services.

A substantial proportion of West Berkeley residents are low income (see table 6-4); and a very high proportion of West Berkeley children live in single-parent households. The large number of single mothers makes the need for child care all the more pressing (although two parent families also have child care needs). The non-English speaking population needs bilingual services (primarily in Spanish, to a lesser extent in Asian languages) across a range of service areas. Most importantly, the fact that perhaps a majority of West Berkeley residents are low income means that their health care, child care and other services are likely to be inadequate.



**Figure 6-2: Community Services  
Facilities in West Berkeley**



The majority of West Berkeley's population is not (Non-Hispanic) white. It is instead (as is discussed elsewhere in this Element) black, Latino, and Asian. These groups have historically had difficulty gaining access to adequate services—whether as a result of typically low incomes, discrimination, or both. It seems safe to assume that West Berkeley non-whites also suffer from such problems. There is also more data available on these groups at a city, county, and state level than there is strictly within West Berkeley.

### ***E. A Matrix of Care—West Berkeley Social Service Agencies***

For an American community of less than 8,000 souls, West Berkeley is unusually well provided with a range of social service agencies. The City itself has developed a senior center, a library (immediately east of San Pablo Ave. on University), and a health clinic (see Map). BUSD operates Franklin School on San Pablo Ave. and a child care facility, and is considering has committed itself to reopening Columbus School, where an after school program currently operates. Adelante operates a job training center, as does the Veterans Assistance Center, although both of these serve citywide and broader clienteles. Oceanview Neighborhood Services is one of the agencies which operates a feeding program in West Berkeley. In fact, West Berkeley has a fuller set of social/public services than it does private commercial ones (see the *Economic Development Element*).

In what we have called the informal sector, there are 13 churches in West Berkeley, 7 of them Baptist. A Buddhist "fellowship" and the gay-oriented Metropolitan Community Church (which shares facilities with another congregation) are among the churches. Many West Berkeley residents attend church outside the area, particularly in South Berkeley. While no unions are headquartered in West Berkeley, at least 15 union locals represent workers at various West Berkeley locations. West Berkeley residents working outside the area may also be union members, particularly if they work in manufacturing, at grocery or department stores, or in the public sector (including the University).



## ~~V. GOALS AND POLICIES~~

### ~~Goal 1:~~

~~Take all reasonable steps in housing policy to maintain and foster the social and economic diversity of West Berkeley's residents~~

#### ~~Rationale:~~

~~Diversity has been the touchstone of Berkeley's housing and social policies. West Berkeley is the part of the city which is truly most diverse. West Berkeley houses many people who would have difficulty finding housing elsewhere in Berkeley. West Berkeley tenants in particular are overwhelmingly low income. Thus, to maintain diversity both in West Berkeley and in Berkeley as a whole, policies which foster diversity in West Berkeley are important. One of the key strategies for maintaining this diversity is to maintain West Berkeley's stock of affordable rental housing.~~

#### ~~Policies:~~

~~1.1. In the context of citywide programs affecting historically low rents and rent control, maintain the affordability of West Berkeley rental housing.~~

~~1.2 Avoid removing buildings which are serving as or have served as affordable rental housing.~~

~~1.3 Provide housing assistance to West Berkeley tenants, as well as to lower income homeowners.~~

### ~~Goal 2:~~

~~Maintain the maximum level of social service provision in West Berkeley that City resources will permit, to support the policy of maintaining diversity in West Berkeley~~

#### ~~Rationale:~~

~~Many West Berkeley residents are low income, unemployed or poorly employed. Many have limited English language proficiency. Therefore, they do not enjoy the same access to health care, child care, and other important services that middle and upper income people have. One important strategy to improve their access is to assist residents in moving into better paid, better benefited jobs (see the Economic Development Element). Nevertheless, (inter)national social realities mean that many West Berkeleyans are likely to remain unemployed or in low wage jobs. Therefore, in order to allow people in such jobs to remain in West Berkeley at all, and to improve their quality of life, maximum feasible provision of services is central. This responsibility falls on not only the City government, but the County, State, and Federal government as well.~~

*Policy:*

~~2.1. Assure that services are available to needy individuals in a language they can understand.~~

*Goal 3:*

~~Encourage the development of housing which provides on-site supportive services.~~

*Rationale:*

~~In recent years, increasing efforts have been made to develop housing which provides on-site supportive services, such as child care, counseling, or cooked meals. This is one of the most direct means to assure that people receive needed services. While such services are needed throughout Berkeley, West Berkeley, with its large population who speak limited English, and its high number of children, is particularly appropriate for such housing. The City could provide direct financial support to such housing if funds are available and/or modify zoning requirements to assist such projects.~~

*Goal 4:*

~~Encourage appropriately scaled and located housing development.~~

*Rationale:*

~~West Berkeley must contribute to the citywide goal of adding housing units. The commercial corridors—particularly San Pablo Ave.—and the Mixed Use/Residential zone provide locations where this can be done without interfering with other Plan goals. Indeed, housing in the Mixed Use/Residential zone will serve the positive purpose of strengthening the residential character of that area's residential enclaves. Similarly, housing on San Pablo Ave. will add vitality to its commercial activities. Another appropriate housing form is second units added to single family houses (although some West Berkeley lots are too small to allow convenient creation of a second unit). This method of housing creation is specifically encouraged as a potential "Community Program" to be supported from Miles' Community Program contribution of \$100,000 annually under its Development Agreement.~~

*Policies:*

~~4.1. Develop planning incentives for housing at commercial "nodes." Such incentives might include allowing the same parking spaces to serve both residential and commercial uses in the building.~~

~~4.2. Encourage the creation of second units with single family houses in the Residential and Mixed Use Residential district. Develop policies to allow the waiver of parking requirements for a second unit when appropriate.~~

*Goal 5:**Encourage the development of Live-Work Units in appropriate locations**Rationale:*

~~Live-work units represent West Berkeley's unique contribution to housing Berkeley's population. Live-work units, especially ones with modest prices or rents, can provide housing for the artists and craftspeople who are so important to West Berkeley's character. While some previous live-work projects have interfered with industrial operations, the West Berkeley Plan designates areas for live-work where this should not be the case. In these locations, the City should encourage live-work and recognize its special character.~~

*Policies:*

~~5.1. Support the development of live-work units in appropriate locations as set forth in the Land Use Element under appropriate development standards.~~

~~5.2. Use "inclusionary" requirements for low income units or other means to assure that live-work units serve their original population of low income artists and craftspeople.~~



## ~~VI. IMPLEMENTATION MEASURES~~

~~This Element does not have a general independent implementation section. While West Berkeley presents its own unique economic, environmental, land use, transportation, and design problems, its housing issues (with only 7% of the city's housing units) are largely shared with South Berkeley and with the city as a whole. Issues of zoning for residential use are discussed in the Land Use Element (live-work development, which is concentrated in West Berkeley, is being considered in Zoning Ordinance amendments). The implementation section is largely omitted here because there is only one housing program which is unique to West Berkeley are being planned.~~

## ***Miles Development Agreement Housing Programs***

There is one source of funding which is at least 50% dedicated to West Berkeley the Miles Development Agreement Affordable Housing program. The Planning Commission and City Council designated these funds for use in rehabilitating homes owned by low income owners, and also for creation of second units if that is feasible. The fund will provide \$615,000 over 10 years. The City is currently in the process of designing a program for use of these funds. In addition, Miles will be contributing \$100,000 per year for 10 years to a Community Programs fund, which can fund a broad range of housing, social service, and youth programs. While these funds will not be sufficient to start new housing programs in West Berkeley, they should make it easier to implement the City's construction, rehabilitation, second unit, or other housing programs here.

## ***City Housing Programs Generally***

West Berkeley's housing programs will generally be those adopted in the 1990 Housing Element, and such Citywide efforts as the multifamily housing acquisition program.

In general, the situation seems similar for social service provision issues. West Berkeley tends to share social service problems and service providers with South Berkeley, and to some extent the city at large. One special need is West Berkeleyans' greater need for services in Spanish and to a lesser extent Asian languages. However, this is not a need for a specific service per se, but rather a cross cutting need for all services to be available in a language the client can understand (see Goal 2, Policy A). The General Plan is assessing the need for social services in Berkeley, and reviewing what geographic models seem to be most effective, given the populations and needs in Berkeley.

The West Berkeley population, with its high percentages of low income renters, low and moderate income homeowners, and non-traditional household forms, does lend special weight to certain housing programs. One important note is that the concept of "housing for families" must include rental housing in West Berkeley, since there are numerous renting families. The expansion of property transfer tax coverage in the 1991 budget was targeted for affordable housing programs, which should aid West Berkeley. In addition to federal housing tax policy (the most important housing program in any city), these are, in rough order of importance:

- Rent Stabilization and Eviction Control
- Section 8 housing assistance
- Rental Rehabilitation Program
- Low Income Weatherization Program
- Mortgage Credit Certificate Program



# APPENDIX A

## *Environmental Strategies & Implementation Measures Revised Evaluation*

The West Berkeley Plan Committee developed a wide-ranging set of potential environmental strategies and implementation measures for review and evaluation. They were first formulated in the winter of 1990-91. The measures covered the regulatory process in general, hazardous materials, soils and groundwater, air quality, noise, and biohazardous materials. This document represents a revised and updated evaluation (as of January, 1992) of these potential strategies. A Preliminary Evaluation was presented in September, 1991.

It is important to note that the great bulk of the proposed strategies and implementation measures have been incorporated into the text of the *Environmental Quality Element*. The *Element* also notes and makes reference to other measures which are not in the proposed strategies and implementation measures e.g. the *Citywide Trip Reduction Ordinance*. There are also some instances where information about the same or similar strategies are organized differently in the *Element* and the appendix thus the same strategy will appear in differing locations. Nonetheless, there is a good deal of overlap between the text and the appendix, which may appear redundant. However, the incorporation of many Committee ideas into the City's environmental workplan indicates their usefulness and timeliness. This document has been retained in its particular form to provide an easily accessible reference on the Committee's discussions.

The format of this evaluation is to provide a summary assessment and brief discussion of the proposed strategy or implementation measure. The evaluation finds most proposed measures *Currently Being Addressed*, that is, already being implemented. In some cases they are *Currently Being Addressed by Other Agencies* rather than City of Berkeley. In a few cases the goal of the proposed strategy is *Currently Being Addressed through Other Strategies*. In a few cases, *Further Research (is) Needed*, because the financial, technological, or other key implications of the proposal is not fully understood. In some areas where there is not current City activity, but future activity is intended or being considered, strategies are identified as *Policies, Projects or Studies of the Environmental Quality* or other West Berkeley Plan. The only area where proposals are evaluated to be *Not Currently Feasible* is in biohazards, where the City has made the decision (at least for the present) to allow the State of California to implement the *Medical Waste Management Act*, rather than itself implementing the Act. This issue is discussed in more detail in the biohazards section.

The appendix begins with a listing of those strategies which the Committee identified as priorities.



## I. ENVIRONMENTAL PRIORITY STRATEGIES

The following priority strategies were selected by the West Berkeley Plan Committee from the more comprehensive set of 6 environmental areas of concern, 40 possible strategies, and over 70 possible implementation measures that are outlined in Sections II through VII.

### General Process

#### Information

- Provide community accessible environmental information through a coordinated staff effort and central location.

#### New Uses

- Avoid the establishment of new uses which pose unmitigable environmental hazards.
- Prohibit the establishment of offsite industrial hazardous waste treatment and/or transfer facilities.
- New uses shall demonstrate the ability to meet applicable environmental laws and standards.

#### Enforcement, Compliance and Clean Up

- Enforce new and existing environmental laws with initial focus on top 10 firms; coordinate efforts with Bay Area Air Quality Management District.

#### Recognition

- Recognize and reward those companies which can exceed City of Berkeley and regional environmental standards.

#### Air Quality

- Avoid the establishment of new uses which pose unmitigable odors to residential districts.
- Reduce existing traffic and mitigate future traffic.
- Hazardous Materials: Transportation, Storage, Handling and Disposal
- Reduce the importing into Berkeley, transportation, storage, and use of hazardous materials and waste.
- Bio-Hazardous Materials
- Enforce the 1991 Medical Waste Management Act.

## II. GENERAL PROCESS

### A. Information

~~1. Provide environmental information which is accessible to the community and in a central location, through a coordinated staff effort.~~

#### ~~Currently Being Addressed~~

~~The Toxics & Pollution Prevention Program is developing an automated, standardized, multidepartmental database on companies and institutions subject to hazardous materials regulation.~~

~~a. Establish an office of environmental advocacy and information~~

#### ~~Currently Being Addressed~~

~~Office of Special Community Services created by City Council in July, 1991~~

~~b. Review the possibility of an Ordinance requiring greater public notification for environmental review, particularly when related to hazardous materials and pollution controls~~

~~Study Environmental Quality Element~~

~~2. Develop a baseline of community health data~~

#### ~~Further Research Needed~~

~~a. Hire epidemiology consultant to supervise health survey of West Berkeley residents.~~

#### ~~Further Research Needed~~

~~City resources are currently inadequate to conduct such a survey. In addition to finding funding for the project, methodologies to use the health data generated effectively would have to be developed. However, it may be possible to work with the UC School of Public Health to develop such a study.~~

### B. Citizen Participation

~~1. Increase citizen participation in coordination with City staff programs.~~

#### ~~Currently Being Addressed~~

~~a. Appoint citizens oversight committee~~

#### ~~Currently Being Addressed~~

~~The Community Environmental Advisory Commission was created by the City Council in April, 1991.~~

~~b. Appoint citizen representatives to the Local Emergency Planning Committee (the interjurisdictional committee which develops plans for responding to hazardous materials emergency)~~

~~Currently Being Addressed~~~~Citizen representative (as of January, 1992 Jim Whalen) has been appointed.~~~~C. Monitoring of Environmental Conditions~~~~1. Develop ability to monitor air, water, and soil contamination.~~~~Currently Being Addressed~~~~The City is upgrading its ability to monitor air, water, and soil contamination conditions. Both the Fire Department and the Toxics Program are requesting new equipment, such as "Drager" Tubes, which will allow them to engage in short term monitoring of air pollution situations. The DeSoto area health study will provide deeper information on conditions in that particular area. Water and soil monitoring will be improved by the requirements of the Stormwater Runoff Program, which will generate new data on water running off into the Bay. Owners of underground tanks are also required to monitor their performance at least annually. As City records are improved and consolidated, using them to evaluate overall environmental conditions will become easier.~~~~a. Hire consultant to monitor contamination~~~~Currently Being Addressed through other strategies (see above)~~~~b. Develop periodic review of existing businesses to achieve Maximum Available Control Technology (MACT)~~~~Currently Being Addressed by other agencies~~~~The Bay Area Air Quality Management District has set MACT as its standard for any "new" source of air emissions. "New" sources include new equipment at existing facilities.~~~~c. Consider amending Zoning Ordinance to set MACT as the appropriate standard.~~~~Currently Being Addressed through other strategies (see above)~~~~D. Emergency Preparedness~~~~1. Increase preparedness for hazardous materials emergencies, utilizing existing neighborhood organizations and watch groups.~~~~Further Research Needed~~~~The City's Emergency Response Plan must be completed, and assessments undertaken on how it can work most effectively with neighborhood organizations.~~~~a. Establish emergency preparedness programs~~~~Currently Being Addressed~~~~City has hired Emergency Preparedness Coordinator, who is working with citizens' groups (such as Disaster Planning Task Force), developing informa-~~

~~tional materials, and engaging in other programs as part of the Office of Special Community Services.~~

## ~~2. Retrofit seismically unsafe buildings~~

### ~~Currently Being Addressed~~

~~Pursuant to state law, the City Council has adopted an Unreinforced Masonry Buildings Ordinance, requiring owners of these buildings to prepare programs to increase their seismic safety.~~

- ~~a. Pass Retrofit Ordinance, including revolving loan fund.~~

### ~~Currently Being Addressed~~

## ~~E. New Uses~~

### ~~1. Avoid the establishment of new uses which pose unmitigable environmental hazards.~~

#### ~~Policies—Land Use and Environmental Quality Elements~~

- ~~a. Establish list of preferred and prohibited uses.~~

#### ~~Districting regulations—Land Use Element~~

~~The Land Use Element establishes permitted and prohibited uses for each district.~~

### ~~2. Prohibit the establishment of off-site industrial hazardous waste treatment and/or transfer facility.~~

### ~~Currently Being Addressed~~

~~Strict siting criteria were adopted in the April, 1991 Hazardous Materials Importation Ordinance.~~

### ~~3. Set City of Berkeley policy with regard to the location and/or operation of companies with a history of environmentally related crimes or non-compliance.~~

- ~~a. Pass appropriate Ordinance (e.g. "Bad Boy")~~

### ~~Currently Being Addressed through other strategies, Study Feasibility of Ordinance~~

~~Environmental records except for those which concern trade secrets are public record. The City of Berkeley's efforts to make these records more accessible have been discussed above. For any company already operating in Berkeley which represent the great bulk of applicant companies here its previous performance will be a matter of great interest to both citizens and staff. Requirements for submittal of Hazardous Materials Management Programs (HMMP) and in some cases, Risk Management and Protection Programs (RMPP) have also been discussed.~~

~~The situation in which a company's extra-Berkeley environmental record would be most critical would arise if a multiplant manufacturer or other firm not already in Berkeley sought to locate here. However, in recent years, no multiplant manufacturers who were not~~

~~already located here have sought to establish a new plant in Berkeley. Concern has been raised about a hazardous waste management facility locating here, but there are many, many communities which would be far easier for such a facility to locate in. Planning staff is also concerned about how and how broadly such a standard could fairly be applied, especially given the inevitable differences in operations and personnel from plant to plant. We are also concerned about such an Ordinance discouraging industrial location and expansion in Berkeley. Despite these concerns, the idea is listed for study of its feasibility.~~

#### ~~4. New uses shall demonstrate ability to meet applicable environmental laws and standards.~~

##### ~~Currently being addressed~~

~~Initial Study/Environmental Review process, carried out in conjunction with the Toxics Program, does not allow new uses to begin operating until such ability is demonstrated.~~

#### ~~5. Separate new residential development from manufacturing uses.~~

##### ~~Currently Being addressed~~

~~Preferred Land Use Concept establishes separate manufacturing, residential zones, buffering regulations.~~

### ~~F. Enforcement, Compliance, and Clean Up~~

#### ~~1. Enforce new and existing environmental laws with initial focus on top 10 firms; coordinate efforts with BAAQMD.~~

##### ~~Currently Being Addressed~~

~~Top 10 firms had hazardous materials inspection in 1991, have been placed on annual inspection cycle.~~

- ~~a. Appoint top level administrator to pursue 5 most significant environmental problems, as defined by citizens.~~

##### ~~Currently Being Addressed~~

~~Office of Special Community Services in City Manager's Office created in July, 1991, Director appointed (currently Denise Johnson) in October, 1991. The Director reports regularly to the Citizens' Environmental Advisory Commission.~~

#### ~~2. Assist existing manufacturers to assure compliance with environmental standards~~

##### ~~Currently Being Addressed~~

~~Assistance providing during inspections, with preparation of Hazardous Materials Management Programs.~~

- ~~a. Hold technical assistance workshops~~

~~Policy-Environmental Quality Element~~

~~Ongoing staff resources above those to conduct basic inspection/regulation program needed.~~

- ~~b. Develop coordinated schedule of staff inspections (insure schedule is not formalized to the point where "surprise" is eliminated)~~

#### ~~Currently Being Addressed~~

~~Expanded inspection schedule being implemented~~

### ~~3. Require businesses which close or leave to clean up site contamination.~~

#### ~~Currently Being Addressed~~

~~Toxics & Pollution Prevention ongoing Work Program activity.~~

- ~~a. Fund adequate number of staff positions.~~

#### ~~Currently Being Addressed~~

~~Toxics & Pollution Prevention Program staff has been increased, Hazardous Materials program fees increased dramatically.~~

## ~~G. Recognition~~

### ~~1. Recognize and reward those companies which can exceed City of Berkeley and regional environmental standards.~~

#### ~~Policy-Environmental Quality Element~~

- ~~a. Increase public awareness of those exceeding standards or engaging in other extraordinary environmental efforts; use portion of fines for non-compliance to publicize~~

#### ~~Ordinance/Regulatory Changes-Environmental Quality Element~~

- ~~b. Insure (CEQA) mitigation fees are expended appropriately~~

#### ~~Currently Being Addressed~~

~~City Planning Department prepares Mitigation Monitoring Programs for this purpose.~~

- ~~c. Review possibility of extending tax credits (tied to cost) for pollution prevention; source and toxic use reduction, solid waste recycling.~~

#### ~~Further Research Needed~~

~~City actively exploring programs in this area.~~



### III. ~~HAZARDOUS MATERIALS~~

#### ~~Transportation, Storage, Handling, and Disposal~~

##### ~~1. Accelerate Compliance with State and City law~~

###### ~~Currently Being Addressed~~

- ~~a. Conduct fee study/consider other financing methods~~

###### ~~Currently Being Addressed~~

~~As noted above, hazardous materials program fees have been increased drastically for 1991-92, to make program self-supporting.~~

- ~~b. Fund adequate number of personnel, 1 additional FTE minimum~~

###### ~~Currently Being Addressed~~

~~In 1991-92, Toxics & Pollution Prevention Program staff has expanded by 1 FTE.~~

- ~~c. Promote/pursue internships.~~

###### ~~Currently Being Addressed~~

~~Program regularly using interns.~~

##### ~~2. Increase inspections and enforcement, improve local enforcement capability~~

###### ~~Currently Being Addressed~~

- ~~a. Use City Attorney's Office to augment County District Attorney's capacity to prepare cases~~

###### ~~Currently Being Addressed through another strategy~~

~~This implementation proposal sought to use the Berkeley City Attorney's office to aid the Alameda County District Attorney (DA) in preparing cases against hazardous materials violator, thus making it possible for the DA to bring more effective cases. Using the City Attorney's Office has not proved possible. However, the Police Department has proposed hiring an investigator for toxics violations, one of whose major duties will be assisting the DA on hazardous materials cases.~~

- ~~b. Require Business Plan to reduce toxics for permit approval.~~

###### ~~Currently Being Addressed~~

~~While state law only requires a Business Plan with Source Reduction for sites that produce over 12,000 kilograms of hazardous waste per year, City Ordinance has reduced the threshold to 4,000 pounds per year.~~

##### ~~3. Develop risk management and communication procedures~~

###### ~~Currently Being Addressed~~

~~Current Risk Management and Prevention Programs now require that risk communication programs be incorporated.~~

~~a. Provide technical assistance workshops for businesses~~

~~Project-Environmental Quality Element~~

~~Ongoing staff time needed to prepare, present workshops.~~

~~4. Reduce the importing into Berkeley, transportation, storage, and use of hazardous materials and waste.~~

~~Goal-Environmental Quality Element~~

~~a. Pass Hazardous Materials Importation Regulation Act.~~

~~Currently Being Addressed~~

~~Ordinance adopted April, 1991~~

~~b. Pass Ordinance based on (Petrus) Hazardous Materials Reduction Ordinance~~

~~Currently Being Addressed~~

~~Pollution prevention planning proposal being developed.~~

~~5. Require Use Permit conditions on hazardous materials/waste hauling.~~

~~Currently Being Addressed by Other Agencies~~

~~Hazardous waste haulers are licensed by State. Facilities using hazardous materials and/or generating hazardous wastes are required to use licensed haulers and maintain accurate manifests of materials/wastes hauled.~~

~~a. Pass new Hazardous Materials Transportation Ordinance~~

~~Study-Environmental Quality Element~~

~~Assess amending existing Ordinance, which prohibits hauling above BART tracks.~~

~~6. Encourage hazardous waste reduction and recycling~~

~~Policy-Environmental Quality Element~~

~~a. Amend Zoning Ordinance to require (Hazardous Waste) Recycling Plan for permit approval.~~

~~Currently Being Addressed~~

~~Toxics & Pollution Prevention Program to develop hazardous waste reduction and recycling programs, review procedures. It, along with the Community Development Department, will consider the effect of these programs on Berkeley's business competitiveness.~~

~~b. Pass mandatory commercial (hazardous waste) recycling Ordinance.~~

~~Study-Environmental Quality Element~~

## ~~IV. CONTAMINATED SOILS AND GROUNDWATERS~~

### ~~1. Increase inspections and enforcement from 1990-91 levels~~

- ~~a. Conduct fee study, analyze other financing methods~~

#### ~~Currently Being Addressed~~

~~Fees substantially increased in 1991-92 program year to meet program costs.~~

- ~~b. Fund adequate number of personnel, 1 FTE above 1990-91 levels minimum~~

#### ~~Currently Being Addressed~~

~~Toxics & Pollution Prevention Program reorganized, threatened staff losses prevented, staff augmented.~~

- ~~c. Promote and pursue internships~~

#### ~~Currently Being Addressed~~

~~Toxics & Pollution Prevention Program actively uses interns for both programs and special projects (e.g. DeSoto waste reduction).~~

### ~~2. Improve disclosure of conditions on sites.~~

- ~~a. Pass Disclosure Ordinance~~

#### ~~Further Research Needed~~

~~San Francisco's Ordinance requiring disclosure of site conditions on sale has not yet been implemented, and no other jurisdiction has passed such a requirement. It is unclear how this requirement would be enforced. However, lenders frequently require such disclosures on sale.~~

- ~~b. Shorten time frame for disclosure, testing, and clean up~~

#### ~~Currently Being Addressed~~

~~The Toxics & Pollution Prevention Program has dramatically increased the level of inspections, and shortened the inspection cycle.~~

### ~~3. Increase site clean-up~~

- ~~a. Review existing legislation~~

#### ~~Currently Being Addressed~~

- ~~• Ongoing programmatic activity~~

- ~~b. Map source sites and groundwater contamination plumes~~

#### ~~Project-Environmental Quality Element~~

~~Resources needed-possibly a qualified intern.~~

- ~~c. Study bio-remediation of soil~~

#### ~~Further Research Needed~~

~~Bioremediation techniques are new, generally untested, and currently require state approval to implement on each specific site. These techniques are not necessarily more cost effective at present than conventional techniques, although technology is evolving.~~

~~4. Publicize Environmental Record~~

~~a. Track violation history~~

~~Currently Being Addressed~~

~~Improved hazardous materials computer database allows such tracking.~~

## ~~V. AIR QUALITY~~

### ~~1. Improve communication and coordinate responsibilities for assistance, enforcement, and complaint response with the BAAQMD.~~

#### ~~Currently Being Addressed~~

- ~~a. Develop Joint Powers Agreement or Memorandum of Understanding with Air Board.~~

#### ~~Currently Being Addressed with other Strategies~~

~~This strategy seeks to improve the City of Berkeley's ability to act against air emission violators. The City is pursuing a variety of steps to do this. City Hazardous Materials inspectors and Air Quality Districts are doing mutual training, so that each will be able to monitor for and report violations of the other's regulations. The referral system has been noted above.~~

- ~~b. Establish priority list of polluters for compliance and technical assistance.~~

#### ~~Currently Being Addressed~~

- ~~c. Develop Prevention Program, 1 year to comply from initial notification~~

~~Pollution prevention planning proposal being developed.~~

### ~~2. Regulate the use of ozone depleting compounds.~~

#### ~~Currently Being Addressed~~

- ~~a. Pass Ordinance regulating the sale, use, and recycling of products with ozone depleting compounds.~~

#### ~~Currently Being Addressed~~

~~Ordinance adopted in January, 1991, to be administered by Toxics & Pollution Prevention Program.~~

### ~~3. Risk Management and Communication~~

- ~~a. Technical assistance workshops~~

#### ~~Project-Environmental Quality Element~~

~~Staffing above and beyond that needed to conduct basic regulation, inspection, and enforcement functions.~~

### ~~4. Reduce the importing into Berkeley, transportation, use, and storage of hazardous materials and waste.~~

- ~~a. Technical assistance workshops~~

#### ~~Currently Being Addressed through Other Strategies~~

~~Technical assistance being provided to hazardous materials users during inspections, in other settings. To date, workshops have been labor intensive and minimally productive.~~

~~b. Require Business Plan to reduce toxics for approval~~

**Currently Being Addressed**

~~State requires Source Reduction Plan for hazardous waste levels over 12,000 Kilograms per year. Toxics Program staff drafting amendment to City's Disclosure Ordinance to require Source Reduction at 4,000 pounds per year.~~

~~c. Adopt appropriate elements of the Hazardous Materials Reduction Ordinance, as proposed in the Petris bill.~~

**Ordinance/Regulatory Changes- Environmental Quality Element**

~~d. West Berkeley Plan- Provide larger mixed use buffer zones between Manufacturing and Residential Zones~~

**Policy- Land Use Element**

~~5. Avoid the establishment of new uses which pose unmitigable odors to residential districts.~~

**Policy- Environmental Quality Element**

~~6. Reduce existing traffic and mitigate future traffic~~

**Policy- Environmental Quality Element**

~~a. Maintain at least Level of Service "E" at key intersections.~~

**Policy- Transportation Element**

~~Higher levels of service would significantly improve air quality, but will be difficult to achieve because of already existing traffic levels.~~

~~b. Reduce pollution from transit vehicles~~

**Policy- Transportation Element**

~~The California Air Resources Board and the federal Department of Transportation are developing improved standards for transit vehicle emissions.~~

~~7. Provide tree planting and landscaping~~

**Currently Being Addressed**

~~The Redevelopment Agency is initiating a tree planting program for the Redevelopment Area (bounded by 6th, Eastshore Freeway, University, and Cedar)~~

~~a. Pass "Greening" Ordinance to promote tree planting and appropriate streetscape design.~~

**Policy- Urban Design Element**

~~The Urban Design Element Draft will call for the development of design guidelines, including streetscape design, for various parts of W. Berkeley.~~



## ~~VI. NOISE~~

### ~~1. Separate noise emitters from sensitive receptors (see Buffer Standards in Land Use Element.) Policy Land Use Element~~

- ~~a. Provide larger mixed use buffer zones.~~

#### ~~Policy Land Use Element~~

~~Land Use Element separates most intense Manufacturing zones from Residential zones.~~

### ~~2. Develop performance standards for new uses (see Performance Standards in Land Use Element).~~

#### ~~Policy Land Use Element~~

- ~~a. Include noise standards for new construction of housing and manufacturing~~

#### ~~Policy Environmental Quality Element~~

- ~~b. Amend Noise Ordinance to apply multi-family zone noise standards to mixed-use areas that permit residential uses.~~

### ~~Currently Being Addressed~~

~~Health & Human Services Department is in process of preparing new Noise Ordinance.~~

### ~~3. Investigate problem noise sources and develop appropriate solutions through negotiation or enforcement.~~

#### ~~Policy Environmental Quality Element~~

- ~~a. Identify sources of night noise.~~

#### ~~Study Environmental Quality Element~~

- ~~b. Impose Use Permit conditions Currently Being Addressed~~

~~Limitations on permitted noise levels are already incorporated in some Use Permits. Staff will continue to review the mechanisms whereby such limits might be best implemented, whether through performance standards, standard Use Permit conditions, or other means.~~

- ~~c. When City lacks authority develop self-enforced "Good neighbor agreements" between industry (and/or institutions) and residents.~~

#### ~~Study Environmental Quality Element~~

~~Analysis would identify situations where such Agreements are needed, would discuss how institutional mechanisms that are fair to all parties could be created to develop and monitor Agreements.~~

#### ~~4. Regulate truck circulation~~

##### ~~Policy Transportation Element~~

###### ~~a. Pass Truck Route Ordinance~~

##### ~~Currently Being Addressed~~

~~Truck Route Ordinance has been modified to prohibit through truck traffic on local residential streets.~~

#### ~~5. Construct sound walls along the Freeway~~

##### ~~a. Study feasibility of University-Gilman sound wall.~~

##### ~~Study Environmental Quality Element~~

###### ~~b. Implement Aquatic Park Master Plan policy construct acoustic berm~~

##### ~~Policy Urban Design Element~~

###### ~~c. Negotiate with Caltrans for construction of a sound wall, if feasible.~~

##### ~~Further Research Needed~~

~~Caltrans apparently unlikely to find any such project until City and Caltrans reach agreement on I-80 plans.~~

## ~~VII. BIO-HAZARDOUS MATERIALS~~

~~The primary non-federal regulatory vehicle in this emerging field is the 1991 California Medical Waste Management Act. (There are a number of federal regulatory statutes, primarily administered by the Food and Drug Administration-FDA.) All large quantity generators of medical waste, and small quantity generators using certain disposal techniques must register. The City of Berkeley had intended to become the local Administering Agency for this Act. However, the City found that fee levels permitted by the State were not commensurate with program responsibilities and costs. Therefore, like most jurisdictions which had the chance to operate the program, Berkeley declined.~~

~~This decision will hold at least through the 1991-92 fiscal year, and perhaps beyond. Since the City will not be administering the Act, the implementation actions which flow from doing so are not feasible. Task 1 in this section is to Enforce the 1991 Medical Waste Management Act. The subtasks are to a. Research the Issues, including source reduction; b. Develop Medical Waste Management Program, to be fee supported; c. Establish City of Berkeley as local enforcement agency to administer 1991 Medical Waste Management Act., and d. Review Medical Waste Management Program after 1st year. All but the last of these subtasks which staff plans to do is not feasible.~~

~~Task 2 is to Increase Inspections. Subtasks are a. Identify Medical Waste generators such as medical and dental offices, clinics, hospitals, surgery centers, laboratories (medical & research), veterinary offices, clinics, hospitals, and pet shops; b. Evaluate the practicality of regulating household medical waste; c. Identify problem companies, health risks, and possible strategies. All of these tasks are based on administration of the Medical Waste Management Act and are thus not feasible. Task 3 is to Develop risk management and communication, with the subtask of technical assistance workshop. This task is also not feasible, because it too relies on Medical Waste Management Act information.~~

# APPENDIX B

## CULTURAL RESOURCES OF WEST BERKELEY

West Berkeley is not generally thought of as Berkeley's cultural center, but there is a great deal of cultural life and activity here. West Berkeley's large spaces, relatively low rents, and ethnic diversity are among the factors which make it a good home for cultural activities. West Berkeley is an important locale for artists and craftspeople, for live music performances, and for ethnic restaurants and groceries, among other cultural resources. The historic buildings and areas of West Berkeley, and its parks and open spaces are also cultural resources which are discussed elsewhere in this Element. There are a wide variety of cultural resources, some of which not everyone would see as resources.

The strong community of artists and craftspeople which exists in West Berkeley is clearly such a resource. There are studios and worksites at locations such as the Kawneer Building (8th & Parker), the Nexus Institute (8th & Carleton), the Kala Institute (9th & Heinz), and other sites. Indeed, the East Bay Open Studio tour, which annually opens artists' private studios to the public listed no less than 26 West Berkeley venues and 59 individual studios in West Berkeley in 1992.

Live music is another West Berkeley cultural element. Current live music venues include Freight & Salvage (Addison E. of San Pablo) and Ashkenaz (San Pablo near Gilman) for folk music, Thunder Bay (Bolivar near Addison) and the 924 Gilman club for rock music, and Picante (6th near Gilman) for jazz. There have been live theatres in West Berkeley, but are none operating currently.

The written word is also represented in West Berkeley. The West Berkeley Branch of the Berkeley Public Library (University E. of San Pablo) sponsors a wide range of literary activities, including Spanish language book discussion groups. West Berkeley also houses the Niebyl-Proctor Marxist Library for Social Research in historic landmark Finn Hall. West Berkeley also has specialized bookstores in architecture Builders' Booksource (4th St. N. of Hearst), ecology Ecology Center (San Pablo S. of Dwight), and poetry Small Press Distribution (San Pablo N. of Hearst).

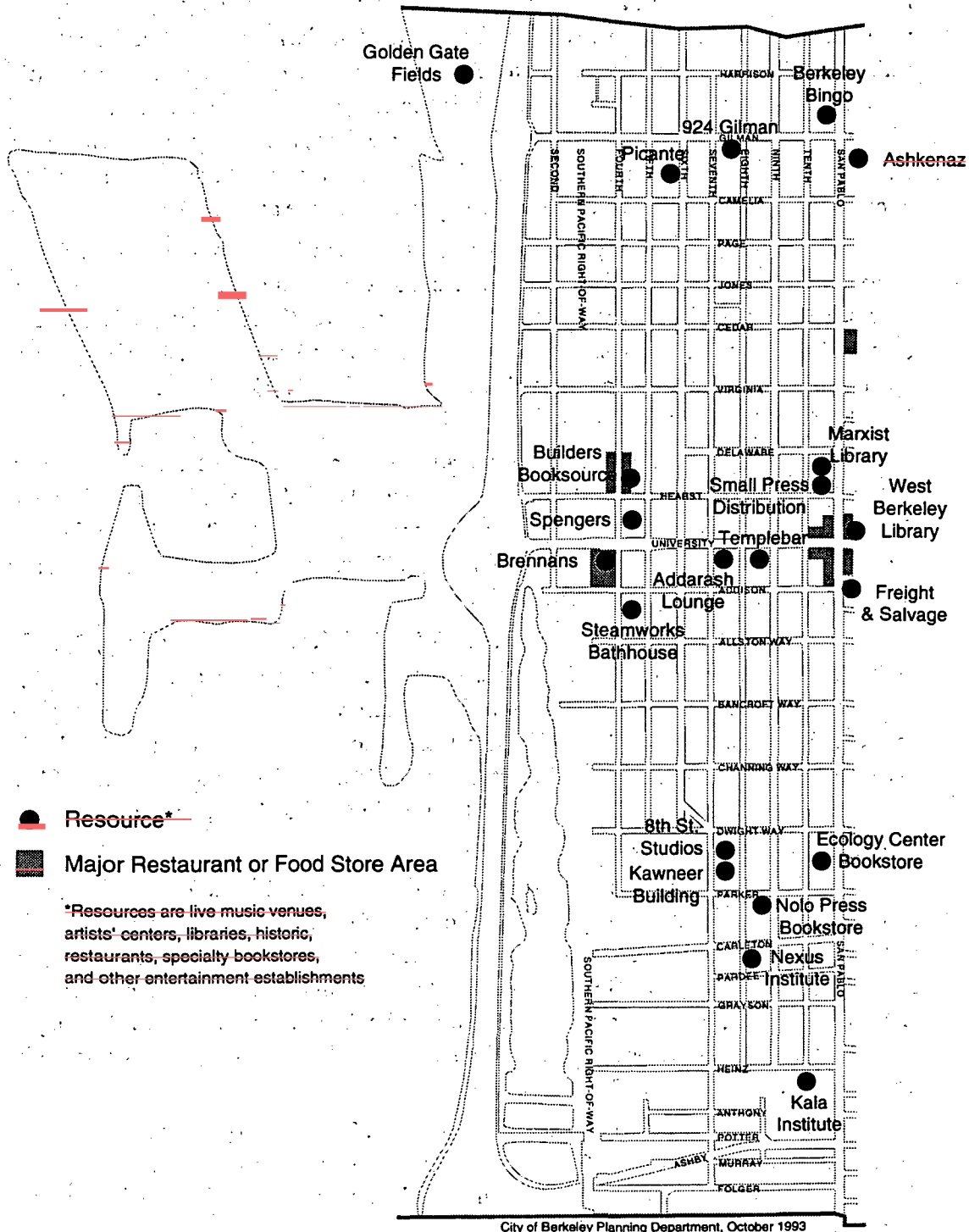
Culture is perhaps most often experienced in the form of food. The 57 eating and drinking places in West Berkeley include Afro-American, American, American Seafood, Californian, Cambodian, Caribbean, Chinese, Indian, Japanese, Mexican and other restaurants. West Berkeley food buyers can take advantage of groceries oriented to Caribbean, Indian, Middle Eastern, Thai and other cuisines. Some of West Berkeley's restaurants and bars such as Spenger's and Brennan's are longtime establishments which are themselves part of West Berkeley history.

West Berkeley is also home to gambling places. The Golden Gate Fields racetrack lies adjacent to the plan area at Gilman St. & West Frontage Rd., and is situated in both Albany and Berkeley. San Pablo north of Gilman is home to a bingo parlor which supports a number of charitable and religious groups.

There has been a public bathhouse in West Berkeley for decades.

In addition to being a locale where culture is enjoyed, it is also one where cultural products are created and produced. In addition to art and craft studios, there are also film, video, and record production companies in West Berkeley, at the Fantasy Building (10th & Carleton) and in other locations. West Berkeley is home to most of Berkeley's printing industry, and to some publishers, such as Nolo Press and Ten Speed Press.

Figure 1: Cultural Resources of West Berkeley, 1993



# APPENDIX C

## Recommended Parking Standards

Discussions of the West Berkeley Plan have highlighted the need to revise parking standards. Currently, the Zoning Ordinance requires the same provision of parking (2 spaces per 1,000 sq. ft. of built space) for most commercial uses, despite the fact that retail, office, and manufacturing uses impose substantially different parking demands. The proposed standards also to some extent differentiate between the differing impacts of different internal uses within a single facility (e.g. production vs. office within a manufacturing plant). The standards are designed to reflect the impact of various uses more accurately, not encourage undue reliance on the private automobile (by providing excessive parking) and to provide an incentive for retention of manufacturing and industrial uses, by lowering their parking standards.

These standards are recommended for adoption in principle.

| Use                                          | Parking spaces<br>required<br>per 1,000 sq. ft. |
|----------------------------------------------|-------------------------------------------------|
| Manufacturing (assembly & production space)  | 1.0                                             |
| Warehouse and storage                        | 1.0                                             |
| Offices (freestanding and within other uses) | 2.0                                             |
| Laboratories                                 | 1.5                                             |
| Retail uses                                  | 2.0                                             |
| Restaurants (except fast food)               | 3.0                                             |
| Fast food restaurants                        | 4.0                                             |

### Additional recommendations concerning parking standards:

- Consider reduced standards for those areas of University Ave. and San Pablo Ave. with strong transit service. Reduced standards in these areas could also assist in developing and maintaining continuous commercial frontage. One approach in mixed use buildings could be allowing the same parking space to serve as required parking for both residential and commercial uses, especially neighborhood commercial uses.

- Develop an appropriate standard when West Berkeley Plan zoning is adopted for required bicycle parking when there is new construction and/or significant change of use.

- Permit a maximum distance of at least 500 feet between a development and required parking serving it, rather than the current 300 feet. Allow in-lieu fees rather than on-site provision of parking spaces for developments within 500 feet of an actual or planned public parking facility.

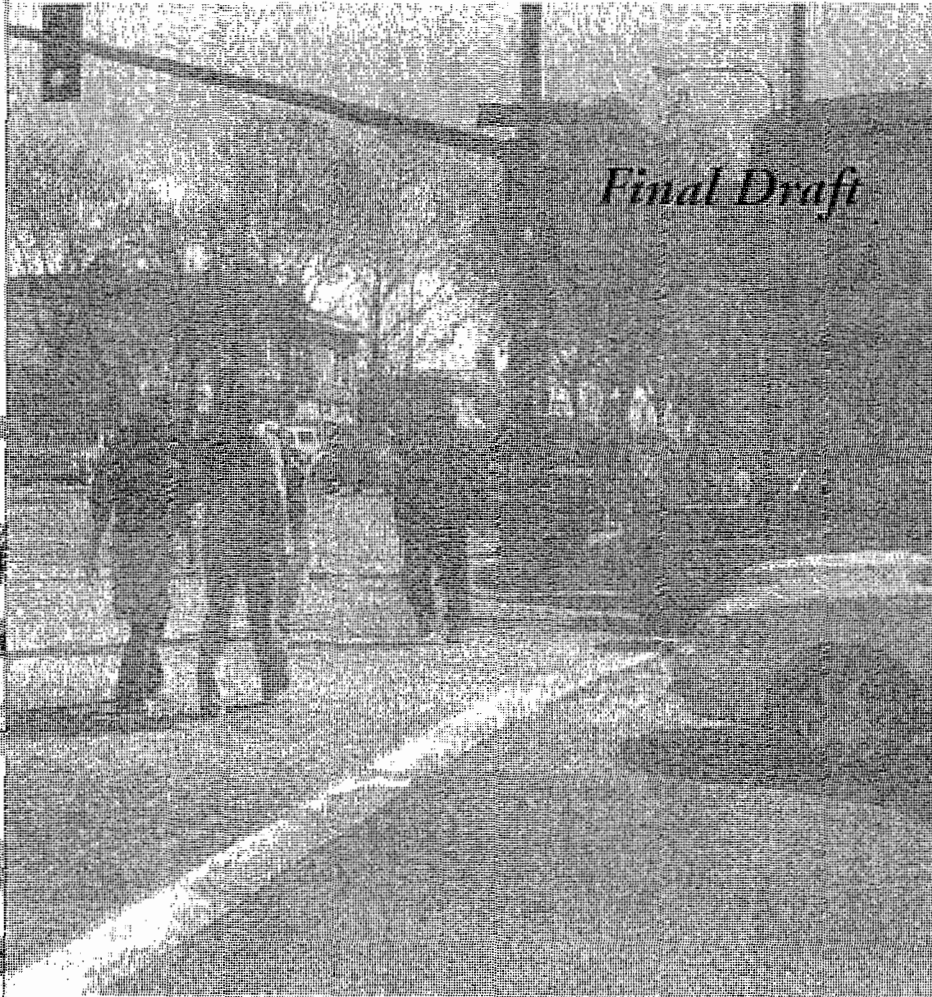
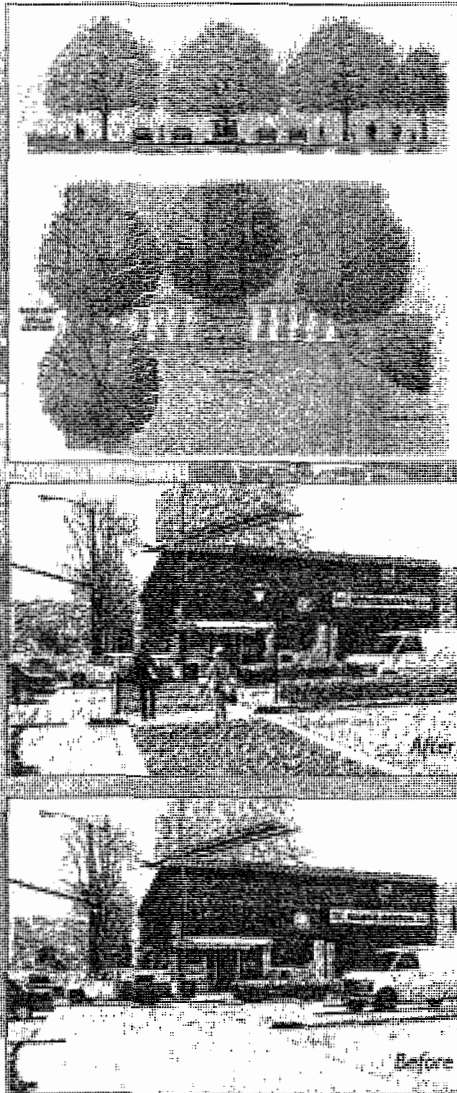


**ATTACHMENT 1, EXHIBIT F**  
**DRAFT**

**SAN PABLO AVENUE PUBLIC IMPROVEMENTS PLAN AMENDMENTS**

The proposed amendment to the San Pablo Avenue Public Improvements Plan would retire the Plan in its entirety. In legislative terms, this would involve deleting all text and images contained in the San Pablo Avenue Public Improvements Plan.

~~City of Berkeley~~  
~~San Pablo Avenue~~  
~~Public Improvements Plan~~



~~Prepared for the Office of Economic Development~~

~~by~~

~~Community Design + Architecture, Inc.~~

~~October 15, 2003~~

~~RESOLUTION NO. 62,741-N.S.~~

~~ADOPTING THE SAN PABLO AVENUE PUBLIC IMPROVEMENTS PLAN~~

~~WHEREAS, the City has prepared the San Pablo Avenue Public Improvements Plan (Exhibit A hereof) with extensive citizen involvement and coordination with Caltrans, AC Transit and City departments; and~~

~~WHEREAS, the Planning Commission has reviewed the Plan and found it consistent with the General Plan; and~~

~~WHEREAS, the Transportation and Public Works Commissions also reviewed the Plan, and issues raised by them were addressed to the fullest extent possible; and~~

~~WHEREAS, Council desires that the Plan will guide the design of all future improvements in the street right-of way on San Pablo Avenue in Berkeley.~~

~~NOW THEREFORE, BE IT RESOLVED that the Council of the City of Berkeley that:~~

- ~~1. The San Pablo Avenue Public Improvements Plan is hereby adopted to guide the design of all future improvements in the street right-of-way along San Pablo Avenue.~~
- ~~2. The City Manager and Public Works Department are directed to follow the recommendations in the Plan to the fullest extent feasible in the design of all future improvements in the San Pablo Avenue street right-of-way.~~
- ~~3. The City Manager is directed to continue to seek opportunities to obtain funding for the improvements recommended in the Plan, with particular emphasis on improving the street right-of-way at designated nodes, as defined in the Zoning Ordinance, and on improving pedestrian access to high-traffic bus stops.~~
- ~~4. A copy of this Plan shall be placed on file in the Office of the City Clerk.~~

~~The foregoing Resolution was adopted by the Berkeley City Council on December 7, 2004 by the following vote:~~

~~Ayes: Councilmembers Anderson, Capitelli, Maio, Moore, Olds, Spring, Worthington, Wozniak and Mayor Bates.~~

~~Noes: None.~~

~~Absent: None.~~

~~Attest: Sara T. Cox  
Sara T. Cox, Acting City Clerk~~

Tom Bates  
Tom Bates, Mayor



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# I. Introduction

## 1.1 Key Characteristics of San Pablo Avenue

San Pablo Avenue in Berkeley is a four-lane urban arterial and designated state highway (SR 123), with a traffic volume of approximately 28,000 ADT (Figure 1). It is an important element of the regional vehicular traffic and transit systems in the East Bay. Several bus lines service this corridor and in the near future AC Transit plans to introduce express bus service and to implement upgrades to bus stops along the street (Figure 2). Three of San Pablo Avenue's cross streets (Ashby Avenue, University Avenue, and Gilman Street) function as major connectors to Interstate I-80, which is located a few blocks west of the corridor. The total right-of-way width of San Pablo Avenue is 100 feet. Three nearly continuous rows of street trees largely define the character of the streetscape (Figure 3). One row each is located in the two 13-foot wide sidewalks, the third in a 13-foot wide center median. The two roadways on either side of the median accommodate one parking lane and two traffic lanes. Left-turn lanes at key intersections reduce the center median to a 4-foot width (also see Figure 4 in Chapter 2). South of University Avenue, blocks are typically 250 to 500 feet long and side streets often terminate in T-intersections on San Pablo Avenue. North of University Avenue, blocks are longer (400 up to 600 feet) and typically form full 'four-leg' intersections.

San Pablo Avenue is an important commercial street within the City of Berkeley. East of San Pablo Avenue residential land uses dominate, with R-1 and R-2 being the most common zoning designations. Land uses in the area west of the street (West Berkeley) include light industrial, mixed-use (light industrial and residential), and residential. All properties fronting onto San Pablo Avenue are zoned West Berkeley Commercial (CW), which allows a height of up three stories and for mixed-use projects, up to four stories in height. The Berkeley Zoning Ordinance delineates five 'designated nodes' (Figure 4 on the following page), each of which have a heavily traveled intersection (Ashby, Dwight, University, Cedar, and Gilman) at their core. The nodes are intended to concentrate business activities and built density, as expressed through the two-story 25-foot minimum height requirement for new buildings in designated nodes.

The regional traffic along the street has attracted many auto-oriented uses, such as car repair shops, fast food restaurants, and used-car dealerships. This led to a development pattern

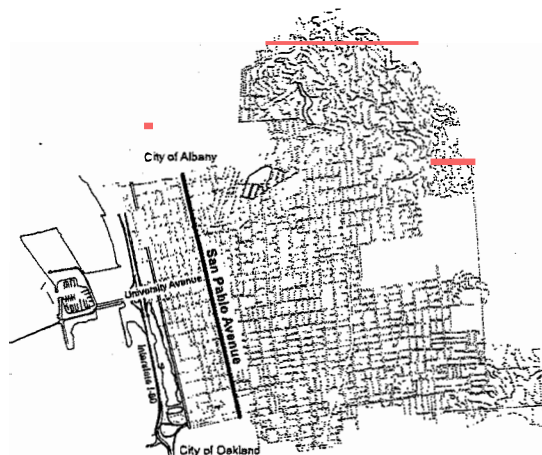


Figure 1: Location of San Pablo Avenue within the City of Berkeley

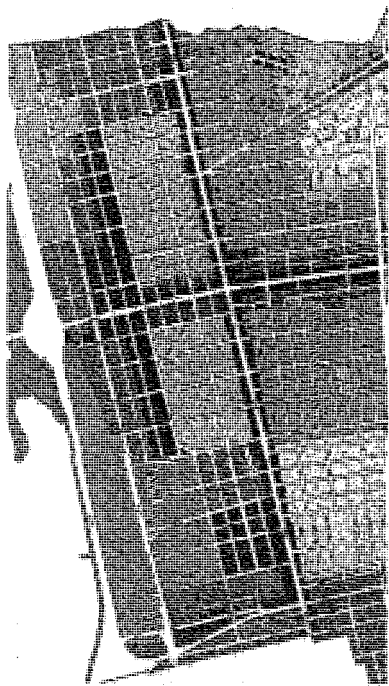


Figure 2: AC Transit Bus Stop at Dwight Street and San Pablo Avenue



Figure 3: Trees define the character of San Pablo Avenue





where the traditional commercial frontage of buildings, built right up to the property line, is interrupted by service yards, parking, and sales areas. Combined with the street's function as regional transportation corridor, this type of development has given rise to a street environment that is largely auto-oriented. However, residents and employees of the surrounding areas have voiced concern about this situation and emphasized that they heavily depend on goods and services offered along San Pablo Avenue. Residents have expressed their desire for public improvements that will help bring new neighborhood-serving businesses to the area and improve the pedestrian-friendliness of the street.

## 1.2 Goals of the San Pablo Avenue Public Improvements Plan

The City of Berkeley is committed to improving the San Pablo Avenue streetscape to balance the needs of pedestrians, bicyclists, local and regional drivers, public transit users, business owners, and local residents. The primary goals of this planning process are to:

- a) Create a framework for streetscape improvements to allow the City to implement improvements over time as funding from city, regional, state, and federal programs becomes available.
- b) Create a safe and attractive streetscape for pedestrians, transit users, residents, and employees, which contributes to the City's revitalization efforts in the area.
- c) Increase pedestrian and bicycle safety.
- d) Maintain and enhance the landscape character of San Pablo within Berkeley.
- e) Distinguish Berkeley's segment of San Pablo Avenue from those in the neighboring communities of Oakland and Albany.
- f) Build on the momentum created by improvements to bus stops and transit service planned by AC Transit and the Alameda County Congestion Management Agency (ACCOMA). Coordinate City and AC Transit improvements to achieve the best mutually enhancing improvements for the pedestrian environment along San Pablo Avenue.



Figure 4: Zoning along San Pablo Avenue (above) and locations of Designated Nodes (below)

- g) Enhance the connection between neighborhoods and employment centers adjacent to the corridor.
- h) Encourage new development that takes advantage of the improved transit services.

### 1.3 Public Participations Process

In November of 1997, the City of Berkeley started the *San Pablo Avenue Revitalization Program* with a well-attended community workshop. At this workshop, community members voiced a number of concerns about conditions on the Avenue and asked that the City develop a revitalization strategy designed to make San Pablo Avenue more pedestrian and transit friendly.

The two public workshops held for this project should be viewed as a continuation of the community participation effort that was started with the process around the San Pablo Avenue Revitalization Program.

The first workshop took place on June 14, 2001 and included the presentation of existing conditions and an assessment of streetscape related issues. Prior to the workshop, interested citizens were given the opportunity to participate in a Bus Tour of the San Pablo Avenue Corridor in Berkeley. Co-sponsored by AC Transit and the City of Berkeley, the event allowed participants to voice their specific views and concerns about the Corridor. At each stop along the Corridor, participants could make comments on location. During the workshop, participants were encouraged to share their thoughts, concerns, and suggestions about San Pablo Avenue and its streetscape. Public input was received through comments during group discussions and on post-it notes that participants attached to maps of the corridor. These comments were shared and discussed with the overall group of participants during the final discussion. After the workshop the comments were summarized and used to inform the development of streetscape design concepts for the corridor.

The second workshop was conducted on November 7, 2001, where the public was presented with schematic designs for different types of pedestrian and bicycle crossings, pedestrian scaled lighting, tree plantings in median and sidewalks, landscaped bulb-outs on cross streets, entry/gateway features, and examples of streetscape furnishings. As during the first workshop, public input was given during group discussions and in written format on post-it notes. Some of the received

comments have been included with this document. They can be found in the shaded boxes interspersed among the figures throughout Chapters 2 and 3.

In addition, the City has recently started an effort to create an International Marketplace in the area around the San Pablo/ University Avenue intersection, where a number of imported food establishments are located. A local merchants group has been formed to plan and guide this effort.

## **1.4 Coordination with City Staff and Other Agencies**

### *Coordination with City Staff*

Throughout the project the consultants and the City's project manager involved city staff from other departments, such as Planning (Current, Long Range, Transportation Planning), Public Works (Traffic Engineering, ADA Access, Forestry), to ensure that input on issues such as transportation, bicycle planning, accessibility standards, lighting, urban forestry, and landscape maintenance informed the public improvements proposed in this document.

### *Coordination with AC Transit Improvements*

In 1999, the Alameda County Congestion Management Agency commissioned the "Transit Operations and Improvement Study" to develop a plan for improved transit service and bus stop facilities along San Pablo Avenue between downtown Oakland and the City of San Pablo. In 2001, the agency published the "San Pablo Transit Corridor Design Standards", which contained specifications for bus stop furnishings, four prototypical and several custom bus stop layouts. The report contains a matrix that classifies all bus stops and assigns typical or custom furnishing layouts.

For the purpose of future improvements of San Pablo Avenue within the City of Berkeley, it is important to coordinate AC Transit's improvements with those envisioned by the City of Berkeley. Chapter 6.4 'Coordination with AC Transit,' describes how this can be achieved with level of detail presently known about the bus stop improvements.

### *Coordination with Caltrans*

Due to San Pablo Avenue's designation as a State Highway (SR 123), continued coordination with Caltrans plays an important role for this project. Although the City has an agreement with Caltrans that relegates a number of maintenance responsibili-

ties to the City, the City may not make changes to streetscape elements, such as curb alignments, pedestrian crossings, traffic control devices, or street lighting, without prior approval by Caltrans. Therefore, the consultants and city staff consulted with Caltrans representatives to discuss design and technical aspects of the proposed improvements, particularly those related to crosswalk designs, the introduction of new crosswalk locations and traffic signals, street lighting, and curb radii (see also 'Coordination with Caltrans', Chapter 6.3).

#### *Coordination with SMART CORRIDOR Project*

The San Pablo Avenue Smart Corridor project is an ongoing planning effort by ACCMA, Caltrans, and a group of cities along the corridor. The project intends to improve traffic conditions throughout the entire length of the corridor by employing various components and concepts often described collectively as 'intelligent transportation system' (ITS). The ITS monitors traffic flows and conditions, and enables localities to better manage traffic. It also provides signal overrides for emergency vehicles and buses, and monitors the progress of individual buses. As part of this system, the ACCMA proposed installation of so-called 'trailblazer' signs (42" x 60") and 'dynamic message signs' (4' x 8') in several locations along Berkeley's segment of the San Pablo corridor. Both types of signs are designed to disseminate real-time information to drivers in the case of accidents, congestion or other problems within the corridor, and in relation to the parallel I-80/880 corridor. CD+A provided the City with comments on the impacts that such signs would have on the existing streetscape and the planned improvements. Based on the anticipated visual impacts and the fact that Berkeley citizens and their representatives preferred enhancement of public transit facilities over the installation of the signs, the City declined participation in this portion of the Smart Corridor program.

## 2. ~~Summary of Issues~~ ~~Assessment~~

~~In general, the existing streetscape along San Pablo Avenue provides a good foundation for further improvements, as it already includes three rows of mature trees, a tree-planted median, 13-foot wide sidewalks, and many commercial businesses (Figure 2). This is particularly evident when these conditions are compared to those on many other urban arterials in the Bay Area, where sidewalks often are as narrow as 8 feet, lack substantial tree coverage and have if any sparsely planted medians. However, key obstacles to a more pedestrian- and transit-friendly environment remain, namely the volume and speed of traffic on the street, the strong orientation of land uses toward motor vehicles, and the traditionally auto-centered operation of the street as a State Highway. Streetscape elements such as crossing locations, building setbacks, and signage are mostly optimized for motor vehicles. Subsequently, the street has increasingly become a barrier between West Berkeley and the neighborhoods to the east. In reverse, improvements for non-motorized traffic participants like pedestrians, bicyclists and transit users have not been a priority in the planning and development process of the street.~~

~~The following summary of the issues assessment identifies shortcomings in the San Pablo streetscape relative to the project goals of enhancing the pedestrian, transit and bicycle environment.~~

### 2.1 ~~Crosswalks and Sidewalks~~

#### *Crosswalks with Brick Paving*

~~Ashby Avenue, Dwight Way, University Avenue, Cedar Street and Gilman Street are key intersections at the center of designated nodes. Although no pedestrian counts exist to allow a direct comparison, it is safe to state that at the above intersections, pedestrian crossings occur more frequently than at most other intersections along the corridor. With exception of Ashby Avenue, the crossings at these intersections feature special paving made of clay brick pavers. Today, many of the brick pavers are damaged and exhibit ‘cupping’ at the center of their surface, which has been scoured by vehicle tires. As a result, ridges along the joint lines where the clay has worn away more slowly act as potential tripping hazards, while the center ‘dimples’ fill with water after rainfall. In addition to this unsafe~~

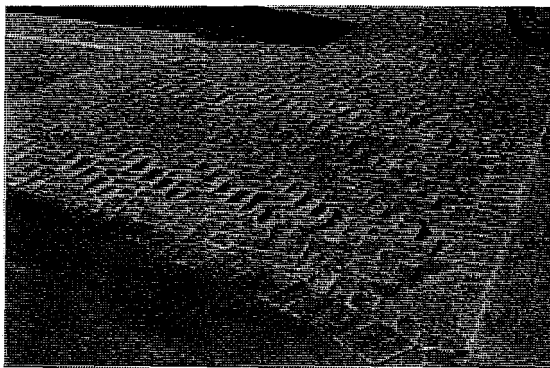


Figure 1: Damaged brick paving in the crosswalk

condition, many of the original bricks have been removed for underground maintenance work or where bricks had deteriorated. In either case, holes remaining after the removal of bricks have been patched up with asphalt, a practice that has resulted in unsightly conditions at many of the crosswalks (Figure 1).

#### *All Remaining Crosswalks*

There are 36 intersections along San Pablo Avenue within Berkeley city limits, 12 of which are signalized. South of University Avenue many of the streets crossing San Pablo terminate at San Pablo, creating T-intersections. The latter often have only one striped crosswalk across San Pablo Avenue. This crosswalk is typically located so as to not cross paths with right turn movements of vehicles turning onto San Pablo. At several intersections no crosswalks are provided. These conditions are a result of traffic engineering standards intended to reduce the perceived conflict points between vehicles and pedestrians. The assumption is that pedestrians will not feel safe, and therefore will not cross, at unmarked crossings even though they can legally cross on any 'leg' of an intersection (unless signage prohibits this). However, research has found that pedestrians and bicyclists are very sensitive to any distance added to the path of travel because this will result in added travel time. Therefore, unmarked crossings will still frequently be used, and even jaywalking may occur, where pedestrians feel that the safety of marked crosswalks can be discounted for the benefit of reduced travel time.

Crosswalks on San Pablo typically have a crossing distance of 74 feet between sidewalk curbs (also see Figure 2). Moreover, the area at the center median where pedestrians wait to cross the second half of the road, is not separated by any vertical demarcation, such as curbs or bollards. This area can be 13 feet wide or 4 feet wide, depending on whether there are turn lanes present. These conditions create potential safety issues between waiting pedestrians and bicyclists, and vehicles making turning movements such as U-turns, turns onto San Pablo from side streets, and other turning maneuvers. These real or perceived conflicts can reduce the number of pedestrians (especially for children and the elderly) or bicyclists crossing in such locations even when marked crosswalks are provided. The limited ease of crossing may also affect small businesses that depend on a customer base from either side of the street.



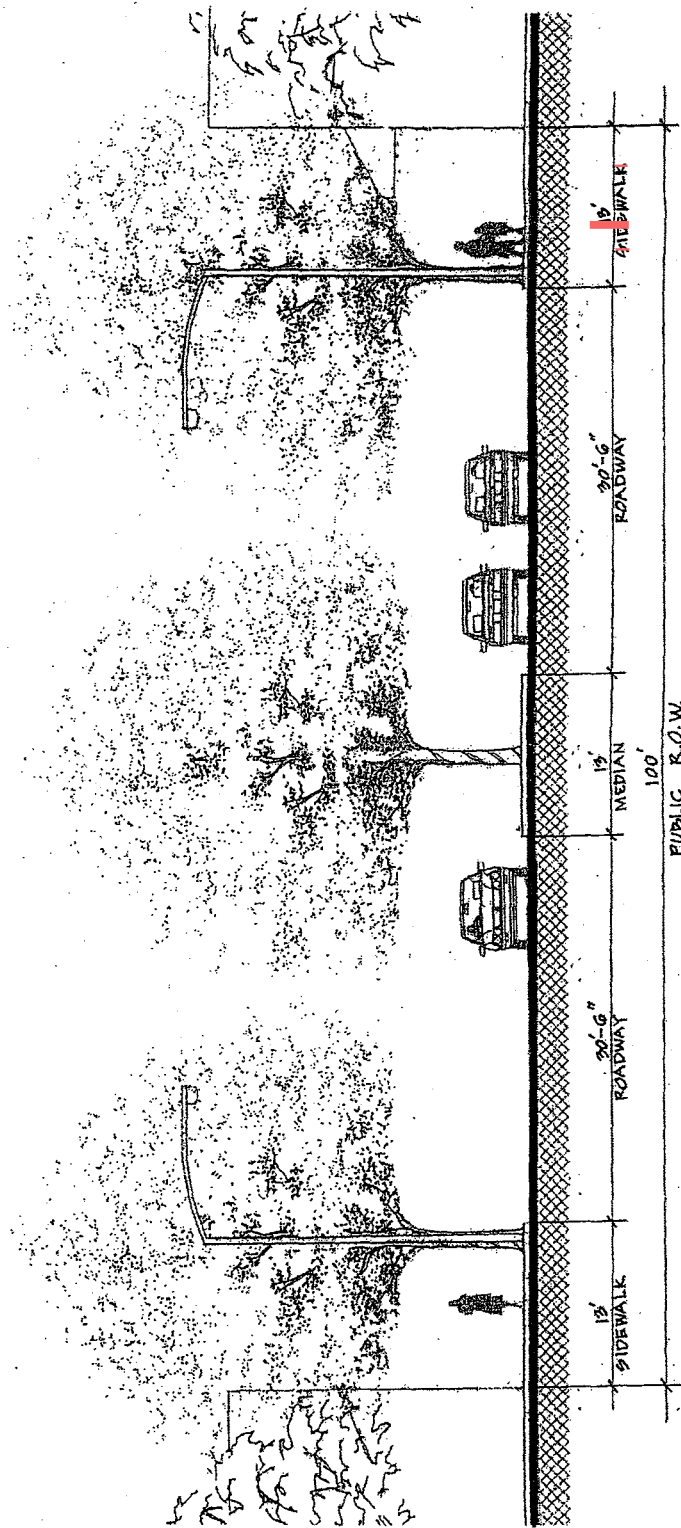


Figure 1: San Pablo Avenue typical existing cross-section

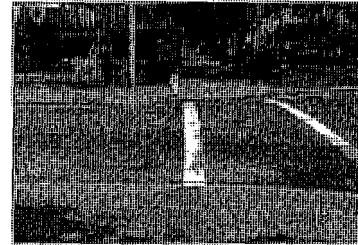


Figure 3: These non-compliant curb ramps at Gilman St. do not align with the crosswalk



Figure 4: Planters and poorly maintained plantings are encroaching on the public right-of-way

### *Curb Ramps*

Nearly all existing curb ramps in the corridor do not comply with current accessibility standards and are in need of replacement. This determination was made in conjunction with the City's Disability Compliance Coordinator. The only intersections with acceptable curb ramps are at Ashby Avenue, Burnett Street (south side), Dwight Way, Bancroft Way (east side), Delaware Street, University Avenue, and Gilman Street (Figure 3).

### *Sidewalks*

Sidewalk paving along San Pablo Avenue is generally in acceptable condition. Repairs may be necessary in locations where tree roots have caused the heaving of segments of the concrete pavement. However, in spite of the maturity of the street trees, this damage is not a pervasive problem.

In several locations (see Figure 5), the typical paved sidewalk width of 13 feet (within the public right-of-way) is reduced, in some cases, to less than 48 inches, which is the minimum required by current standards for accessible routes. These encroachments mostly consist of landscaping that has been extended into the public right-of-way in front of businesses and residences (Figure 4).

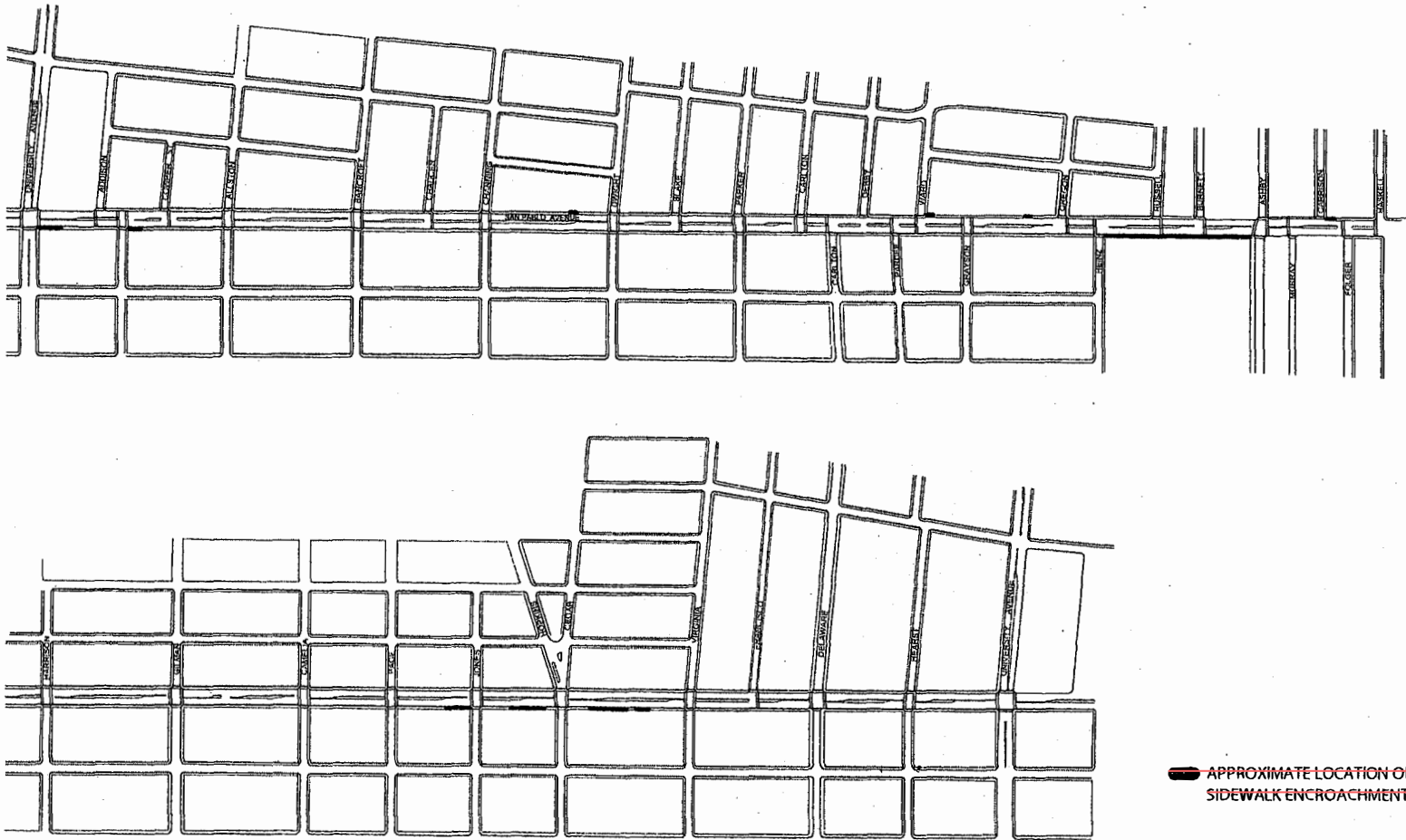


Figure 5: Approximate location of sidewalk encroachment



Figure 6: Light from this 'cobra-head' fixture is partially blocked by this street tree



Figure 7: Empty tree wells along San Pablo Ave

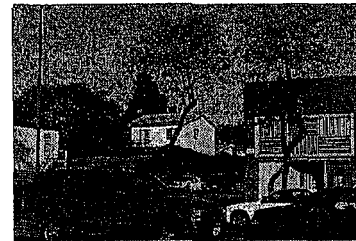


Figure 8: Example of stunted Bradford Pear Trees



## 2.2 Lighting

San Pablo Avenue is lined by tan-colored 'cobra-head' roadway light fixtures that are spaced at distances of 90 and 110 feet. The light source of these fixtures is located about 30 feet above the street and designed to provide light primarily to the roadway surface. Some of the light from the existing fixtures is blocked from reaching the sidewalk area by the large crowns of the street trees (Figure 6). This condition has a negative impact on the sense of safety for pedestrians. The fact that light fixtures, which are primarily designed for roadway lighting, are the sole light source, contributes to the sense that San Pablo Avenue's streetscape is geared more toward vehicles than toward pedestrians. The lack of pedestrian-scaled lighting also impacts the street's integration into the adjacent neighborhoods.

## 2.3 Landscaping

### Trees in Sidewalks

The vast majority of trees planted along the sidewalk are London Plane Trees (*Platanus x acerifolia* 'Varwood'). The trees, which were planted some time in the early 1970s, have since matured with broad crowns and are generally in good health. The typical spacing is 50 feet on-center (o.c.), but reach up to 70 feet o.c. where driveways interfere with the typical planting rhythm.

In numerous locations street trees have been removed, due to poor condition or other reasons, and not been replaced. Many of the unplanted tree wells are currently filled with asphalt to reduce the potential tripping hazard of the empty cutout in the concrete pavement (Figure 7).

Near many of the intersections along the corridor, small-crowned Bradford Pear trees have been planted in sidewalks in the past, perhaps to highlight intersection locations or allay merchants' concerns about reduced visibility of storefronts. Today, however, the majority of Pear trees are in poor or very poor condition and are often stunted with small or distorted crowns that block views to shop windows (Figure 8). Furthermore, the location of these smaller-crowned trees near major intersections diminishes the visual continuity of the rows of London Plane trees.



### *Trees in Medians*

The row of trees in the center median is a key component of San Pablo Avenue's identity within the City of Berkeley. Over large segments of the corridor, the crowns of the trees planted in medians touch those of sidewalk trees. This pleasant effect can best be observed south of the Dwight Way intersection, where tree canopies create a translucent, 'green' enclosure of the space between the façades on either side of the street. Most rows of median trees have been planted with a spacing ranging from 15 to 20 feet o.c. Also, trees have been planted as close as 16 feet from the end of a median (full width medians), although 40 to 50 feet is more common. Using this average tree spacing and the present average distances of trees from intersections (end of median) as a gauge, a field review found that numerous locations for infill tree planting exist throughout the corridor (Figure 9). In addition, it was found that several medians have no trees (Figure 10).

As an alternative to the London Plane Tree, a number of medians are planted with American Sweet Gums (*Liquidambar styraciflua*) to provide additional visual interest with fall color. However, the mature crowns of the American Sweet Gum do not complement the broad crowns of the prevailing London Plane Trees. The Sweet Gum's crown is too narrow for the canopies of sidewalk trees to touch those of median trees. This shortcoming disrupts the spatial and visual continuity created by the London Plane trees (Figure 11, also see Figure 3 in Chapter 1 for comparison).

### *Opportunity Sites for New Trees*

A field review of the tree rows in sidewalk locations showed that opportunity sites exist for the installation of new trees. These often coincide with abandoned driveways, where a tree may not have been planted to allow for access to the adjacent property.



Figure 9: Trees trunks shown in White indicate infill opportunities

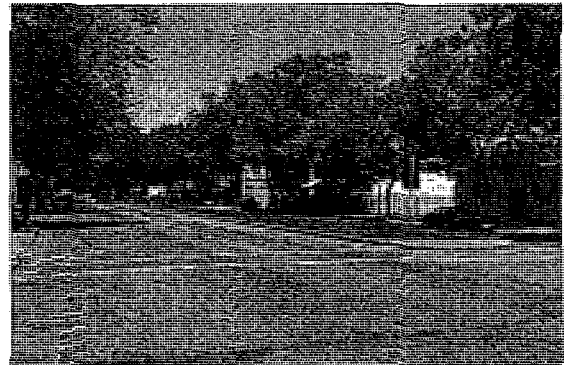


Figure 10: A treeless median at San Pablo Ave and Channing



Figure 11: Median Sweet Gums with a narrow canopy



Figure 12: Example of touching canopies of existing London Plane trees





Figure 13: Median with an Indian Hawthorn Hedge

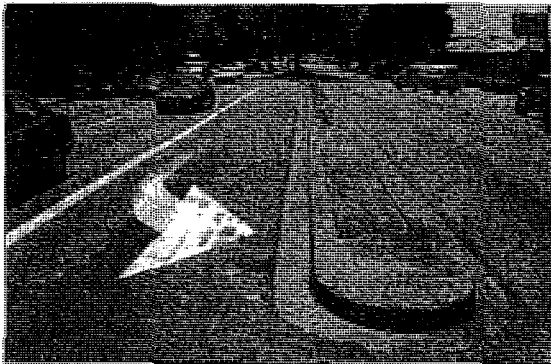


Figure 14: Example of an unplanted median along San Pablo

### *Landscaping in Narrow Medians*

In the past, the narrow medians next to left turn lanes on San Pablo Avenue have been planted with hedges of Indian Hawthorn (*Raphiolepis indica*). Today, the condition of these hedges varies significantly between different locations (Figure 15). Some medians have an uninterrupted, 2 to 2.5 foot high hedge of Indian Hawthorn along their entire length, while in others individual plants or hedge segments are missing (Figure 13). Several medians are entirely denuded, exposing dirt in the area between the curbs. Many of the observed planting gaps are related to pedestrian foot traffic and frequent jay walking in these locations. The failing of plant material in these medians diminishes their spatial definition and function as a device for guiding movements of vehicles, pedestrians, and bicycles. It also represents a lost opportunity for streetscape beautification (Figure 14).



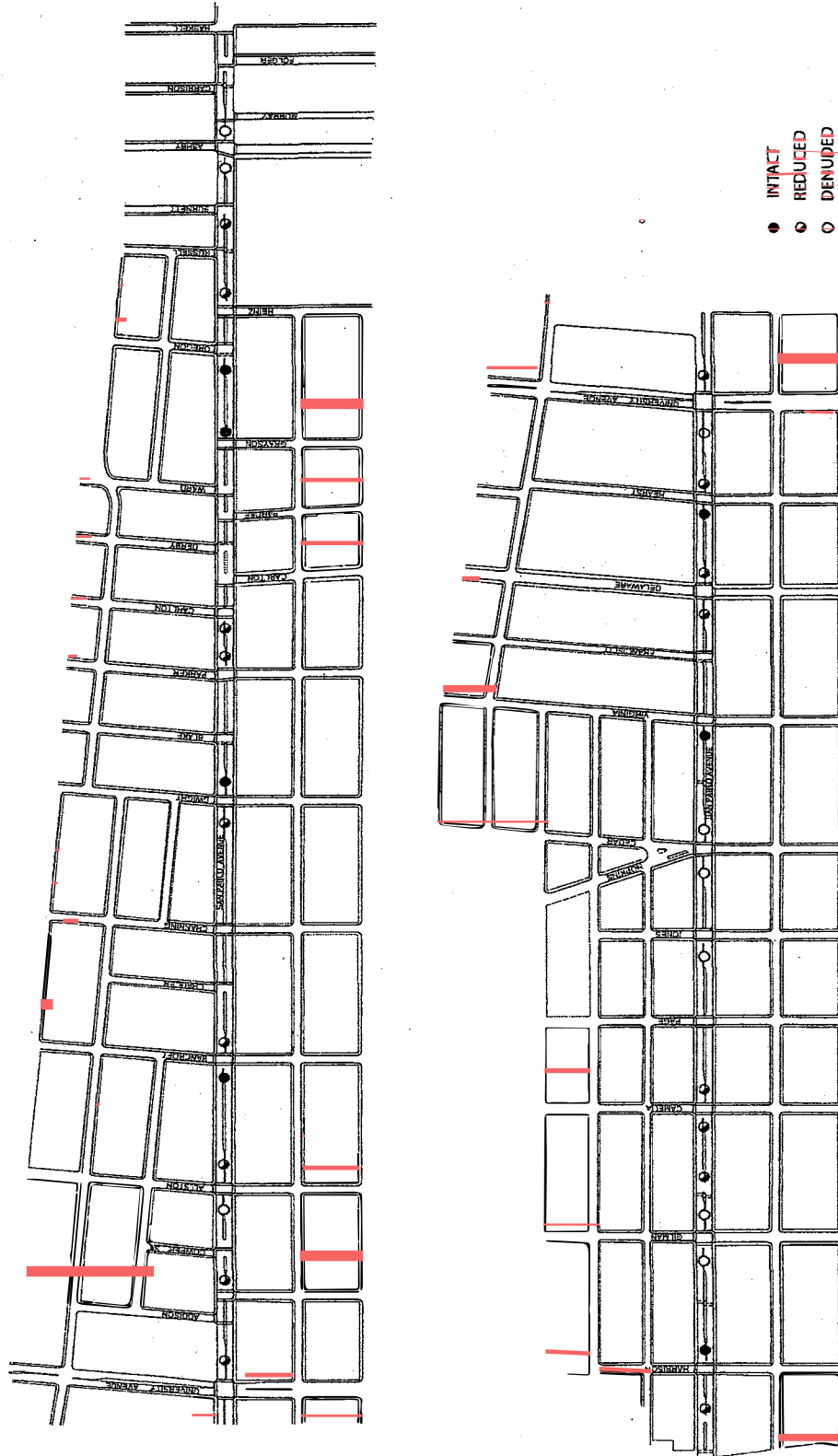


Figure 1.3: Plant Conditions ■ Narrow Medians



Figure 1.6: Side street with no street trees in San Pablo has a more "barren" look

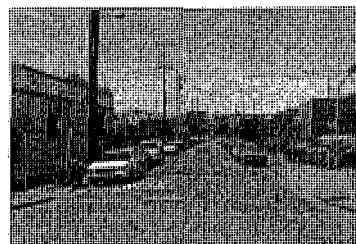


Figure 1.7: A side street with street trees has a more "barren" look

#### *Street Trees On Side Streets*

Side streets of San Pablo Avenue provide an important connection between adjacent residential neighborhoods and major employment centers. A field review of street trees along the blocks closest to San Pablo showed that visual continuity and a pedestrian-friendly appearance were often impeded by two conditions: Either rows of street trees did not fully extend to San Pablo Avenue or tree plantings were intermittent and provided little visual definition and continuity (Figures 16 & 17 and Figure 18).

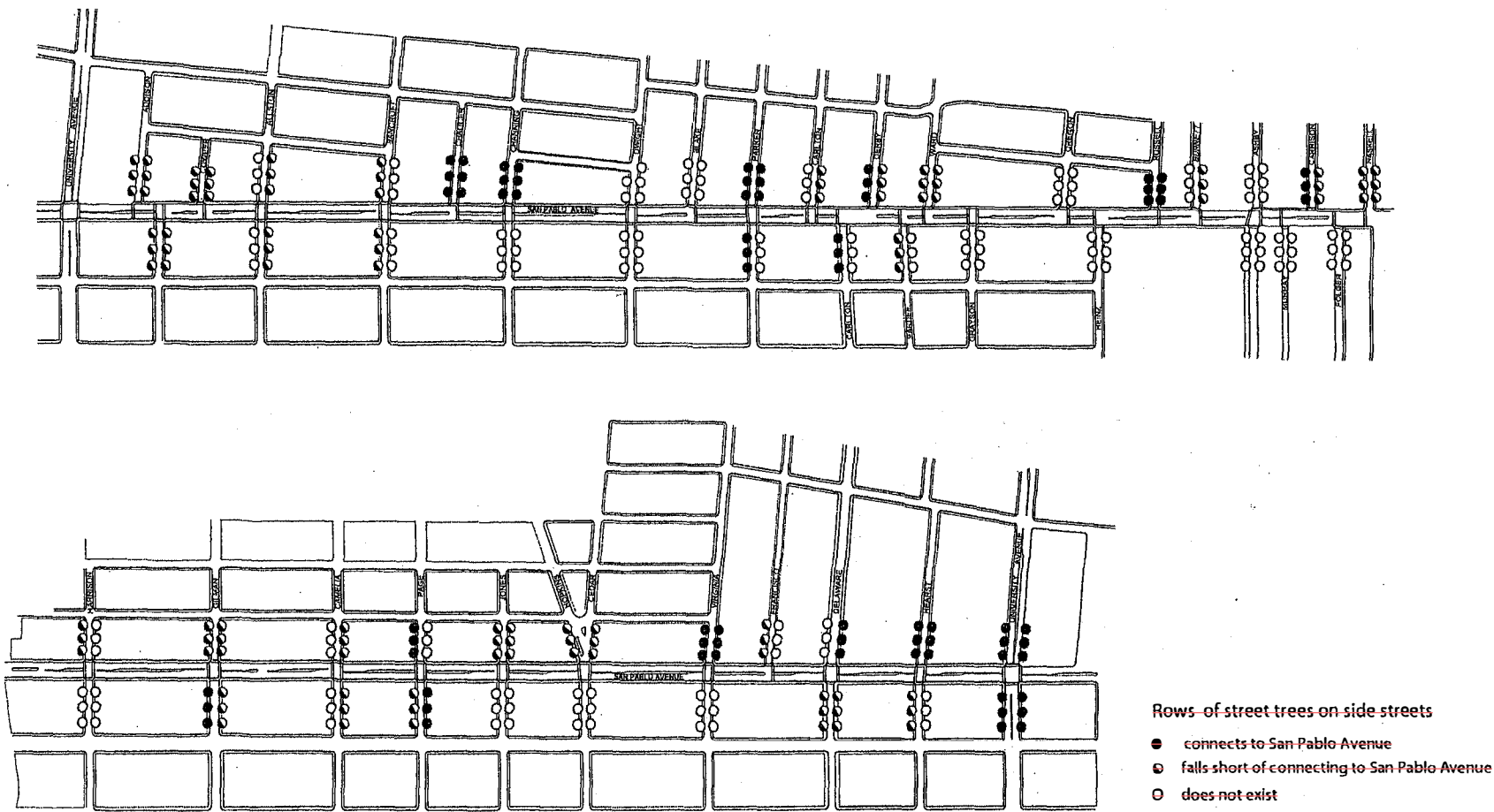


Figure 18: Tree rows on side streets



Figure 19: Single-loop bike rack as occasionally found on San Pablo Avenue

*Have bicycle crossings like the ones at Channing/MLK*



Figure 20: An unimproved bus stop along San Pablo Avenue

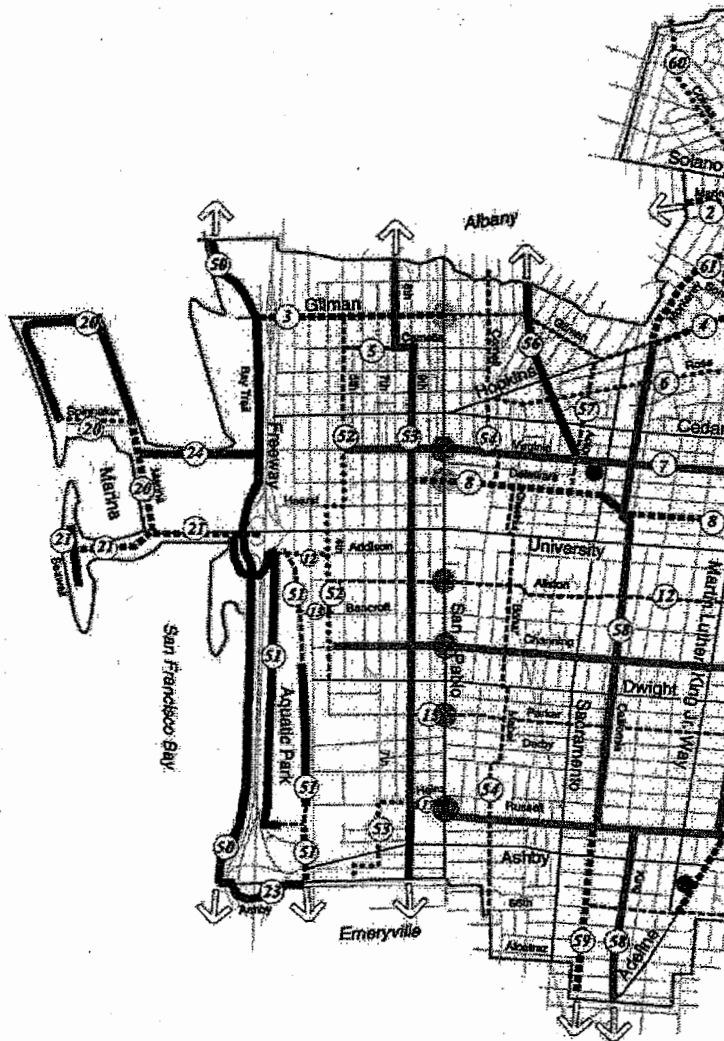
## 2.4 Crossings of Bicycle Routes and Bicycle Amenities

Routes designated as 'bicycle boulevards' in Berkeley's Bicycle Plan (Figure 21) cross San Pablo Avenue at un-signalized intersections (Virginia, Channing, and Russell/Heinz Streets). The only signalized crossings of any designated bicycle routes are at Gilman (Bicycle Lane/Class 2.5) and Delaware (Bicycle Lane). It was the joint judgment of the consultant, City staff, and the bicycling community, that San Pablo Avenue presents a difficult challenge for crossing bicyclists and that solutions for this situation should be included in this improvements plan. Bicycle amenities found along San Pablo Avenue consist of (mostly single-loop) bicycle racks, which have been installed by the City, and in a few cases, by adjacent businesses (Figure 19).

## 2.5 Street Furniture

Currently, the pedestrian streetscape along San Pablo Avenue does not offer any public amenities or street furnishings, such as public benches or trash receptacles. Any existing trash receptacles and benches are associated with AC Transit bus stops. The majority of these benches, however, have a worn appearance and many are in need of repair (Figure 20).

News racks, deployed by newspaper agencies or advertisement companies, have been placed at many of the intersections throughout the corridor. Although general guidelines for the placement of news racks exist, it was observed that they often interfere with the flow of pedestrian paths at crosswalks and sometimes pose obstacles to proper access to curb ramps.



# Berkeley Bicycle Plan

Figure 2  
Recommended  
Bikeway Network

## Legend

- Paths (Class 1)**  
(multi-use trail; non-motorized route)
- Boulevards (bicycle priority street)**  
*NOTE: Exact alignment of Bicycle Boulevards to be determined during the Bicycle Boulevard planning process.*
- Lanes (Class 2)**  
(dedicated lanes for bicycles only)
- Class 2.5**  
(upgraded bike route with targeted improvements)
- Routes (Class 3)**  
(signed route - no special markings)
- Connections to Existing / Proposed Routes in other Cities**
- BART Station**
- Bikeway Network Number**

## Sources:

- *Proposed and Existing Bikeway Inventory, April 14, 1998*
- Wilbur Smith Associates
- City of Berkeley Staff



**Draft for Inclusion in the General Plan**  
12/28/98

**WILL RUP SMITH ASSOCIATES**  
ENGINEERS + PLANNERS  
in association with:  
**DM Associates, Landscape Architects**  
**DMU Transportation Consultants**

Figure 21: The Berkeley Bicycle Plan



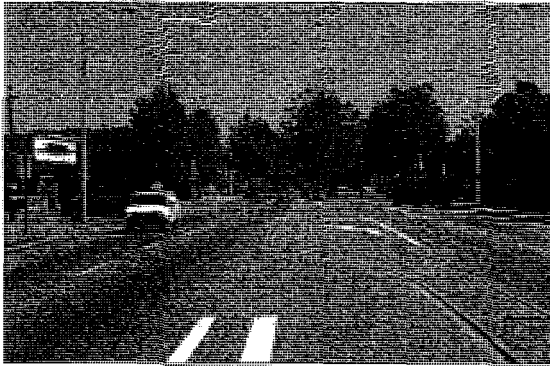


Figure 22: The border between Berkeley and Oakland (foreground)

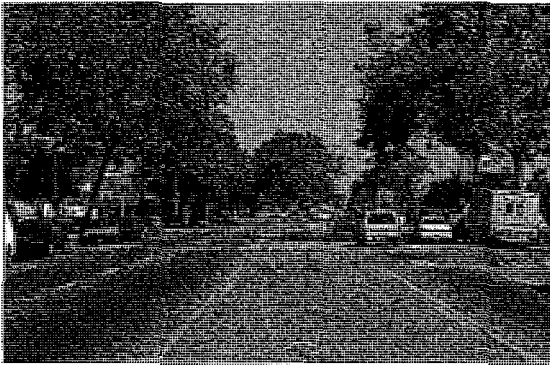


Figure 23: The border between Berkeley and Albany (foreground)

## 2.6 San Pablo at Berkeley's Northern and Southern City Border

Currently, entrances to Berkeley can be easily recognized by virtue of the contrasting streetscape conditions that exist on San Pablo in the neighboring communities. The streetscape in both Oakland and Albany lacks medians and significant street trees (see Figures 22 & 23). However, a review of planned or intended streetscape improvements found that the City of Oakland is constructing new raised and tree-lined medians, extending as far as 67<sup>th</sup> Street just south of the Berkeley border. The plans do not include special entry features at Oakland's city limit. The City of Albany's 'San Pablo Avenue Streetscape Master Plan' calls for the future planting of street trees in sidewalks right up to the Berkeley border. This plan also proposes to establish a gateway marked by special signage bearing the name of the city and to emphasize the presence of Codornices Creek (which coincides with the location of the city limit line) underneath San Pablo Avenue. This is to be achieved through the use of a special paving pattern suggestive of flowing water that would be integral to the roadway surface of San Pablo Avenue.

It can be concluded that, in the future, the visual distinction between Oakland and Berkeley will be diminished after the new median trees mature. The improvements intended by the City of Albany for its southern border, present an opportunity for a joint project between Berkeley and Albany to emphasize the ecological importance of urban creeks by highlighting the presence of Codornices Creek at the mutual city limit line.



### 3. Description of Public Improvements

#### 3.1 Overall Approach

The following concepts and prototypical schematic designs for public improvements within the San Pablo Avenue streetscape were developed based on the City's goals, the findings of the issues assessment, comments received at the public workshops, and the input from City staff.

As outlined in Chapter 2.1, the overarching goal for San Pablo Avenue is to improve the street's quality as a multi-modal transportation corridor and to contribute to the revitalization of the commercial environment and its relationship to neighboring communities. The overall approach to achieving the goals includes the following action items related to capital improvements:

- Significantly improve pedestrian safety and neighborhood connectivity by upgrading existing crosswalks, introducing new crosswalks in several locations, and installing of pedestrian-scaled light fixtures.
- Improve the accessibility of uses and transit by upgrading curb ramps at crosswalks to current ADA standards throughout the corridor.
- Distinguish key intersections within designated nodes as focal points of pedestrian activity through the use of special features or materials.
- Improve safety for bicyclists by upgrading the San Pablo crossings of key bicycle routes.
- Maintain and enhance the rows of trees in sidewalks and medians, which define the street's overall character and image within Berkeley.
- Enhance the visual quality of sidewalk connections from adjacent residential areas and employment centers to San Pablo Avenue with additional landscaping and curb bulb outs in appropriate locations.
- Explore the idea of introducing distinct entry/gateway features at the northern and southern city borders.



Figure 1: Crosswalk across San Pablo Avenue: Existing Conditions

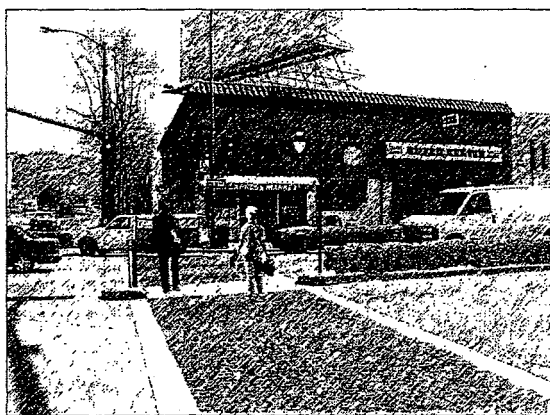


Figure 2: The same crosswalk with pedestrian safe haven, concrete unit pavers, pedestrian lighting and a landscaped median.

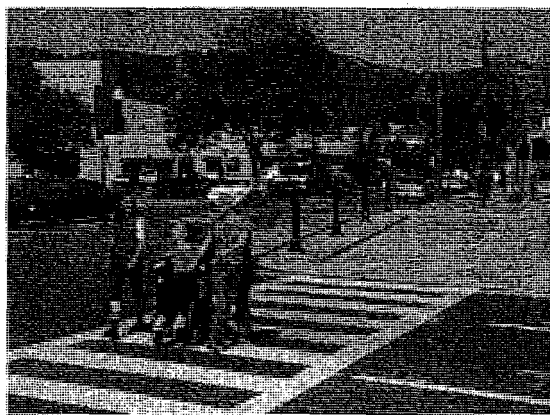


Figure 3: Pedestrian refuges similar to the proposed have already been installed on Adeline Street in Berkeley

## 3.2 Crosswalk Improvements

### General

The ease and safety of pedestrian and bicyclist crossing improvements should be improved by implementing the following measures:

- Improve existing signalized and un-signalized pedestrian crossings through the installation of curb ramps compliant with all applicable accessibility standards, installation of pedestrian refuges as integral part of medians and crosswalks, and the introduction of pedestrian scale lighting.
- The consideration of new un-signalized crosswalks in locations listed in Table 1 of the Appendix, including a new crosswalk through the continuous median at the intersection of San Pablo and Garrison Street. These new crosswalks will increase the route choices for pedestrians and bicyclists and by virtue of their increased number and visibility, act as 'reminders' to drivers of the presence of these other traffic participants throughout the corridor. It is the City's intention to pursue the new crosswalks with Caltrans according to the prioritization indicated in Table 1 of the Appendix. This approach will help to focus the City's efforts on providing the most critical crosswalk improvements in the short-term.
- The installation of new traffic lights at currently un-signalized intersections where designated *Bicycle Boulevards* cross San Pablo Avenue. As with the previous item, this effort will involve the requesting of warrants for such traffic lights from Caltrans.

Improvements at new and existing crossings should be built to the standards described in this document. Figure 1 and Table 1 in the Appendix provide an overview of all proposed crosswalk improvements.

Figures 4 through 9, on the following pages, illustrate typical improvements proposed for signalized and un-signalized intersections. The geometry and arrangement of individual streetscape elements vary depending on whether the intersection is a T- or four-way intersection and includes a pair of curb bulb-outs (Figures 4 and 5) or just a single curb bulb-out (Figure 6) or no bulb-outs (Figure 7). All proposed crossings share the following characteristics:

- ~~new curb ramps for handicapped accessibility (directional curb ramps wherever feasible);~~
- ~~pedestrian refuges at narrow and wide center medians;~~
- ~~painted crosswalk markings of 2 foot wide white bars between the standard 12 inch lines that demarcate the crosswalk (at un-signalized intersections, except special paving crosswalks through continuous medians);~~
- ~~standard crosswalk markings of 12 inch wide lines demarcating the crosswalk edges (at signalized intersections (except intersections with special paving crosswalks), and crosswalks on side streets;~~
- ~~pedestrian scale, in pavement light fixtures that are integral part of the crosswalk and median refuge design.~~

#### ~~*Special Paving Crosswalks at the Ashby, Dwight, University, Cedar, and Gilman Intersections*~~

~~The existing clay brick crosswalks at Dwight Way, University Avenue (Figure 8), Cedar Street, and Gilman Street should be replaced with crosswalks of colored concrete pavers designed to withstand the wear and tear of turning passenger vehicles, buses, and trucks, yet provide the desired visual emphasis for these intersections at the core of designated nodes. To achieve consistency between the designated nodes, the crosswalks at Ashby Avenue (Figure 6), currently without special paving crosswalks, should receive the same treatment as the intersections listed above.~~

#### ~~*Curb Ramps*~~

~~With the exception of Ashby Avenue, Burnett Street (south side), Dwight Way, Bancroft Way (east side), Delaware Street, University Avenue, and Gilman Street, curb ramps at all San Pablo Avenue intersections require curb ramp replacement in order to gain compliance with current federal and state accessibility standards. The City will coordinate with Caltrans the possibility of incorporating the installation of required curb ramps into the planned repaving of the San Pablo roadway surface intended by Caltrans for the year 2004.~~

~~The installation and configuration of new curb ramps is closely related to the potential installation of curb extensions or bulb outs at the corners of San Pablo side streets as suggested in this~~

~~San Pablo Avenue Public Improvements Plan ■ City of Berkeley, California~~

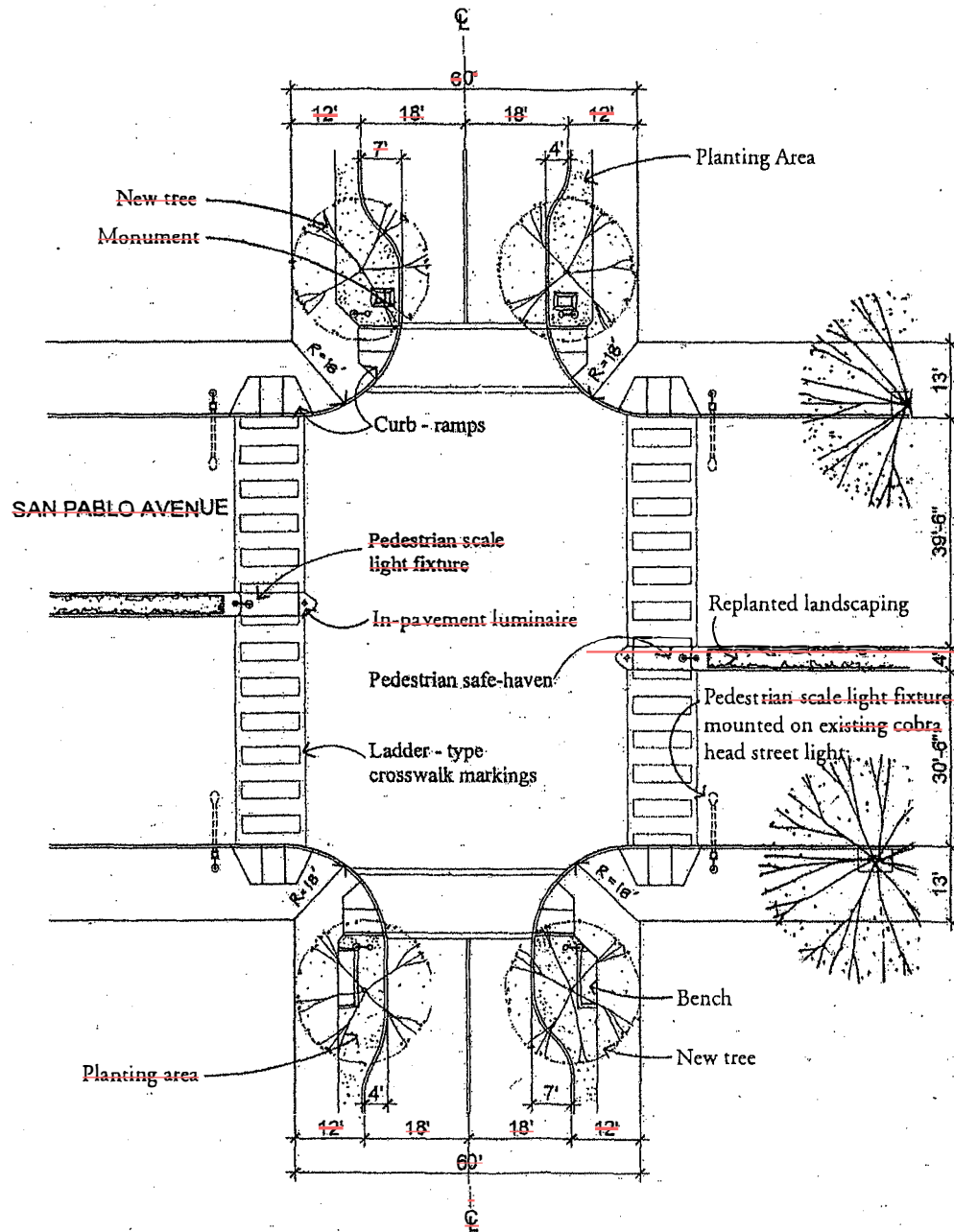


Figure 4: Typical set of improvements proposed for unsignalized four-way intersections (intersecting R.O.W is 60 feet wide)

- at signalized locations crosswalks are striped with two parallel lines
- alternative landscape treatments are shown for bulb-outs on intersecting street



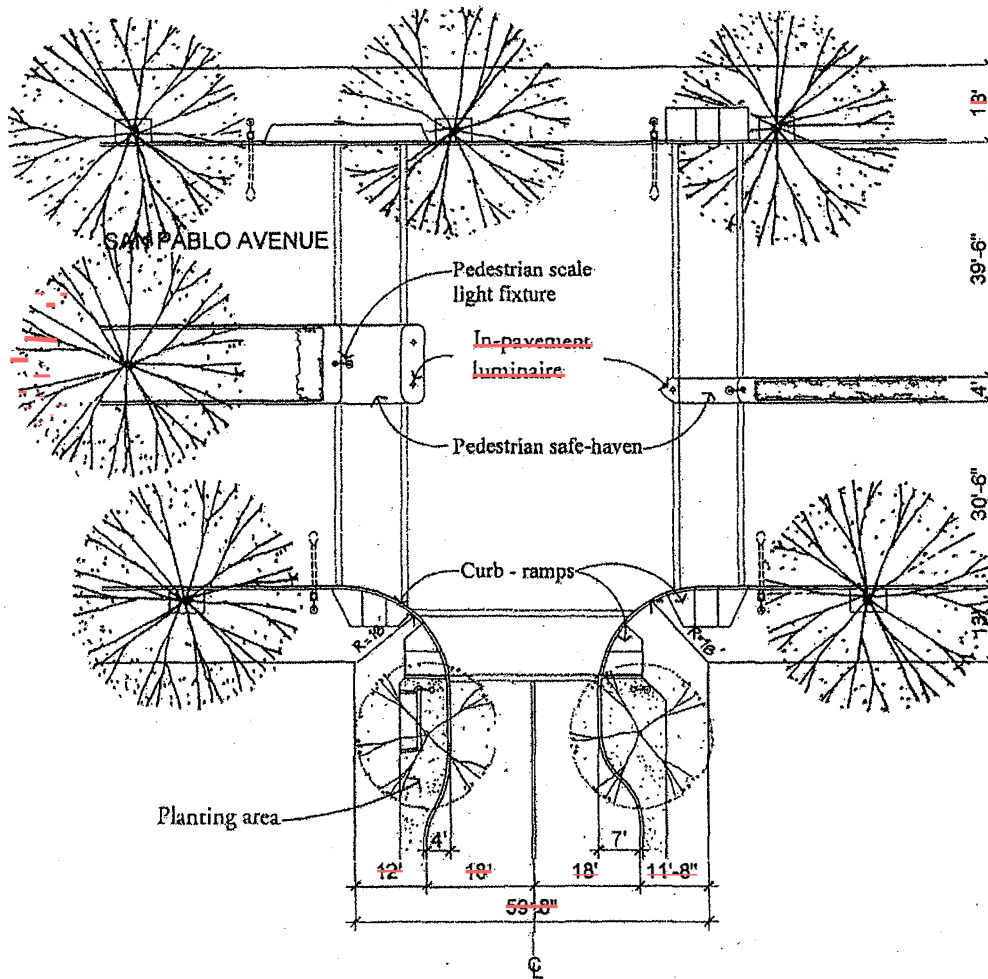
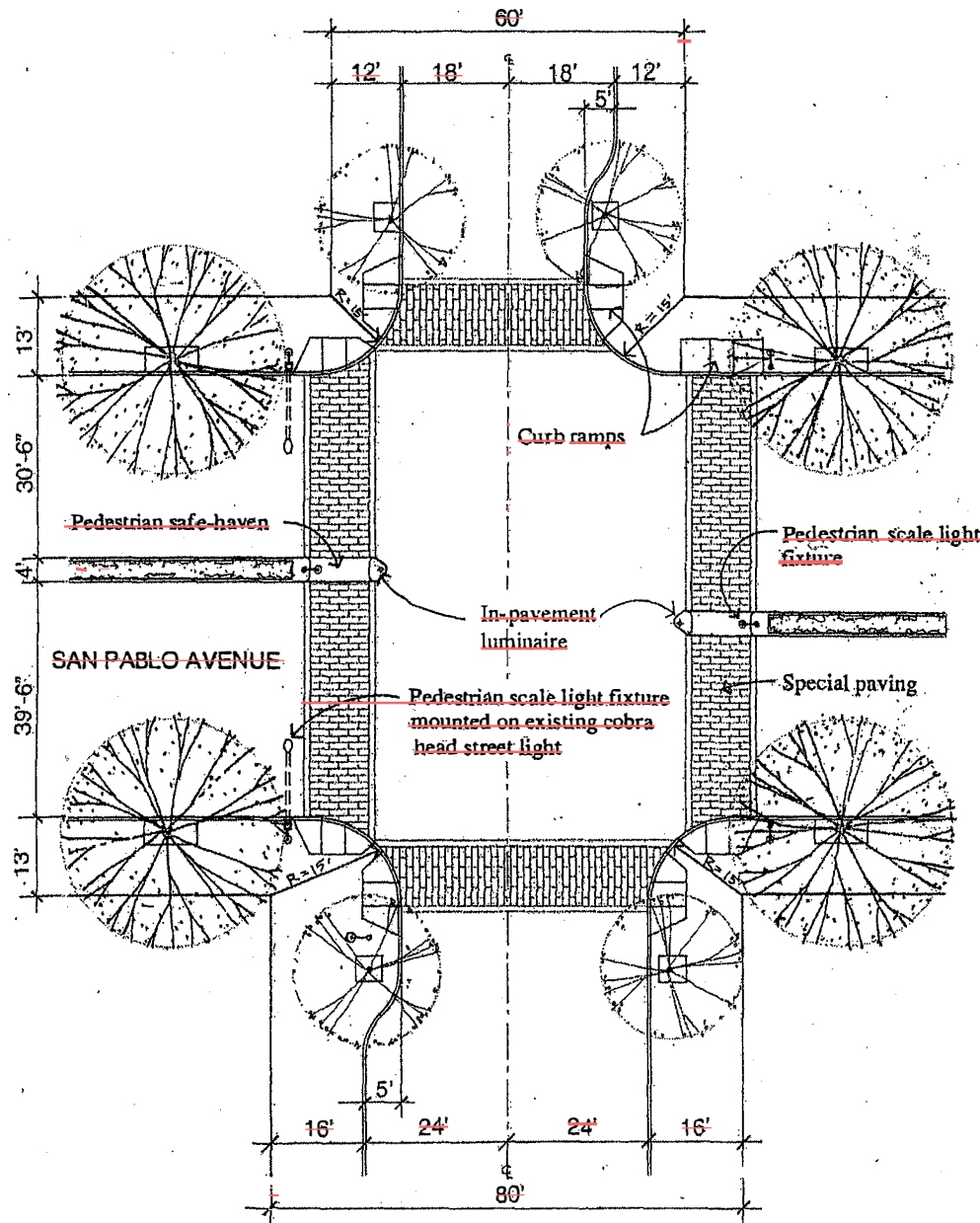


Figure 5: Typical set of improvements proposed at signalized T-intersections (use ladder-type crosswalk striping at un-signalized intersections)





Figure 6: Typical Improvements Proposed for Ashby (shown),  
Dwight, Cedar, and Gilman.



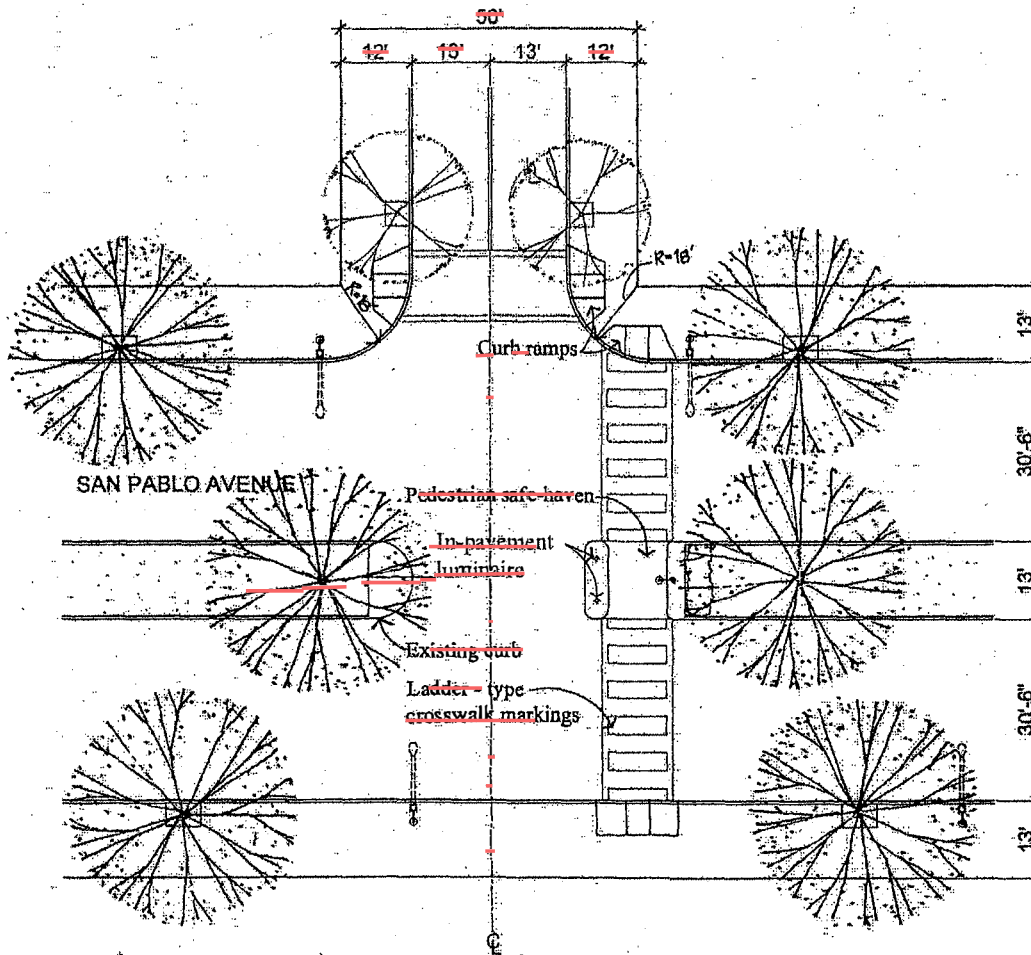
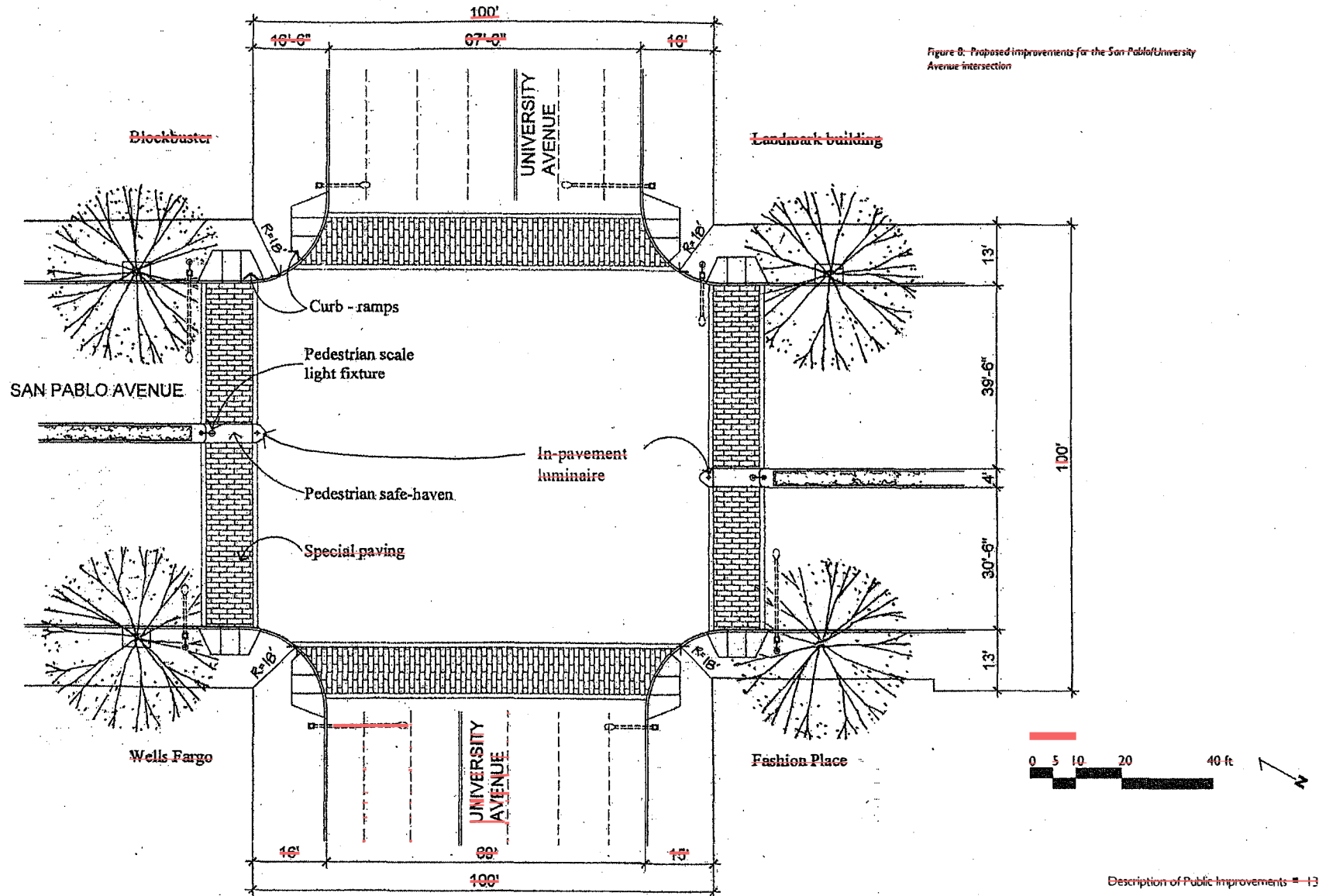


Figure 7: Typical set of improvements proposed at unsignalized T-intersections (intersecting R.O.W. is 50 feet wide)



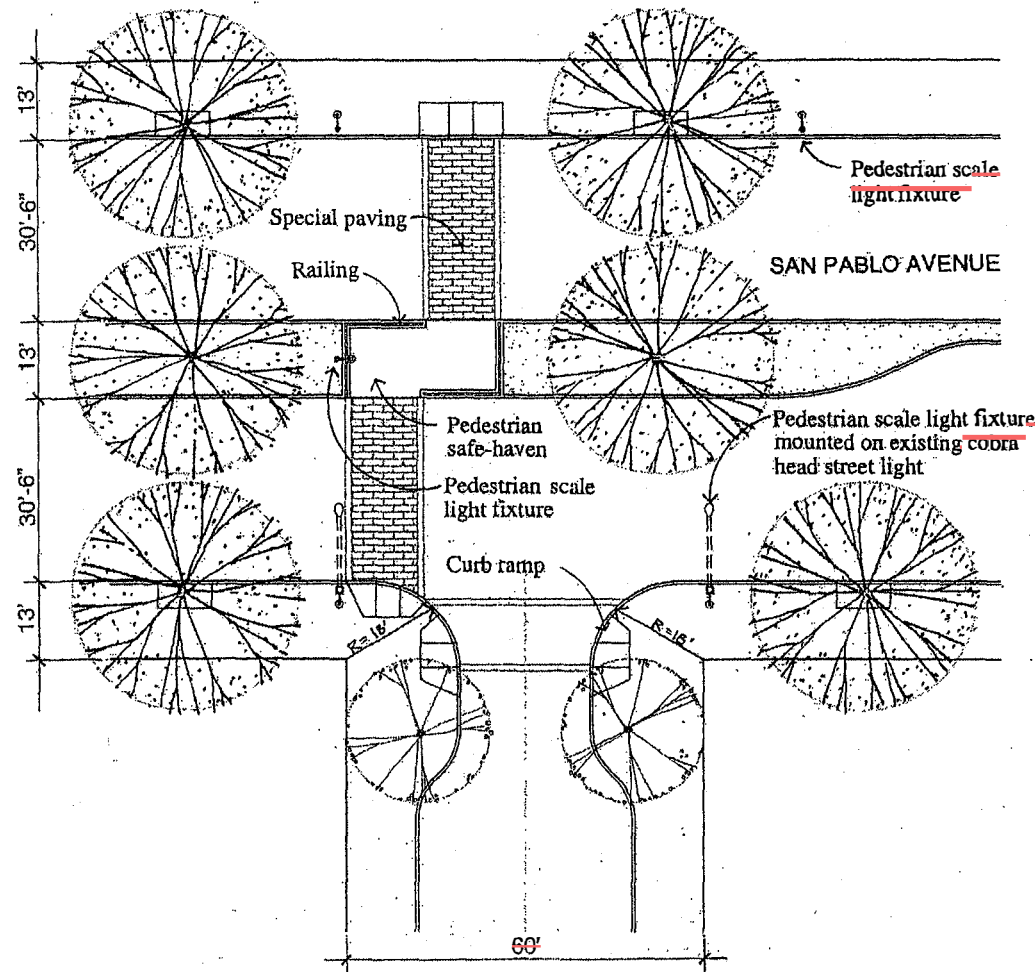


Figure 9: Typical set of improvements proposed for crosswalks through medians at T-intersections (corral configuration) and potential mid-block crossings.

document (see 3.3 below). Where a curb bulb-out is installed, this will allow for the a ramp configuration, in which each crosswalk has a pair of directional ramps rather than one diagonal ramp that serves two crosswalks (this condition is illustrated in Figure 12).

#### *Special Pedestrian Signal Equipment at Gilman, Cedar, University, Dwight and Ashby Intersections*

It is strongly recommended that countdown pedestrian signals with LED technology be used at the signalized pedestrian crossings throughout the Corridor (Figure 10). As a minimum they should be installed at the following intersections: Gilman Street, Cedar Street, University Avenue, Dwight Way and Ashby Avenue. The pedestrian countdown signal will alert pedestrians about the time remaining before the signal will turn to yellow/wait. This measure is intended to further increase pedestrian safety for the intersections that lie at the cores of the five designated nodes. These intersections are the most heavily traveled by motorized vehicles and current and potential future pedestrian activity is high.

#### *Removal of Crosswalks*

Because of its close proximity to the heavily traveled intersection at Ashby Avenue and the unsafe condition created by the gas station curb cut at the eastern end of the crosswalk, it is recommended to remove the existing crosswalk and curb ramp north of Murray Street (see Figure 13 on the following page). As part of the removal process, the original standard 6 inch high curb should be re-established on the west side of the street.

#### *Crosswalks Through Continuous Medians (Corral Type)*

Existing and new crosswalks through continuous medians should be improved to provide better safety for pedestrians and bicyclists crossing in those locations (see Figure 13). The proposed 'corral' design of the pedestrian refuge within the median includes an offset of the two crosswalks on either side of the median, ensuring that persons who reach the refuge will turn toward on-coming traffic, thus increasing their awareness of approaching vehicles (Figure 9). To emphasize this type of crossing, the same special paving should be used for the crosswalks as at the intersections discussed above. This will help to alert drivers to the presence of a pedestrian crossing in a location where it is otherwise not expected. (see Figure 11).

#### *Possible Future Locations for Mid-Block Crosswalks*

The consultant proposes that in the future, assessment of the feasibility of mid-block crosswalks at three locations north of University Avenue should be undertaken. These are locations



Figure 10: Countdown pedestrian signal

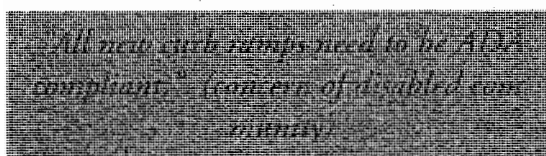
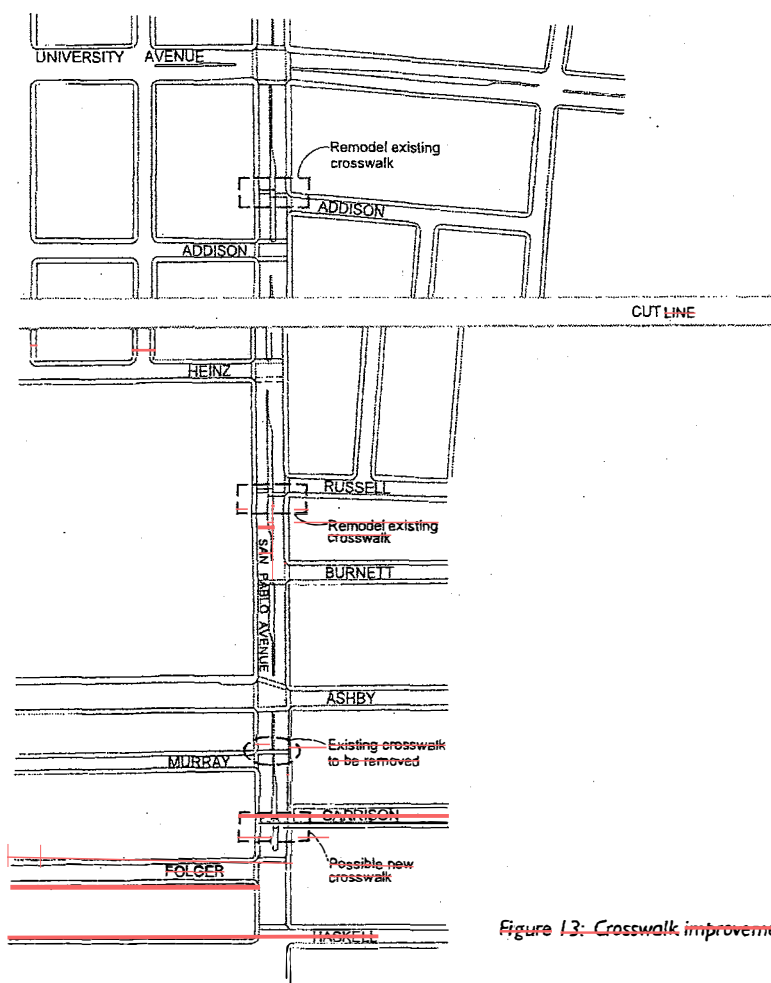
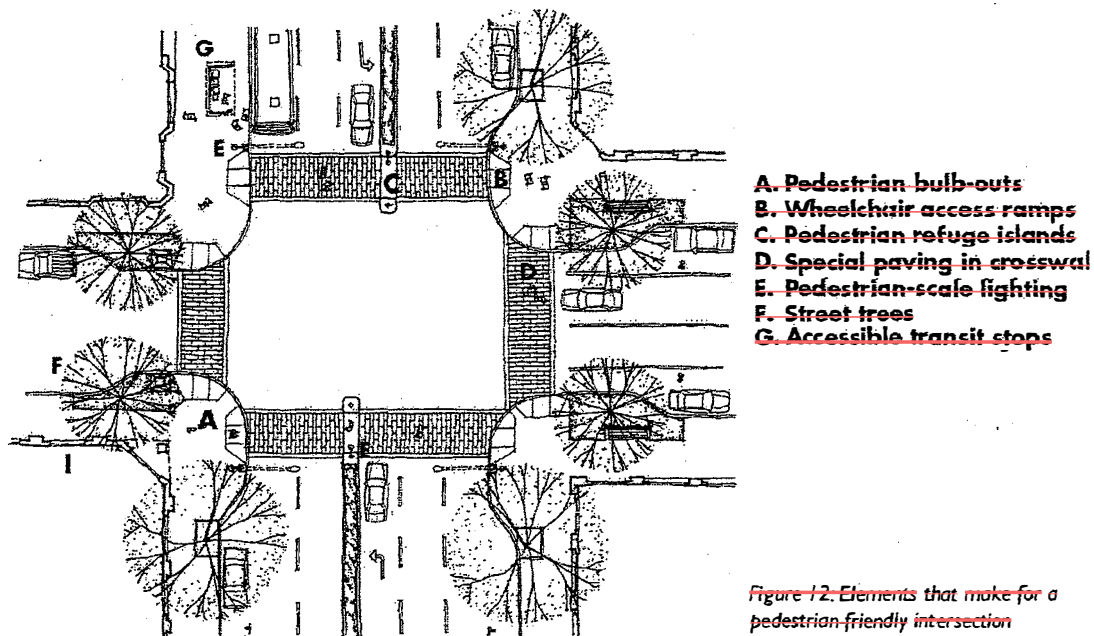


Figure 11: Special pedestrian paving







where the distance between intersections is almost 600 feet long and commercial uses present a strong 'draw' for pedestrians to cross the street at mid-block. The mid-block crossings are suggested for the following blocks with designated nodes:

- between Harrison and Gilman;
- between Gilman and Camelia, north of the break in the center median; and,
- between Cedar and Virginia.

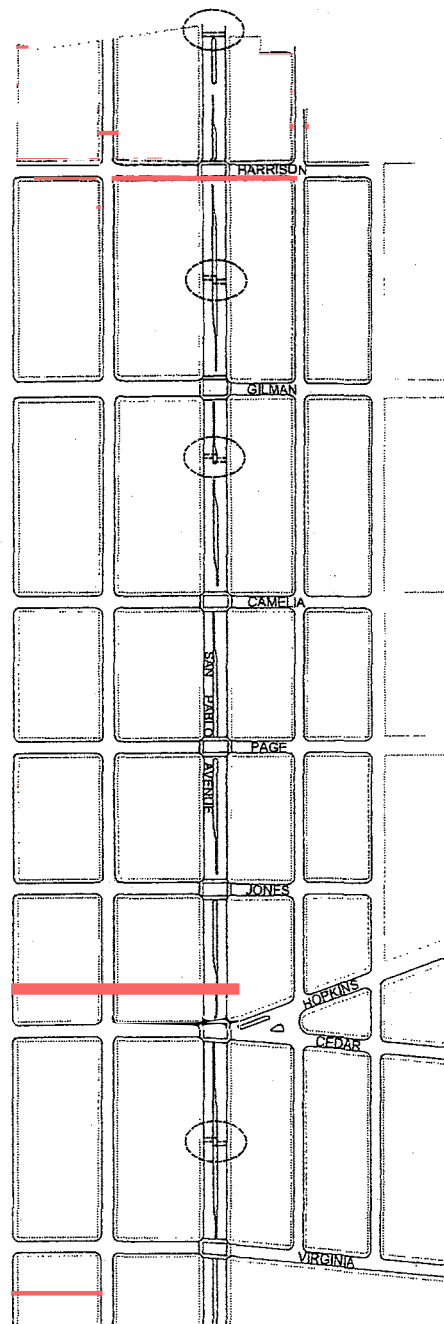
Currently, Caltrans is reluctant to approve such crossings on State Highways. However, with Context Sensitive Design gaining momentum, this may change in the future and allow Berkeley staff to present a case for implementation of the mid-block crossings proposed in this document. Also, as new development occurs within these nodes more pedestrian activity may further increase the need for these crossings (Figure 14).

### 3.3 Curb Bulb-Outs on Side Streets

It is recommended that curb bulb-outs be constructed at the corners of San Pablo side streets. The proposed curb bulb-outs would only extend into the current roadway of the side street and not into the San Pablo roadway. At intersections where traffic on side streets exceeds 8,000 vehicles ADT, and those with painted bike lanes, curb bulb-outs of a reduced depth should be used on one side of the street (such as previously illustrated in Figure 6).

Curb bulb-outs would provide the following benefits:

- reduction of roadway width across side streets of San Pablo Avenue improving pedestrian access along San Pablo;
- slowing down of vehicles turning onto side streets from San Pablo Avenue as they enter local streets where slower speeds are required;
- visual indication of transition from major arterial to residential/mixed-use side streets; and,
- additional space for street trees, other landscaping, an additional pedestrian-scaled light fixture and amenities or features such as public benches, neighborhood monuments, or neighborhood message boards.



Possible future mid-block crossings

Figure 14: Possible Future Mid-block crossings

- ~~Allow the installation of directional rather than diagonal curb ramps.~~

~~The installation of curb bulb-outs is closely related to the necessary installation of ADA-compliant curb ramps as curb bulb-outs allow for construction of the preferred ramp configuration (see also 3.2 Crosswalk Improvements/Curb Ramps). It is therefore recommended that, in the short-term, City and neighbors on San Pablo side streets decide jointly on the possible installation of corner curb bulb-outs. The results of this process would allow the City to create a priority list of locations where the construction of bulb-outs could potentially be scheduled prior to installation of updated curb ramps. Such phasing would avoid demolition of already remodeled curb ramps as a result of the installation of bulb-outs.<sup>1</sup>~~

### ~~3.4 Bicycle Boulevard Crossings~~

~~Based on the difficulty and potential danger that bicyclists on Bicycle Boulevards currently encounter at the San Pablo Avenue route crossings, and after conferring with the bicycling community, the City intends to approach Caltrans with the request for approval of additional traffic signals at the following intersections:~~

- ~~Virginia Street;~~

---

<sup>1</sup> ~~When the San Pablo Avenue Public Improvements Plan was commissioned in Spring 2001, the City of Berkeley decided not to pursue with the California Department of Transportation (Caltrans) the possibility of introducing curb extensions (bulb-outs) narrowing the roadway width of San Pablo Avenue itself. This decision was largely based on the fact that Caltrans had in the past been very reluctant to consider approval of curb extensions along state highway facilities. However, it should be noted here that since the Spring of 2001, Caltrans has approved design plans for state highways in urban locations that include the introduction of curb extensions. Depending on the availability of funding and the subsequent phasing of capital improvements for San Pablo Avenue, it may be desirable to revisit the issue of bulb-outs into the street as this would reduce the crossing distance for pedestrians and therefore add further safety benefits to the improvements described in this document. It should also be noted that plans for this document had already been finalized when the possibility of bulb-outs became a possible consideration with Caltrans.~~

~~The acceptance of curb extensions on urban highways is only one example of Caltrans' increased flexibility in application of design standards in order to provide highway facilities more sensitive to varying urban contexts in different communities.~~

- Channing Way; and
- Heinz Street.

The intent is to increase safety for bicyclists at those crossings where high bicycle volumes can be expected based on the designation as Bicycle Boulevard. The new traffic signals would be integrated into the recently implemented advanced traffic signal coordination, which is one of several measures encompassed in the San Pablo Smart Corridor planning effort. Sensing loops should be located on the side streets so that the signal system recognizes the presence of bicycles at these intersections.

In the Heinz Street location, where the bicycle boulevard jogs from Heinz to Russell Street, a signal would only be requested for the Heinz Street intersection. Here, bicyclists coming from Russell Street would take a right onto San Pablo and then cross

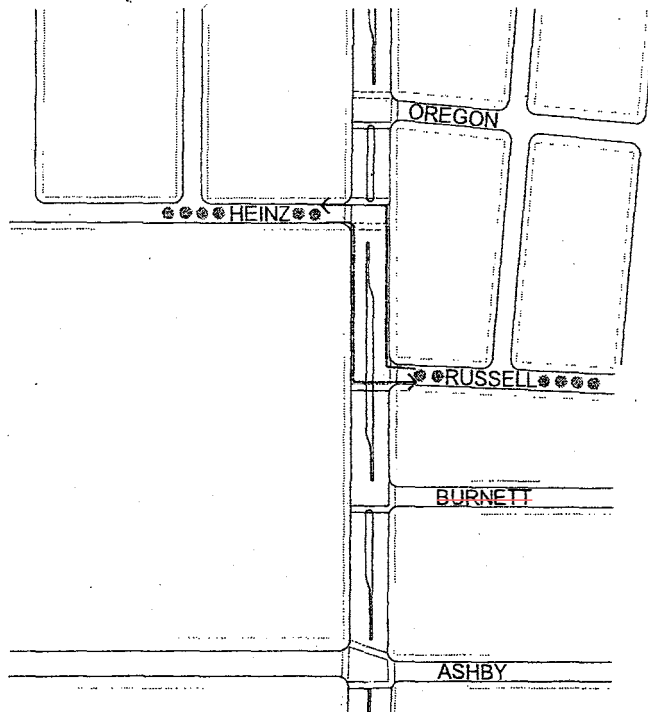


Figure 1-5: Bicycle Blvd Crossings

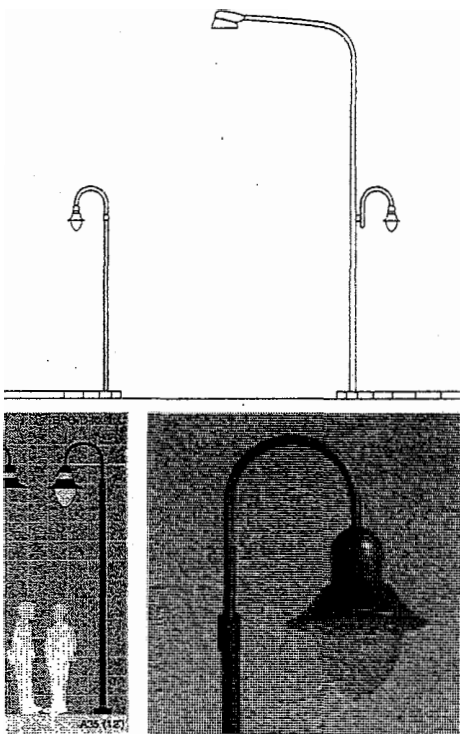


Figure 16 and 17: Pedestrian-scale light fixtures mounted on existing cobra heads, and free-standing fixtures to fill gaps between existing fixtures



Figure 18: City-standard trash and recycling receptacle

safely at the new Heinz signal. Cyclists turning right onto San Pablo coming from Heinz would cross at the un-signalized crossing through the continuous median at Russell. This crossing would be improved according to the suggestions made in this document for corral-type crossing that provide a pedestrian refuge in the center median, thus increasing the safety of crossing bicyclist in this location (see Figure 15).

### 3.5 Pedestrian-scale Lighting and Street Furnishings

#### *Pedestrian-scale Lighting*

A key component of enhancing pedestrian safety and comfort on San Pablo Avenue is the addition of pedestrian-scale light fixtures. To achieve this goal in a cost-effective manner, a light fixture was selected that can be mounted to the poles of the existing 'cobra head' fixtures as well as on individual 12-foot poles (see Figure 16 & 17). This approach is based on the fact that locations of existing street trees and 'cobra head' light fixtures close to intersections make it difficult for additional poles to be pleasingly inserted into the rhythm already established by these elements. The pendant form of the fixture was selected in order to extend the light source toward the center of the sidewalk. The downward-facing light source also limits the 'loss of light' in the leaves of adjacent tree crowns.

The pedestrian-scaled light fixtures should be installed according to the diagrams in the 'Improvements Locations Guide' section (See Chapter 4, Figures 2 through 4) and the typical crosswalk layouts illustrated in previous sections of Chapter 3.

#### *Trash/Recycling Receptacles*

Within designated nodes, where pedestrians and stores are more frequent, two (2) city-standard trash/recycling receptacles (Figure 18) should be installed per intersection (including T-intersections), on opposite sides of the street. The installation of city-standard receptacles may be omitted where new trash receptacles are installed or are slated to be installed within 50 feet of the respective intersection as part of AC Transit bus stop improvements.

Between designated nodes, one trash/recycling receptacle should be installed per intersection (including T-intersections), however, the distance between two receptacles on the same side of the street should not exceed 300 feet. The installation of city-standard receptacles may be omitted where new trash



receptacles are installed or are slated to being installed within 50 feet of the respective intersection as part of AC Transit bus stop improvements.

All trash/recycling receptacles shall be located according to the diagram in the 'Improvements Locations Guide' (See Chapter 4, Figures 2 through 4).

### *Public Benches*

During the second workshop some citizens voiced concern about the installation of public benches on San Pablo Avenue. Some participants viewed benches as potential magnets for loitering or illicit activities. This document therefore does not recommend that public benches on San Pablo Avenue be implemented with further input from neighborhood resident. However, this document does give recommendations about the type, style and location within the public right-of-way for the potential installation of public benches in case of a future request for such an installation by residents, businesses or property owners. Public benches can only be installed within the Curb Zone of the sidewalk or as a design option for a landscaped curb bulb-out at a side street. Both installations have to conform to locations recommended in diagrams of the 'Improvements Locations Guide' section in this document (See Chapter 4, Figures 2 through 4).

Benches installed within the Building Zone of the public sidewalk shall conform to the Berkeley Design Guidelines for Planters and Benches. Benches may not encroach into the 6-foot Clear Zone of the sidewalk.

Should any free standing benches be proposed as part of a design for plazas in conjunction with a private development projects, those benches shall conform with the standard bench models described in this document. Figures 19 illustrates the standard bench type selected for installation on San Pablo Avenue and in the potential bulb-outs on side streets.

### *Bicycle Racks*

The City of Berkeley has a program that allows for city-sponsored installation of bicycle racks upon request by store owners or the bicycling community (Figure 20). New bicycle racks along San Pablo Avenue should be installed within the 4 foot curb zone as described in the 'Improvements Location Guide' (See Chapter 4, Figures 2 through 4).

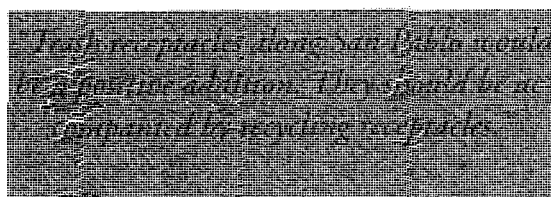


Figure 19: Recommended bench type for installation on San Pablo Ave

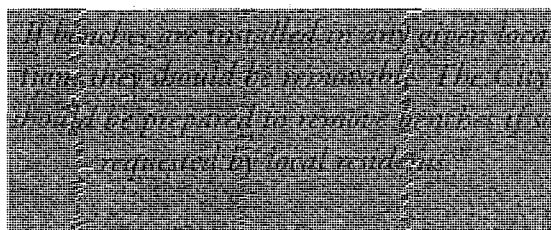


Figure 20: Example of loop-type bicycle rack

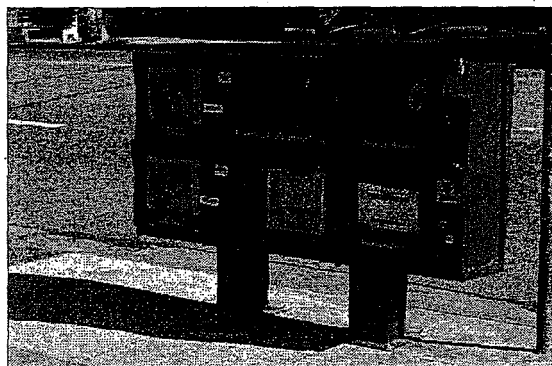


Figure 21: Consolidated News Rack

### *News Racks*

It is recommended that the visual clutter and caused by news racks and the space occupied by them be further reduced by combining several racks into larger units. Depending on the availability of funding, the City of Berkeley may decide to opt for one of two alternatives, with Option 1 requiring less commitment of funds than Option 2:

- **Option 1:** Under this option, the City would strongly encourage the operators of news racks to consolidate the number of individual news racks by accommodating them in modular units, such as the one shown in Figure 21.
- **Option 2:** The City would sponsor the design of a decorative custom rack that would combine 6 or 8 standard modular dispenser units.

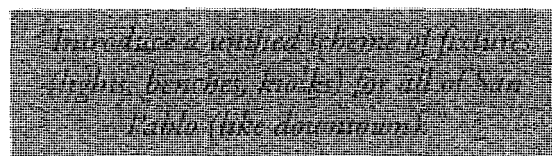
Installation of racks in both Options should be within the 4-foot curb zone as described in the 'Improvements Location Guide' (See Chapter 4, Figures 2 through 4). In the short-term, the City should enforce the placement of existing and new news racks according to the already established City guidelines.

In addition, all location restrictions and other regulations outlined in Berkeley's *Newsrack Ordinance* shall apply throughout the corridor. It is furthermore recommended, that on San Pablo Avenue the placement of news racks be limited to locations within designated nodes.

### *San Pablo Avenue Color Scheme for Lighting fixtures and Street Furniture*

All street furnishings described in this document should receive a powder coating or paint finish of the same color. During the second workshop, the proposed color, RAL 5008, a dark slate blue, was well received by participating members of the public. The consistent use of this color will give a unified appearance to the various streetscape elements located throughout Berkeley's segment of the San Pablo Corridor. It is recommended that the City of Berkeley negotiate with Caltrans the repainting of all cobra head light fixtures in this color. This would facilitate that pedestrian scaled light fixtures attached to the cobra heads and those mounted on individual 12-foot poles have the same appearance.

The recommended color is compatible with the color specified for light fixtures to be installed by AC Transit as part of the planned bus stop improvements.





### 3.6 Potential for Extended and New Medians

Three locations have been identified where opportunities exist to either extend existing medians or add new medians. Either measure should also include the planting of new trees in the median. Opportunities for new or extended medians exist in the following locations:

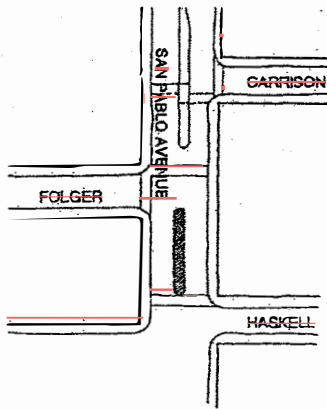
- a) Between the Albany/Berkeley border and the current northern end of the existing median (also see “City Entry/Gateway Features”);
- b) Between the southern edge of Folger Street and the northern edge of Haskell Street (also see “City Entry/Gateway Features”); and,
- c) Between the southern edge of Carleton Street and the northern edge of Derby Street.

The median in location c) could be implemented in three different configurations, depending on the need for turning lanes at Carleton and Derby Streets (see Figure 22). The preferred alternative would be to install a new median without turning lanes in this location in order to maximize the positive attributes of a median. The implementation of any of the proposed medians would shorten or eliminate current two-way left turning lanes. The City of Berkeley intends to conduct traffic counts and an analysis of turning movements for all three locations to determine which proposals for new medians to advance for approval by Caltrans.

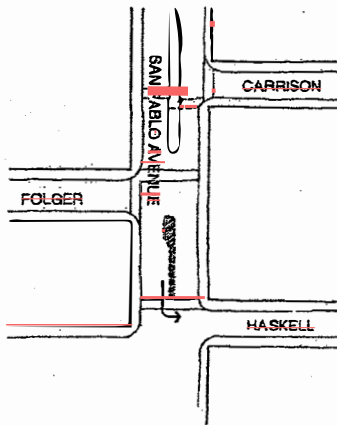
### 3.7 Locations of Reduced Sidewalk Width

In several locations along San Pablo Avenue existing sidewalk widths are less than the 13 feet of designated sidewalk space between face of curb and the property line (see Figure 4 in Chapter 2 for a locations of reduced sidewalk widths). In most cases such ‘encroachments’ onto the public right of way consist of landscaping that extends into the designated sidewalk space from adjacent properties. Often, the landscaping is the result of the City’s past failure to provide the full paved sidewalk width in these locations (Figure 23). Because such encroachments may interfere with current federal and state accessibility laws, the City intends to address this issue in two ways. In the short-term the City will ensure that at least 4 feet of clear sidewalk exist as measured between the edge of any existing or new tree well and the edge of the sidewalk closest to the nearest property

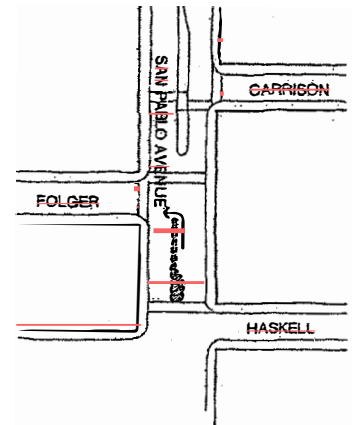
### Median Options at Folger & Haskell



Option 1  
No Left Turn Option

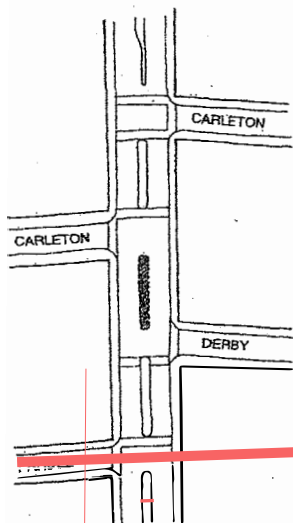


Option 2  
Left Turn Lane onto Haskell

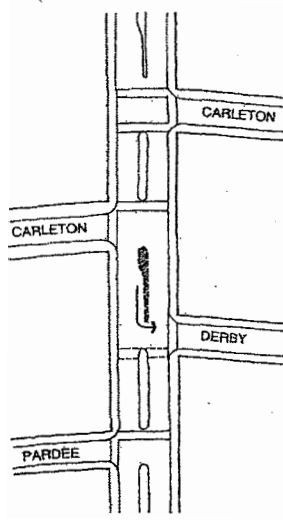


Option 3  
Left Turn Lane onto Folger

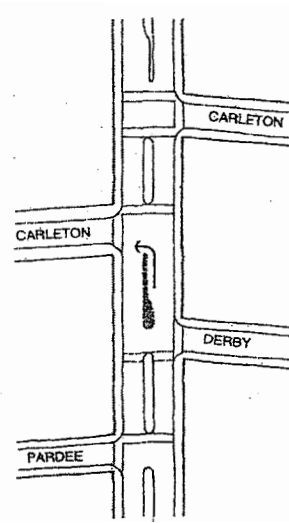
### Median Options at Carleton & Derby



Option 1  
No Left Turn Option



Option 2  
Left Turn Lane onto Derby



Option 3  
Left Turn Lane onto Carleton

222 Proposed median  
222 Possible new crosswalk

Figure 22: Median Configurations

line. In the long term the City intends to establish sidewalk widths throughout the entire corridor that take advantage of the full public right of way designated as sidewalk between face of curb and the property line (typically 13 feet). In implementing its short and long term goals, the City is committed to working with individual property owners. Wherever conditions that constitute encroachments are removed, the City will extend the paved sidewalk surface to the extent found appropriate for the specific location.

### 3.8 Landscape Improvements

#### *Street Trees in Sidewalks and Medians*

The existing rows of street trees should be well maintained and their positive effect on the San Pablo streetscape enhanced by planting additional trees where opportunities exist. The poor condition of the majority of Bradford Pears on San Pablo Avenue is proof that this species has been unsuccessful. It is therefore recommended to phase out this tree species by replanting failed specimens with London Plane Trees.

Based on conversations with the City's Forestry Supervisor the introduction of Sunset Maple (*Acer rubrum* 'Frankred') as an alternative tree species to the London Plane tree is recommended for some medians (see further discussion below). Over time, this species is intended to replace the existing American Sweet Gum, whose narrow crown habit does not complement the broad crowns of the London Plane Trees and thus, fails to create the desired touching of tree canopies. The Sunset Maple will also provide a vibrant fall color and maintain the visual interest and variety to the landscaping of San Pablo Avenue. In summary, new trees should be planted in the following locations and situations:

#### *Sidewalks*

- a) In any existing sidewalk tree well that is not currently occupied by a tree. Tree wells that have been filled in with asphalt should be cleared and again be used for tree planting purposes.

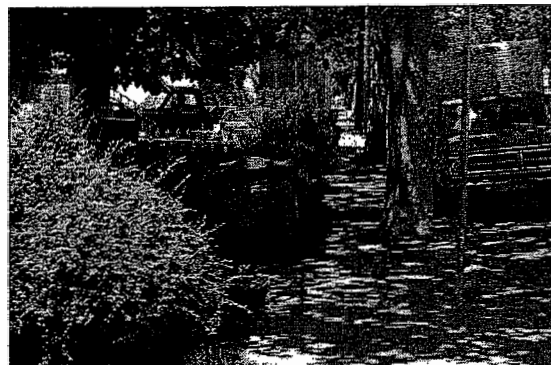
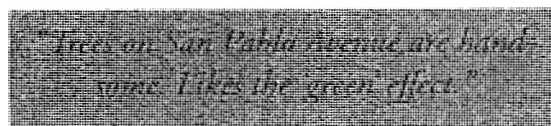


Figure 23: Examples of sidewalk encroachment by vegetation planted on private property



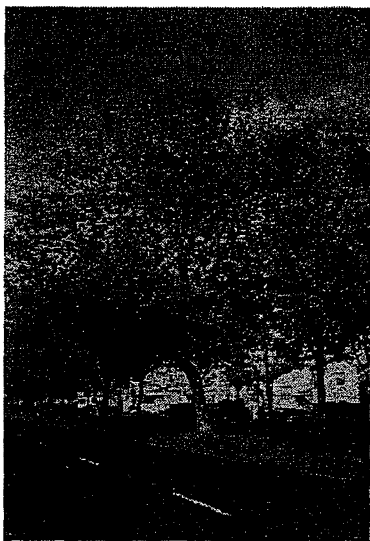


Figure 24: London Plane Tree

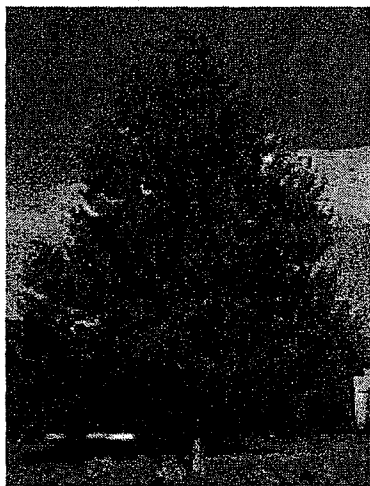
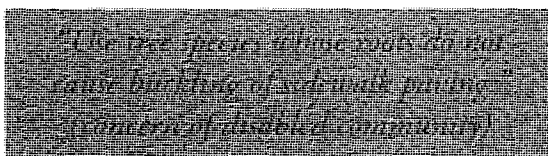


Figure 25: Sunset Maple

- b) In locations where the planting of a tree was originally omitted due to the presence of a driveway and where such driveways have now become defunct because of a change in land use.

#### *Medians*

- a) In locations where the tree planting rhythm within a given median appears to omit one or several trees.
- b) In locations where existing rows of trees fall short of continuing to the closest allowable planting location near an intersection.<sup>2</sup>
- c) In all medians that currently have no trees. Here trees should typically be planted at a spacing of 20 feet o.c. This spacing should be reduced to any increment between 20 and 15 feet o.c. where this would allow the overall number of trees planting locations in a new median to be raised beyond the number possible by using 20 feet o.c. spacing.

The following tree species must be used for new trees or the replacement of unhealthy existing trees:

#### *Sidewalks*

- a) In all sidewalk locations use London Plane Tree (*Platanus x acerifolia* 'Yarwood') (Figure 24).
- b) Failing Bradford Pears will not be replanted with London Plane Trees. Because of the difference in spacing between Bradford Pears and London Plane Trees, the replacement process should be conducted as follows:

<sup>2</sup> Caltrans recently increased the distance required between the endpoint of a raised median and the nearest median tree location from 50 feet to 100 feet, with greater distances being required where this needed for provision of proper sight distance. However, many median trees on San Pablo are as close to endpoint as 16 feet, with 40 to 50 feet being the average. It is recommended to approach Caltrans with the request for permission to plant trees as close to the median endpoint as 50 feet at signalized intersections. At unsignalized intersections, sight distances required by the Highway Design Manual should be observed. These will vary with different intersection configurations. These standards will also need to be observed for tree planting in new and extended medians (see Section 3.6 Potential for Extended and New Medians).

1. Maintain the tree well located closest to a given intersection and replace Bradford Pear with London Plane.
2. Determine the distance between this new tree and the first existing (mature) London Plane tree away from the intersection.
3. Divide this distance into increments of 40 feet (or up to 50 feet) to determine additional locations for new London Plane trees and respective new tree wells.
4. Replace abandoned Bradford Pear tree wells with concrete.

### *Medians*

- a) Where London Plane Trees prevail in an existing median use London Plane Tree (*Platanus x acerifolia* 'Varwood') for new and replacement trees (Figure 24).
- b) Where American Sweet Gum (*Liquidambar styraciflua*) prevails in an existing median use Sunset Maple (*Acer rubrum* 'Franksred') (Figure 25). Failing American Sweet Gums will be replanted with Sunset Maple and thus be phased out over time.
- c) Medians that currently have no street trees should be planted with a species that is in contrast to the one found in adjacent medians, i.e. Sunset Maple (*Acer rubrum* 'Franksred') if the adjacent median is planted with London Plane Trees (Figure 24).

### *A Note on Tree Pruning*

The branches of existing mature trees in sidewalk locations should not reach lower than 14 feet above sidewalk level to provide clearance for trucks as required by Caltrans and to lend visibility to storefronts and signage.

### *Tree Wells and Tree Grates*

Trees in urban environments typically do not have the same life expectancy as their counterparts in natural or rural environments. This is largely due to the numerous environmental stress factors that street trees are exposed to. Particularly important to a tree's vitality is the proper supply of water and oxygen through its root system. In the case of street trees, this supply is limited by the presence of impervious surfaces, such as asphalt roadways and concrete sidewalks, leaving the tree

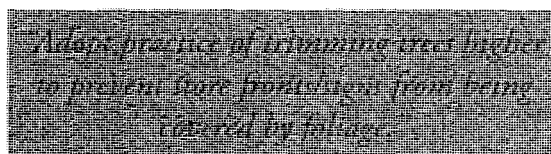






Figure 26: Example Tree well configuration

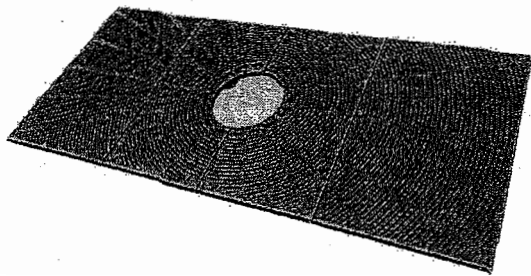


Figure 27: Proposed 4 x 6-foot tree grate

well as the most critical “window” through which oxygen and water can reach the root system. The current tree well size of 4' x 4' for trees in San Pablo sidewalks should be considered as below optimum and is likely to be responsible for some of the sidewalk heaving that can be observed close to tree locations. Although the trees at average have grown to a large size, more can be done to protect this landscape asset in the tree well size to 4 x 6 feet. This can be achieved by saw cutting the existing concrete pavement. The permeability of the soil within the tree well should be optimized and the tree well be filled with decomposed granite for percolation and oxygen flow.

Higher pedestrian traffic often causes decomposed granite from tree wells to be spread beyond the edge of the well. This can lead to unsightly and potentially unsafe conditions on the sidewalk. It is therefore, strongly recommended that 4 x 6 foot tree grates be installed for all tree locations within designated nodes, where pedestrian volumes are higher. Two alternative tree grate installations may be considered. In the first installation method a steel frame that is anchored in the poured concrete around the tree well edge. This installation method requires the demolition, enlargement and reconstruction of portions of the existing concrete sidewalk around the tree well opening (similar to the example in Figure 26). Alternatively, a retrofit tree grate can be used that rests on the saw cut edges of the existing concrete around the tree well. The latter installation method requires that the sidewalk around the tree well be level. This enables the tree grate to rest evenly on the four concrete edges. While this retrofit installation is more cost effective, in the long run it is less likely to be as safe as the tree grates installed by using the steel frame method. This is due to the susceptibility of retrofit tree grates to shifting upwards caused by shifts of the underlying concrete. The Consultants and the City's Urban Forestry Supervisor therefore recommended that, funding permitted, tree grates with steel frames be installed. Whichever option is chosen, it should be used consistently throughout the corridor.

#### *Landscaping in Narrow Medians Alongside Left Turn Lanes*

Intact examples of low shrubs and other planting located in the narrow medians alongside left turn lanes demonstrate their positive impact on the streetscape. They help to maintain the physical definition of the median where its width is reduced to less than a third of its size in other locations along the Avenue, and where trees cannot be planted. This quality, furthermore, is an important element for the pedestrian ‘safe havens’ of the improved crosswalks. Here the low plants define the edge of the pedestrian waiting area on the side of the median. In addition, the landscaping of the narrow medians beautifies a street element that is located in close proximity to pedestrians’ path of





Figure 28: Treatment of Narrow Medians

travel, and represents a 'stepping stone' between the proposed landscaping in side street bulb-outs on either side of San Pablo. Figure 28 lists the locations of all narrow medians and their respective need for partial or full replacement of plant material.

Additional analysis will be necessary to determine why the initial complement of plants has failed in certain locations. This has a bearing on the selection of plant species for future replanting on denuded medians. It is recommended that Berkeley Public Works maintenance staff take a lead role in determining which plant species are most appropriate for long-term landscaping in narrow medians along San Pablo Avenue.

#### *Landscaping in Proposed Bulb-outs on Side Streets*

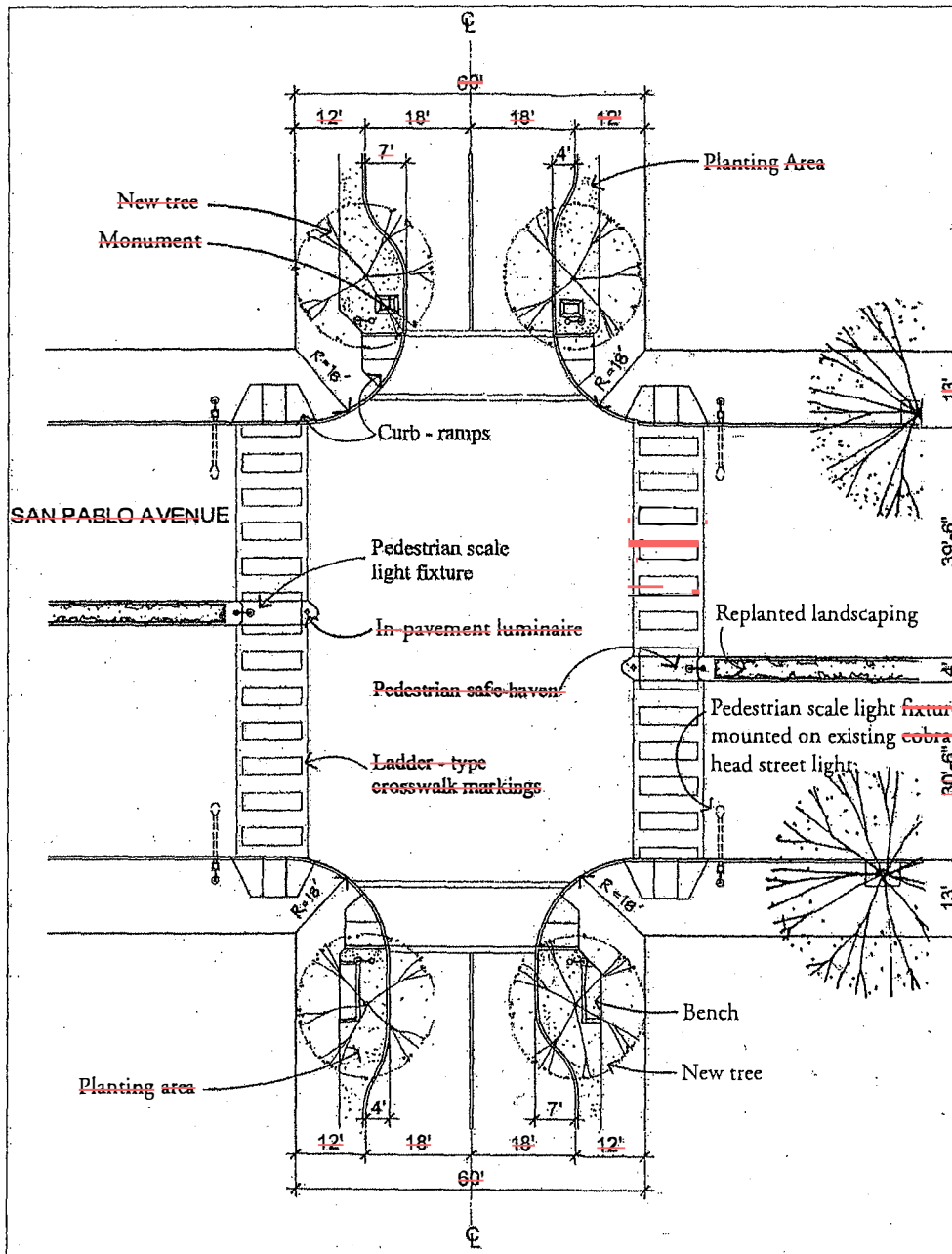
The proposed bulb-outs on cross streets (also see 3.3 Curb Bulb-outs on Side Streets) not only shorten the crossing distance for pedestrians but also represent an opportunity to beautify the street with additional landscaping. Each individual bulb-out provides approximately 250 square feet of planting area. Depending on the choices made by local residents, a bench or residential monument may be included in the design of the bulb-out landscaping. At a minimum, one street tree shall be planted within the bulb-out area. Although bulb-outs could be paved with concrete or other paving materials, it is preferable to take advantage of this opportunity for additional landscaping. Figures 30 and 31 illustrate how individual bulb-out elements should be arranged within the bulb-out.

#### *Supplemental Street Trees and Landscaping on Cross Streets*

Streets intersecting San Pablo should receive supplemental planting of street trees in order to strengthen the physical and visual relationship between neighborhoods and districts surrounding the avenue, and San Pablo's amenities such as public transit and commercial businesses and services. This is particularly recommended on the blocks directly connecting to San Pablo Avenue. Such tree plantings would also tie into and further enhance the benefits of landscaping and tree plantings in the proposed bulb-outs. Tree species planted along cross streets should match the dominant species among existing trees or be selected in conjunction with the City's Forestry Supervisor, maintenance staff, and the streets' residents and business owners (Figure 32).

The planting of medium-sized flowering trees on residential streets is recommended, where no existing tree species is yet dominant. Wherever feasible, existing planting strips should be planted with appropriate ground covers or perennials, to further enhance the landscape character of cross streets.

~~San Pablo Avenue Public Improvements Plan ■ City of Berkeley, California~~



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Figure 29. Typical bulb-out landscape treatments (plan view)

Figure 30: Optional landscape with neighborhood monuments

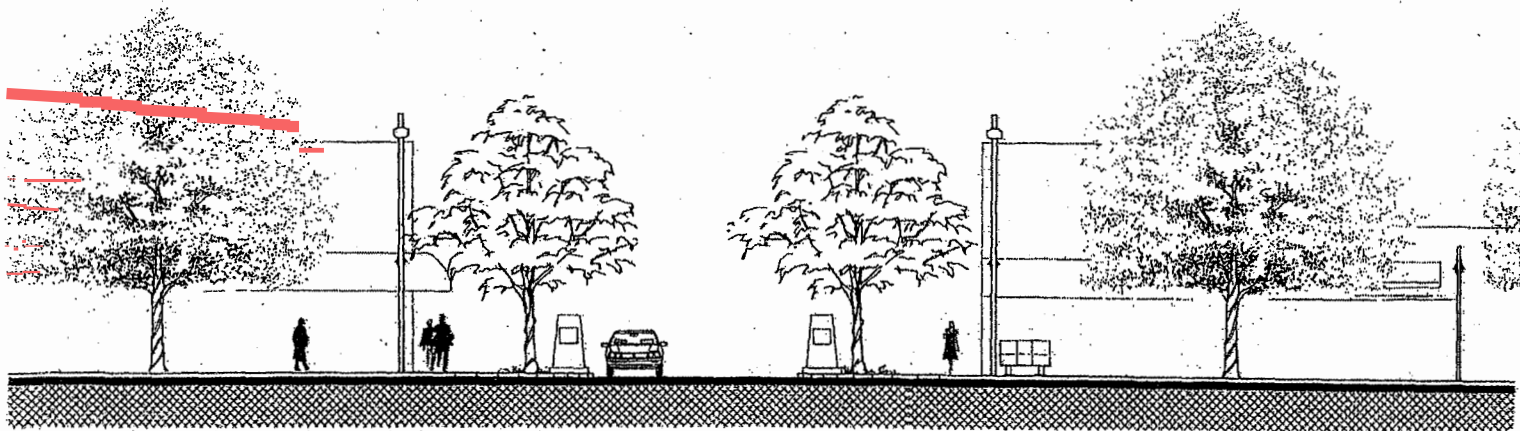
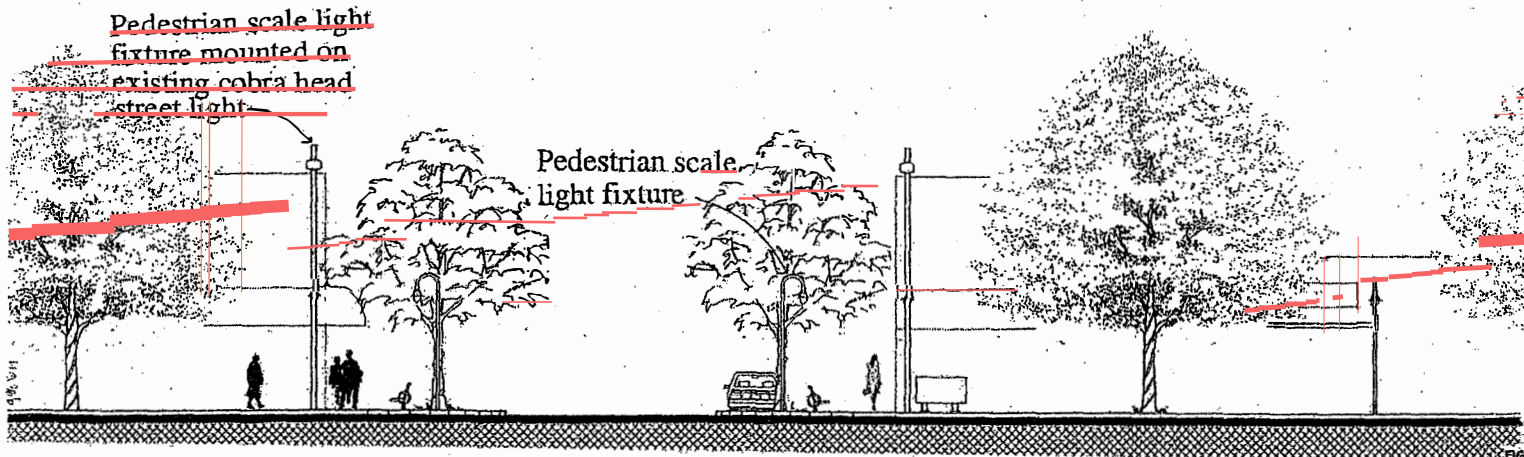


Figure 31: Optional bulb-out landscape with benches





#### Suggested Tree Planting on Side Streets

- add individual trees where necessary
- add trees to existing rows, completing a connection to San Pablo Avenue
- establish new row of street trees connecting to San Pablo Avenue

Figure 32: Suggested tree planting on side streets



### 3.9 Entry/Gateway Feature

At both community workshops, a majority of workshop participants supported the concept of defining the northern and southern entry points into Berkeley with a gateway feature on San Pablo Avenue.

#### *Entry at Oakland Border*

Recent construction of planted medians by the City of Oakland south Berkeley city limit will, over time and as planted trees mature, render the location of the city limit line less distinct. In the past this distinction was rooted in the absence of trees on the Oakland side. However, the proposed new median will provide greater visual consistency to the overall appearance of San Pablo Avenue as it traverses different communities. To maintain a sense of arrival and departure as one travels through the different communities, it is suggested that a modest entry or gateway feature be included in the design of the proposed extended median at this southern end of San Pablo Avenue. Figure 33 illustrates a schematic design for such a modest entry feature. The design proposes to combine the opportunity for a new median between Folger and Haskell Streets with a small structure that incorporates a "City of Berkeley" sign. The structure should reflect architectural traditions and materials associated with the best architectural traditions found in Berkeley. The structure should furthermore be an integral part of the crosswalk design and its standard elements, including the light fixtures identified in this document. It is important that the feature be appropriately scaled to equally address passing pedestrians, bicyclists and drivers alike.



#### *Entry at Albany Border*

At the northern city limit, between Berkeley and the City of Albany, another opportunity exists to extend the existing median to the Berkeley city limit line. In addition, the crossing of Codornices Creek underneath San Pablo Avenue (coinciding with the city limit line), and the fact that some design ideas for this location and related to the creek already exist can positively inform the creation of a gateway design.

In early 2001, the City of Albany adopted the "San Pablo Avenue Streetscape Master Plan," which proposes to establish a gateway using special design features, which highlight the creek crossing. The plan proposes to accentuate the creek crossing by integrating into the roadway a special paving and a scor-

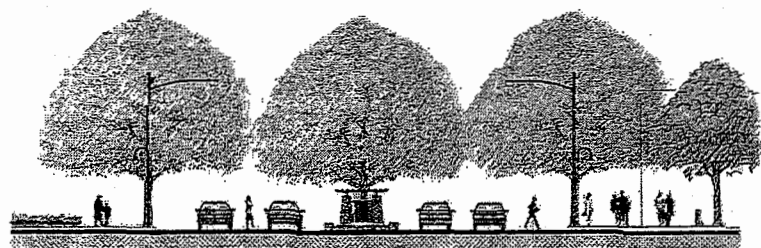


Figure 33: Schematic design for an entry feature on San Pablo between Folger and Haskell

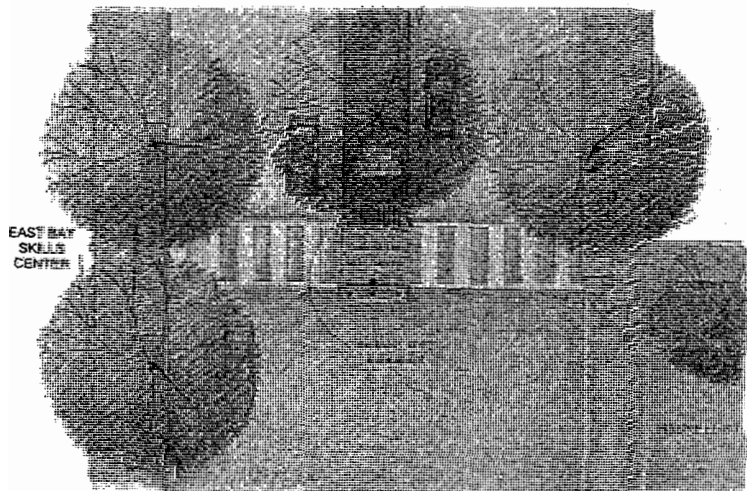
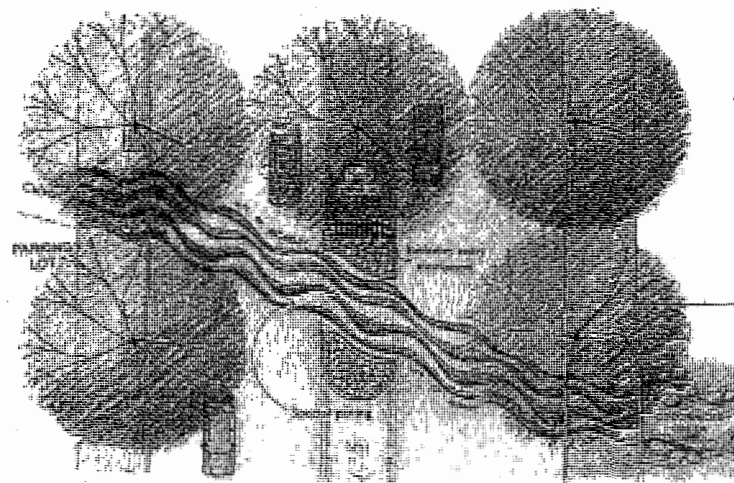
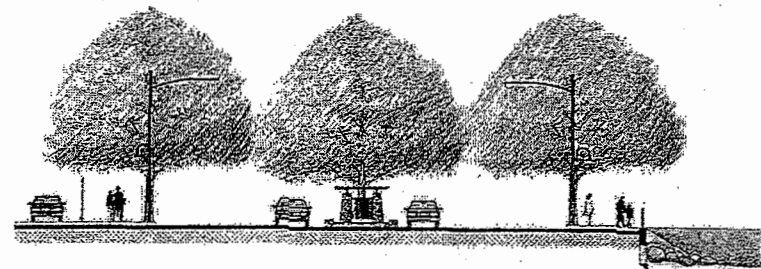


Figure 34: Design for the border between Albany and Berkeley that uses special paving to emphasize the creek crossing beneath the roadway Albany Border



ing pattern that is suggestive of the water flowing beneath. The schematic design for a Berkeley entry feature illustrated in Figure 34 builds on this idea. It suggests that the special paving be carried across the sidewalks to render them more noticeable to pedestrians and that the paving be combined with an extension of the existing median on the Berkeley side of San Pablo (no medians are currently planned in this location by the City of Albany). The extended median should have at its terminus an identical companion to the entry/gateway feature at the Oakland border.

Other planning efforts currently undertaken by the City of Albany explore the possibility of paralleling the creek with a multi-purpose path for pedestrians and bicyclists. If a multi-purpose path that connected to either side of San Pablo Avenue were implemented, this would create a significant need for a mid-block crossing in this location. The City of Berkeley and the City of Albany should coordinate their efforts for the design of city entry features so that they can enhance one another and provide the future possibility for pedestrian and bicycle mid-block crossing in this location.

### 3.10 Incorporation of Public Art

Once construction funding for improvements on San Pablo Avenue will become available, 1.5% of these funds will, by default, be dedicated for public art. It is recommended that priority be given for such funds to be used to incorporate artwork into the proposed entry feature, i.e. the special paving pattern at the Albany city limit or the architectural element in the center medians at both city entries. However, this recommendation is not intended to discourage public art in other places throughout the corridor, it merely expresses a preference for early implementation of public art in said locations. Final determination of this subject falls within the purview of the Berkeley Public Arts Commission.

There are many opportunities for the incorporation of public art into the streetscape of San Pablo Avenue, including but not limited to special pavement design in areas of high pedestrian foot traffic, median refuges (where 13-foot wide), 'corral' railings at crosswalks through continuous medians, and monuments in bulb-outs.

It should also be noted that south of the intersection with University Avenue

~~a steel arch once spanned San Pablo Avenue. Arrows and signs were affixed to the arch, orienting drivers with respect to the location of Downtown and other destinations. For support of the war effort this structure was scrapped for its metal.~~

~~Recently, some interest has been expressed to give consideration to recreation or commemoration of this structure. In light of the fact that today University Avenue and not San Pablo Avenue is the main gateway into Berkeley in this particular area, it is recommended to associate such efforts with allocation on University Avenue rather than on San Pablo.~~

## **~~4. Placement Guide for Improvements~~**

~~As funding for public improvement projects becomes available over time, it is critical to ensure a consistent appearance and a mutually enhancing impact of successive capital improvements projects or the incremental installation of individual improvements, whether they be privately or publicly financed. The following diagrams describe where particular streetscape furnishings and materials shall typically be used and located within the public right-of-way.~~

### **~~4.1 Placement Guidelines for Public Improvements~~**

~~This chapter will contain Figures and Diagrams that illustrate where specific streetscape elements shall be accommodated within the public right-of-way. For this purpose the sidewalk was divided into three zones: the Curb Zone, and the Clear Zone and Building Zone (Figure 1).~~

~~Figures 2 through 8 address the proper location of the following proposed street furnishings:~~

- ~~□ Pedestrian Lighting~~
- ~~□ Benches~~
- ~~□ Trash/ Recycling Receptacles~~
- ~~□ Tree Grates~~
- ~~□ Bicycle Racks~~

### **~~4.2 Placement Guidelines for Improvements based on Private Initiative~~**

#### *~~Planters~~*

~~Planters installed or placed upon private initiative have to comply with the City's "Guidelines for Benches and Planters" and have to be located within the 2.5 foot wide 'Building Zone' or the 4 foot wide Curb Zone of the sidewalk.~~



*~~Landscaping in Tree Wells of existing Street Trees~~*

~~Private property owners, residents, and businesses are encouraged to plant perennials or groundcovers in those tree wells that have no tree grates. It is the responsibility of the individual who introduces landscaping into a tree well to provide appropriate watering and other maintenance. The City reserves the right to remove any landscaping that adversely affects the visual appearance of the streetscape or interferes with other sidewalk functions.~~

*~~Benches/Seating~~*

~~Benches installed in the 'Curb Zone' must match the San Pablo Avenue specifications for benches in this location, while benches in the 'Building Zone' have to comply with the City's "Guidelines for Benches and Planters." Chairs and tables for sidewalk cafes may be of any design, but must be installed or placed so that their use does not encroach into the 6-foot Clear Zone of the sidewalk.~~

*~~Bicycle Racks~~*

~~Bicycle Racks installed as a result of development activity on a private properties or private initiative must match the specifications described in this document and accordingly be located in the 4-foot wide 'Curb Zone.'~~



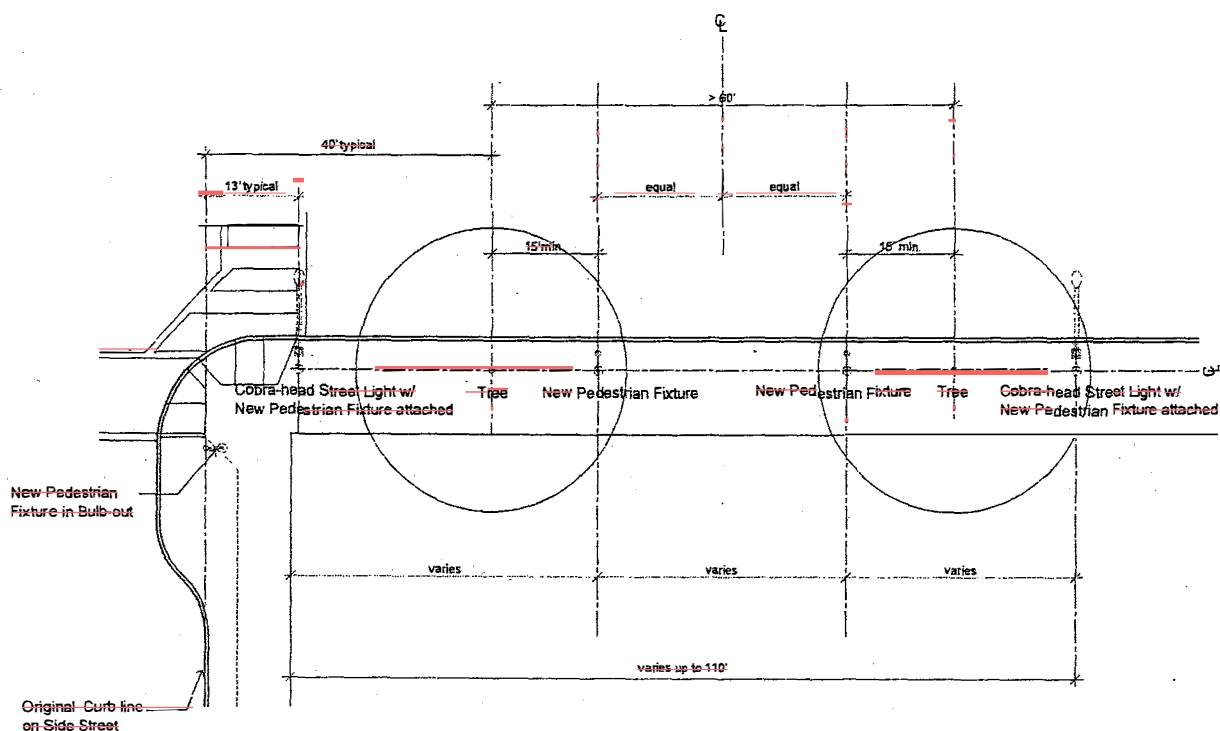


Figure 2: Guidelines for the placement of pedestrian fixtures where trees are spaced more than 55 feet on-center

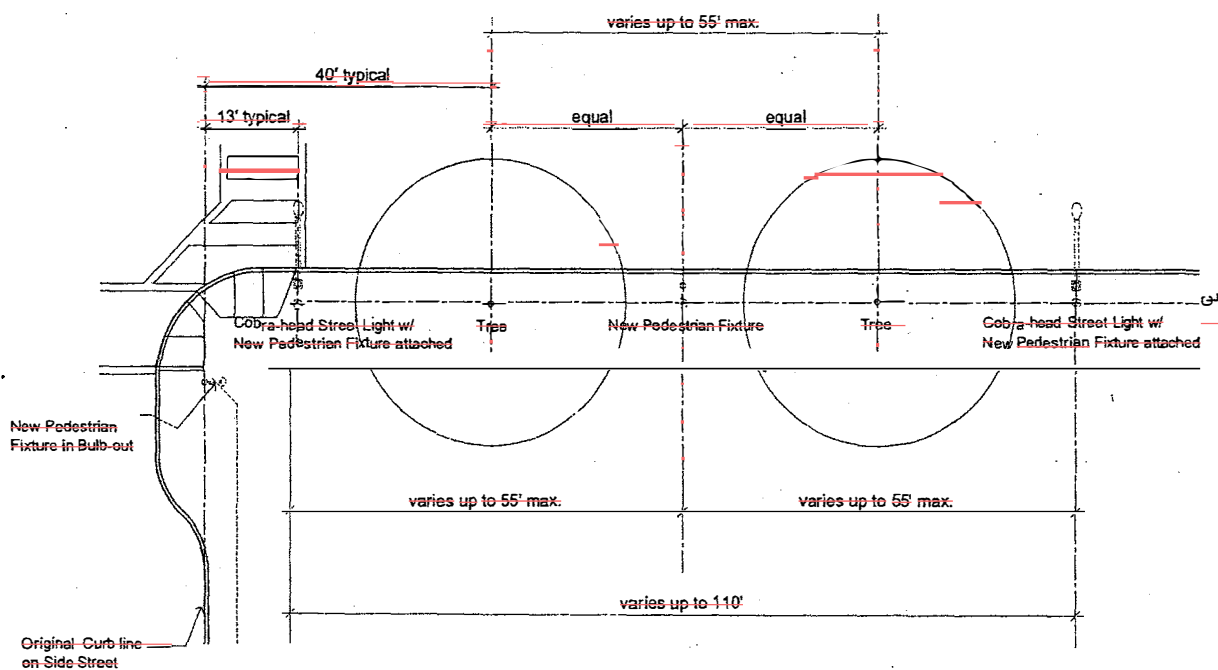


Figure 3: Guidelines for the placement of pedestrian fixtures where trees are spaced up to 55 feet on-center

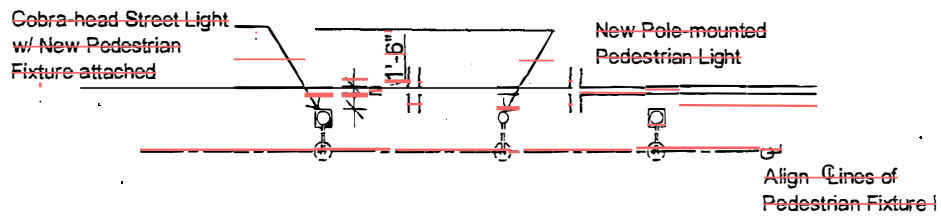


Figure 4: Alignment of Pedestrian-scale Light Fixtures

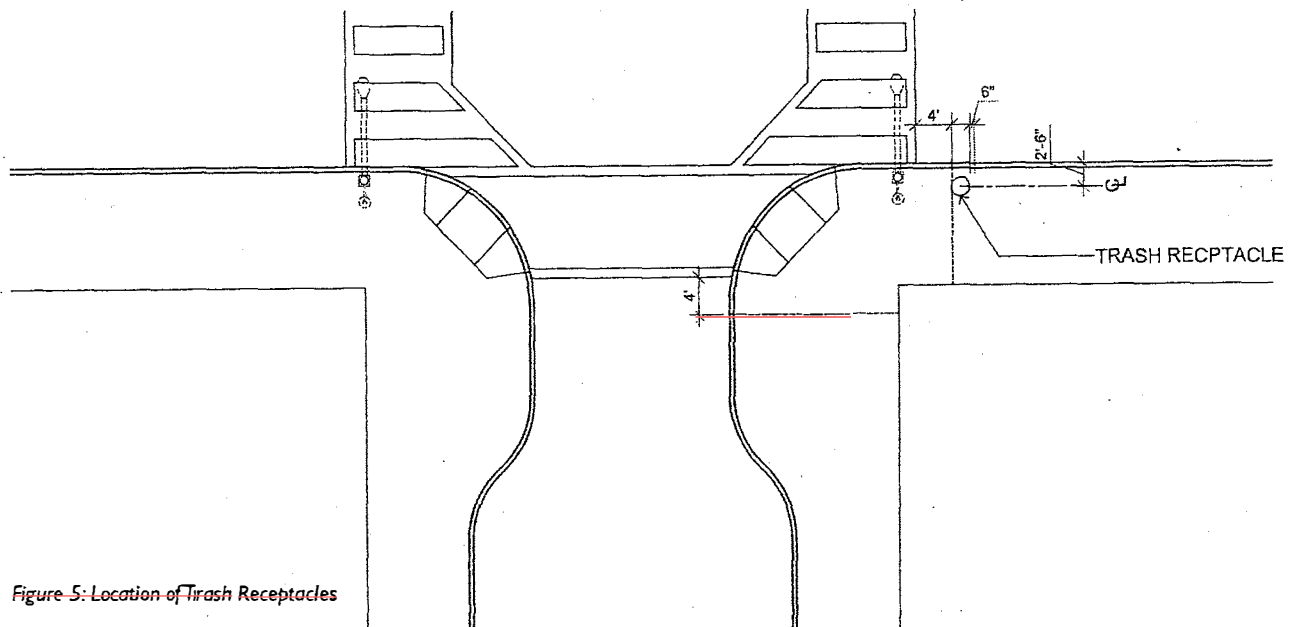


Figure 5: Location of Trash Receptacles

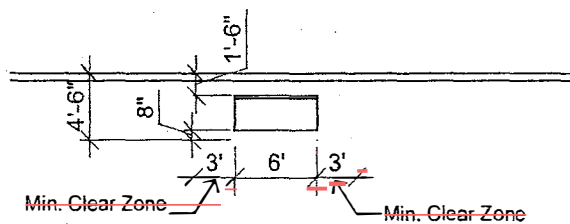


Figure 6: Bench Location and Placement

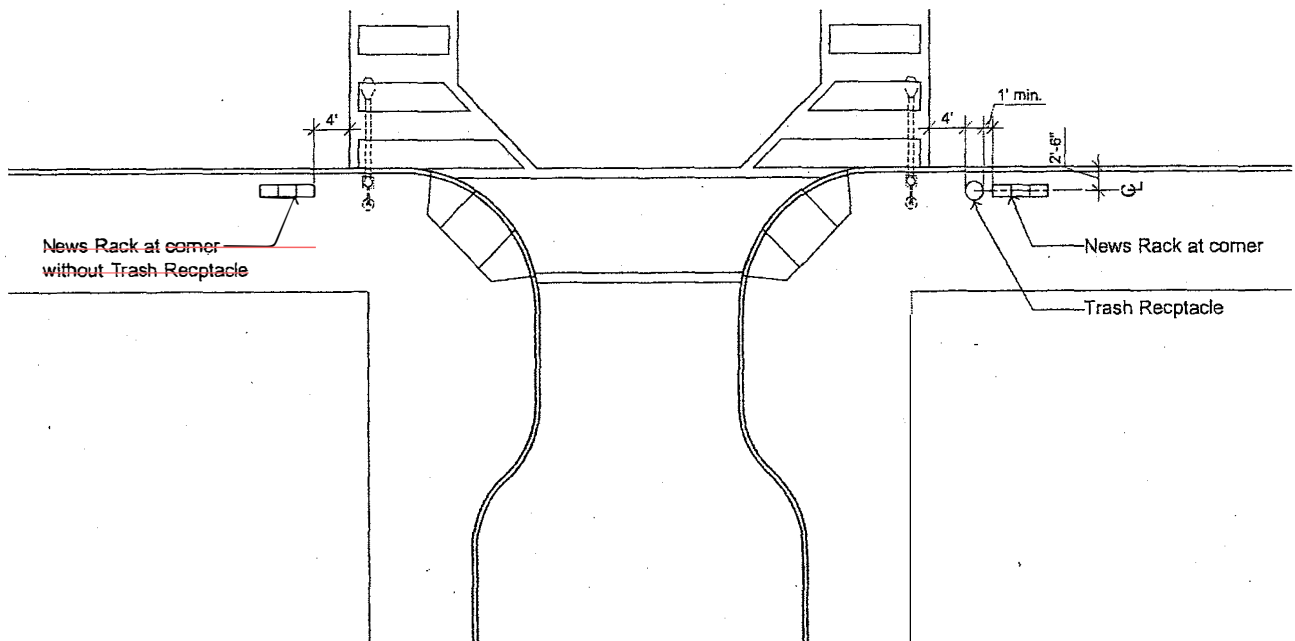
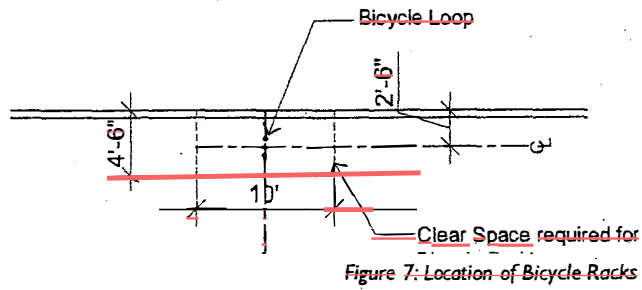


Figure 8: Location of News Racks (News Racks may not be placed within Bus Stop locations)

## ~~5. Implementation and Phasing~~

### ~~5.1 Phasing of Improvements and Funding Sources~~

~~It is anticipated that the implementation of improvements proposed in this document will occur over a longer period of time (5 to 10 years). Some improvements can be made sooner than others. For instance, the installation of any new traffic lights or the installation of new medians will most likely be long-range improvements as they require additional feasibility studies and final approval from Caltrans. Other improvements, such as the installation of individual bicycle racks or the planting of individual trees could be funded through existing City programs and therefore move ahead sooner. However, for implementation of the key pedestrian and streetscape improvements proposed in this document, the City will have to pursue funding from outside sources. The availability of funding will therefore largely determine the phasing of capital improvements for San Pablo Avenue.~~

~~The City has expressed its commitment to pursue a diverse range of funding sources as it has in the past in order to incrementally move portions of the Improvements Plan toward construction. Such funding sources include, but are not limited to the Alameda County Congestion Management Agency, the Metropolitan Transportation Commission's (MTC) Livable Communities program, and other programs that allow or support the implementation of capital streetscape improvements. The City could create cost reductions for some of the proposed improvements by coordinating its efforts with those of AC Transit and Caltrans (see 6.2 and 6.3)~~

~~In addition, the City should seek every opportunity to facilitate that private development projects contribute in a meaningful and coordinated way to the City's ongoing efforts of improving the public right-of-way. Such contributions may include the planting of new street trees along the frontage of a new development project, the installation of tree grates at existing tree locations, new pedestrian-scale light fixtures, or the improvement of a nearby crosswalk.~~

A prioritization index was included in the Improvements Matrix, in order to facilitate the determination of which improvements to move toward construction in the short-, mid-, or long-term within the incremental implementation process (see *Appendix*).

## 5.2 Coordination with Improvements Planned by Caltrans

At the time of writing of this document, it was expected that Caltrans will conduct comprehensive repaving work on San Pablo Avenue in the next two years. This work should trigger an upgrade of the sub-standard handicapped ramps along the corridor. The City intends to coordinate with Caltrans on this issue to facilitate the most efficient and cost-effective implementation of improvements proposed in this document. This pertains particularly to the construction of curb bulb-outs on side streets and the location of curb ramps in relation to proposed crosswalk improvements.

## 5.3 Coordination with Improvements Planned by AC Transit

The following paragraphs and diagrams describe how improvements planned by AC Transit and those proposed in this document should be coordinated so as to mutually enhance the overall streetscape character and pedestrian and transit-friendliness of the San Pablo Avenue corridor.

In the Fall of 2001, the Alameda County Congestion Management Agency published the final report of the San Pablo Avenue Corridor transit Operations and Improvements Study. Among other subjects, this report addresses Design Standards for Bus Stop Improvements as they are intended for implementation at AC Transit's bus stops throughout the San Pablo Corridor. The level of intensity of the proposed improvements is dependent on the importance of the stop as reflected by the number of boardings and alightings. Important bus stops will therefore receive a more extensive array of features as compared to a bus stops with significantly fewer boardings. Altogether there are four different typical improvements levels, which in turn may be laid out in different ways depending on local conditions (see example in *Figure 1*). The San Pablo Avenue Public Improvements Plan seeks to ensure the compatibility of AC Transit's intended improvements with those proposed in this document, as well as the improvements mutually supportive benefits of these improvements.

~~For this purpose a review was conducted of the bus stop improvement standards with respect to the proposed typical layouts of bus stop areas and the proposed furnishings and materials. The review concluded that bus stop improvements and public improvements will generally coordinate well with one another and typically have the desired mutually enhancing effect. To increase the cost efficient use of available capital improvement funds, the City intends to discuss with AC Transit the possibility of installing concurrently, and possibly through the same contractor, improvements funded by both City and AC Transit. A detailed coordination is not feasible within this document as the majority of bus stops will require one or the other level of customization of the presently known typical designs. However, the following general items should be observed in future coordination efforts:~~

#### ~~*Light Fixtures*~~

~~Where the final location of AC Transit bus stop light fixtures coincide with the location of a pedestrian scaled, pole-mounted light fixtures as proposed in this document, the installation of the City-funded fixture should be omitted.~~

#### ~~*Trash Receptacles*~~

~~The installation of city-funded trash receptacles should be omitted where AC Transit's trash receptacles are installed within 50 feet of an intersection where a city receptacle is required (see also 3.5 Pedestrian scaled Light Fixtures and Street Furnishings).~~

#### ~~*Pavement Layout*~~

~~The special paving proposed by AC Transit for installation at bus stops should relate to existing tree wells and crosswalk improvements.~~

#### ~~*News and Bicycle Racks*~~

~~No news or bicycle racks should be approved for installation within the AC Transit bus stop area where bus stop furnishings are installed. The minimum distance between news or bicycle racks installed in the Curb Zone and the end or beginning of a bus stop zone (as designated by AC Transit) is 10 feet.~~

#### ~~*Removal of obsolete Improvements at relocated or abandoned Bus Stops*~~

~~The initial set of bus stop improvements planned by AC Transit will include the relocation of a number of bus stops (far side vs. near side). In this context, the transit agency should be requested to remove all remnants of bus stop improvements at locations that are being abandoned as part of this process. This~~



~~request should be extended to older bus stop improvements, such as pavement tiles, trash receptacles and benches, that were partially left in place after bus stop locations were changed as a result of previous changes of bus service on San Pablo Avenue. Today, these left over improvements are unsightly and add to the visual clutter within the pedestrian realm.~~

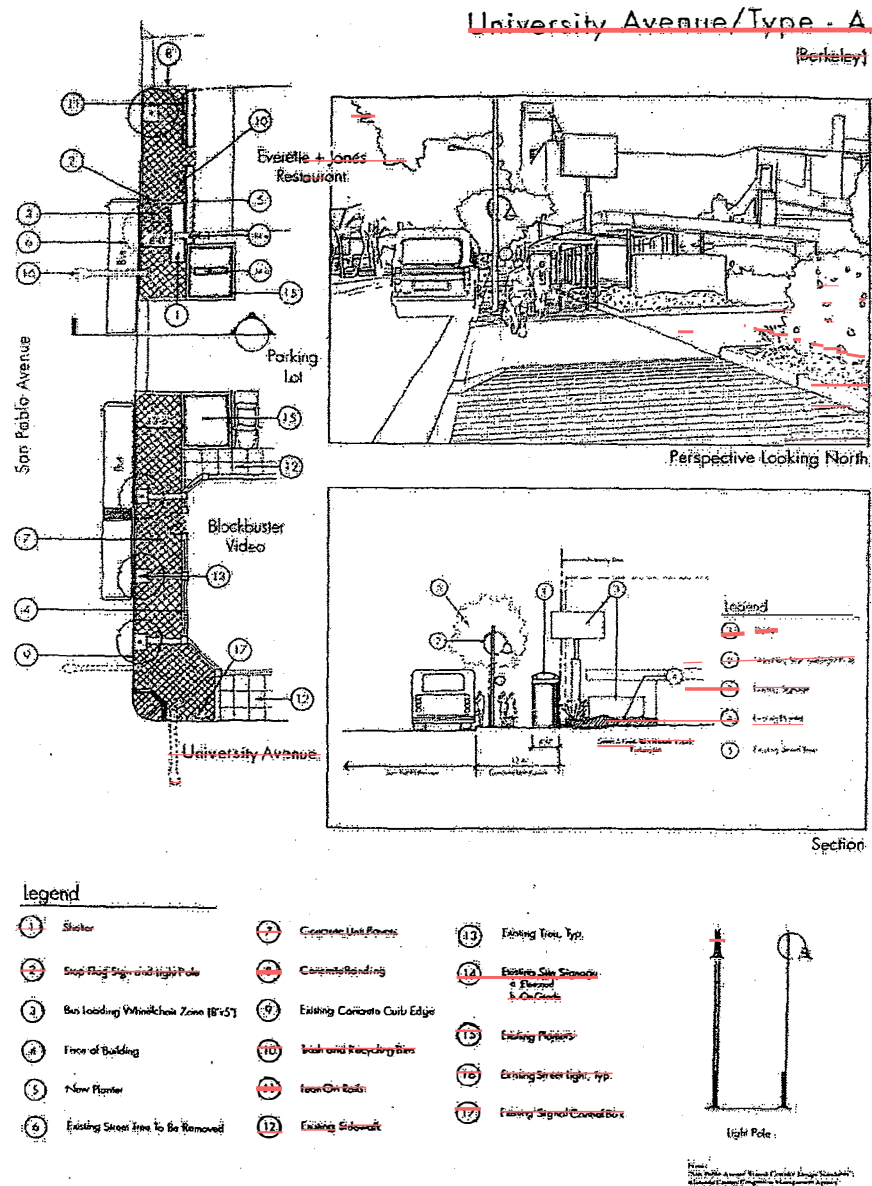


Figure 1: Example of bus stop improvements proposed by AC Transit

## ~~6. Preliminary Cost Estimates~~

~~Preliminary cost estimates were prepared to gauge the magnitude of funding needed for implementation of improvements suggested in this document.~~

~~Not included in the preliminary cost estimates were items which require additional feasibility studies, such as the extension or creation of new medians, or the introduction of mid-block crossings. Although any new signal on San Pablo Avenue will also require additional analysis and the issuing of warrants by Caltrans, their approximate cost has been included by adding \$250,000 per signal location.~~

### ~~How were the cost estimates prepared?~~

~~The corridor-wide and intersection-specific costs for improvements were arrived at by going through the following set of steps:~~

- ~~1. A set of intersection and crosswalk improvements was selected that addressed most variations of improvement and intersection configurations.~~
- ~~2. Schematic cost estimates were prepared for five different sample intersection/improvement configurations. Each estimate was assigned a category that could then be assigned to similar intersection/improvement configurations throughout the Corridor.~~

~~Category 1 (Cowper) \$32,000;~~

~~Category 2 (see below) \$95,000~~

~~Category 3 (Addison west) \$125,000;~~

~~Category 4 (Hearst \$205,000);~~

~~Category 5 (see below) \$275,000;~~

~~Category 6 (Addison east) \$130,000~~

~~Category 7 (University Avenue) \$300,000.~~

The individual sample cost estimates include cost items such as demolition of existing pavement and curbs, the construction of new curbs, landscaping, pedestrian-scale lighting, and other street furnishings (see Appendix for itemized schematic cost estimates for all sample intersections). A contingency of 25% and 8% design and engineering cost were added to the total calculated capital cost.

3. Two additional schematic cost estimates were prepared for configurations that are very similar to one the above but include an additional feature or one less feature. Category 2 is based on the configuration of intersection and improvements of Category 3, but includes one less crosswalk. Category 5 is based on Category 4 improvements, but in addition includes special paving for all four crosswalks.

4. All intersections throughout the Corridor were then assigned one of the above categories based on similarity to the sample intersection/improvements configuration (see Table 1 - "Improvements Matrix" in the Appendix).

5. To estimate the cost for improvements proposed to occur between intersections, a cost estimate was prepared for a total of 1000 feet of improvements on both sides of the street (approx. \$500,000 per 1,00 feet). This cost was then extrapolated to reflect the entire corridor length between intersections (10,000 feet).

### *Summary of Results*

Based on the above outlined schematic cost estimates, corridor-wide improvements suggested in this document would total an approximate \$11 million (see Table below and Tables 2 through 5 in the Appendix).

| Estimated Cost for Corridor-wide Improvements               |                     |
|-------------------------------------------------------------|---------------------|
| Total Estimated Cost for all Intersection Improvements      | \$5,600,000         |
| Total Estimated Cost for Improvements between Intersections | \$5,000,000         |
| Estimated Cost for new Signals                              | \$750,000           |
| <b>Schematic Total for Corridor-wide Improvements</b>       | <b>\$11,350,000</b> |

\* Not included are costs for new medians and special gateway designs

## **~~7. Appendix~~**

### **~~A. Capital Improvements Plan~~**

### **~~B. Improvements Matrix~~**

### **~~C. Summary of Streetscape Furnishings and Materials~~**

- ☐ ~~Pedestrian-scale Lighting and Refuge Lighting~~
- ☐ ~~Bench~~
- ☐ ~~Trash and Recycling Receptacle~~
- ☐ ~~Tree Grates~~
- ☐ ~~Bicycle Racks~~
- ☐ ~~Special Paving~~

### **~~D. Sample Cost Estimates~~**

~~San Pablo Avenue Public Improvements Plan ■ City of Berkeley, California~~

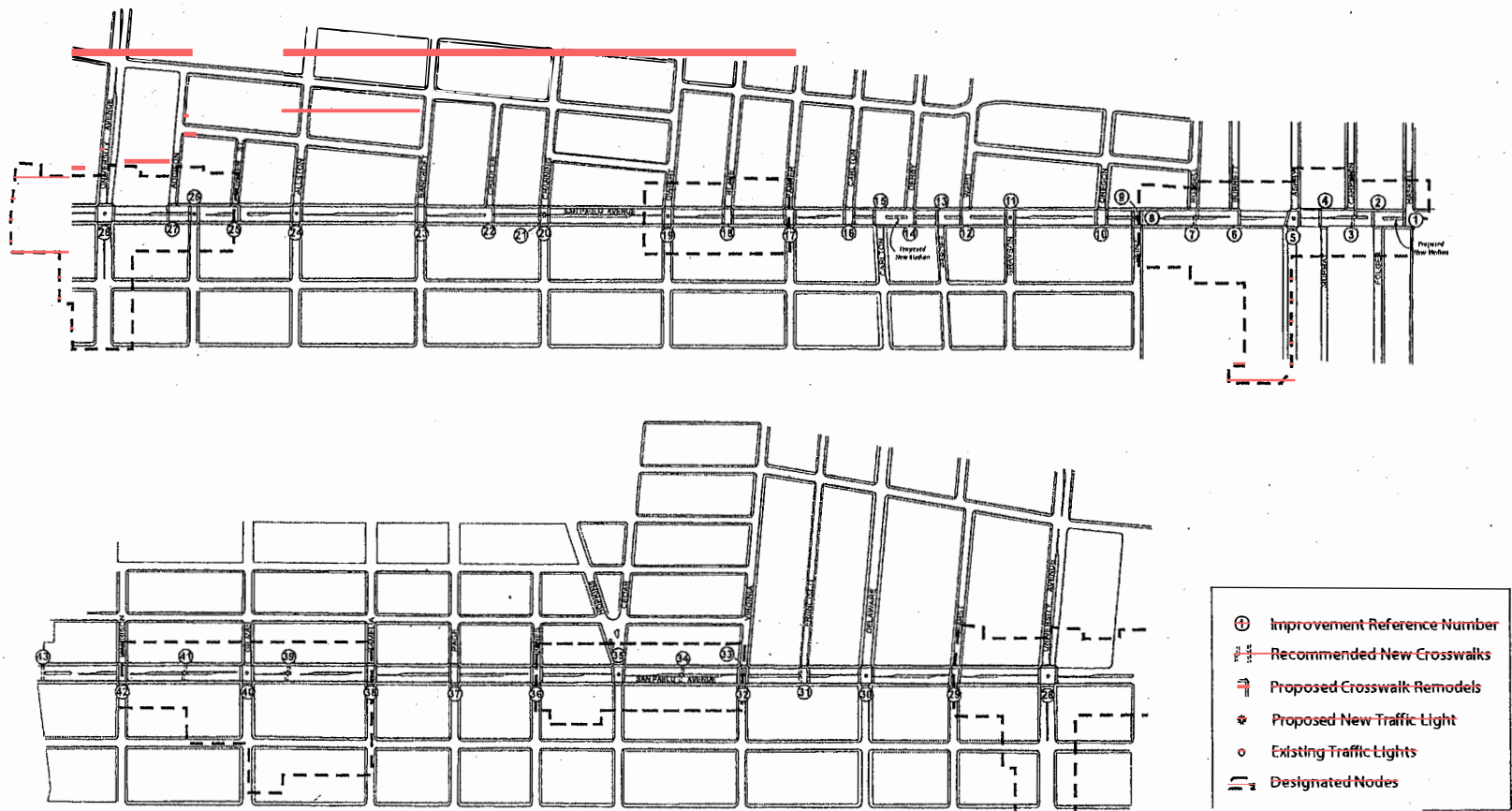


Figure 1: Capital Improvements

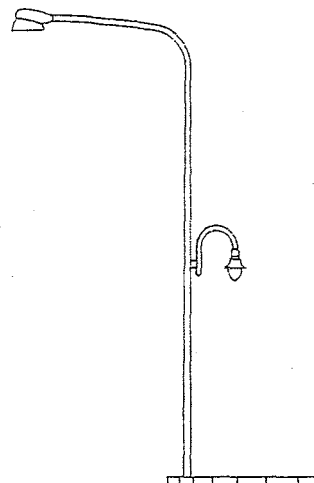


## C. Summary of Streetscape Furnishings and Materials

### *Pedestrian-scale Lighting and Refuge Lighting*

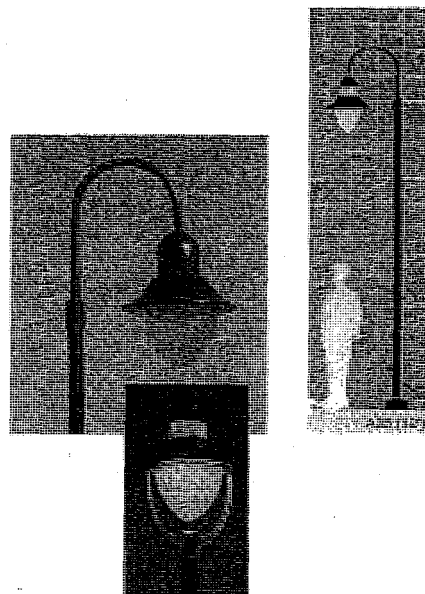
#### *Selux*

- ▢ ~~Beta Pendant (BPO D R3 custom bracket MH150w)~~
- ▢ ~~Mount on existing 'cobra head' light fixture (match mounting height of 12' pole fixture described below)~~



#### *Selux*

- ▢ ~~Paint with RAL 5008 to match other street furnishings.~~
- ▢ ~~Beta Pendant (BPO D R3 single MH150w)~~
- ▢ ~~Mount on 12 foot pole, with BC1 optional base cover.~~
- ▢ ~~Paint with RAL 5008 to match other street furnishings.~~



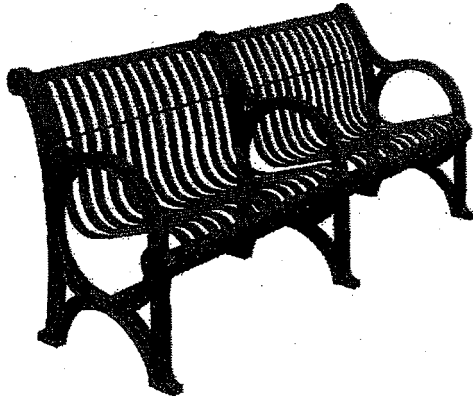
#### *BEGA*

- ▢ ~~8714MH In pavement Luminaire~~
- ▢ ~~MH 39 Watts~~



| Reference No. (see Image X of Report) | Cross streets at intersection  | R.O.W. Width of Side Street | T-Intersection | Located Inlet Edge of Designated Node | Special features/characteristics                                     | Removal of Existing Crosswalk | New Traffic Light Proposed | New Crosswalk Recommended | Remodel Of Existing Crosswalks Proposed | Crosswalk Cuts Through Median | Install New Special Paving for Crosswalks | Priority for Implementation of combined Crosswalk Improvements (1=highest, 4=lowest) | Priority Ranking Criteria                                                                                             | Built-Out proposed on Side Street (see per app' Intersection Layout) | Cost Category (see Chapter 6) |
|---------------------------------------|--------------------------------|-----------------------------|----------------|---------------------------------------|----------------------------------------------------------------------|-------------------------------|----------------------------|---------------------------|-----------------------------------------|-------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-------------------------------|
| 1                                     | Haskell (East)                 | 60'                         | yes            |                                       | Explore Incorporation of Entry Feature                               |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | 1- Bus Stop Access to stop in Oakland at 8th; 2- Draw of University Bldg.                                             |                                                                      | 2                             |
| 2                                     | Folger (East)                  | 69'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 3                                                                                    | Inlet X-ing where higher ranking ones exist nearby.                                                                   |                                                                      | 2                             |
| 3                                     | Carrison (East)                | 60'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 1 B                                                                                  | No Crosswalk currently exists causing reduced safety.                                                                 |                                                                      | 6                             |
| 4                                     | Murray (West)                  | 50'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | This X-ing was deemed unsafe because of too close proximity to Ashby Intersection.                                    |                                                                      | 1                             |
| 5                                     | Ashby (East/West)              | 60'/80'                     |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Key Node Intersection; 2- Bus Stop Access; 3- Access to businesses                                                 |                                                                      | 5                             |
| 6                                     | Burnett (East)                 | 80'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | 1- Access to businesses; 2- Bus Stop Access                                                                           |                                                                      | 2                             |
| 7                                     | Russell (East)                 | 60'                         | yes            |                                       | Bicycle Boulevard                                                    |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Bicycle Blvd. Crossing; 2- Access to businesses                                                                    |                                                                      | 6                             |
| 8                                     | Heinz (West)                   | 60'                         | yes            |                                       | Bicycle Boulevard                                                    |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Bicycle Blvd. Crossing; 2- Bus Stop Access; 3- Access to businesses                                                |                                                                      | 3                             |
| 9                                     | same                           |                             |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Bicycle Blvd. Crossing; 2- Bus Stop Access; 3- Access to businesses                                                | n/a                                                                  | t.b.d.                        |
| 10                                    | Oregon (East)                  | 70'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | Key Bus Stop Access from residential areas                                                                            |                                                                      | 3                             |
| 11                                    | Grayson (West)                 | 60'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 3                                                                                    | Bus Stop Access, but existing signal provides safety                                                                  |                                                                      | 3                             |
| 12                                    | Ward (East)                    | 80'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | Bus Stop Access                                                                                                       |                                                                      | 2                             |
| 13                                    | Pardoe (West)                  | 60'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 3                                                                                    | Inlet X-ing where higher ranking ones exist nearby.                                                                   |                                                                      | 2                             |
| 14                                    | Dorby (East)                   | 60'                         | yes            |                                       | New median is proposed between Dorby and Carleton.                   |                               |                            |                           |                                         |                               |                                           | 1 B                                                                                  | No Crosswalk currently exists causing reduced safety.                                                                 |                                                                      | 2                             |
| 15                                    | Carleton (West)                | 72'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 3                                                                                    | Inlet X-ing where higher ranking ones exist nearby.                                                                   |                                                                      | 2                             |
| 16                                    | Carleton (East)                | 60'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | Bus Stop Access                                                                                                       |                                                                      | 3                             |
| 17                                    | Parker (East/West)             | 60'/60'                     |                |                                       | Class 3 Bicycle Route                                                |                               |                            |                           |                                         |                               |                                           | 1 B                                                                                  | 1- Bus Stop Access; 2- Bicycle Route; 3- Key route to Workday workplaces                                              |                                                                      | 4                             |
| 18                                    | Blake (East)                   | 60'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | 1- Access to businesses; 2- Bus Stop Access                                                                           |                                                                      | 3                             |
| 19                                    | Dwight (East/West)             | 80'/80'                     |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Key Node Intersection; 2- Bus Stop Access; 3- Access to businesses                                                 |                                                                      | 5                             |
| 20                                    | Channing (East/West)           | 60'/60'                     |                |                                       | Bicycle Boulevard                                                    |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Bicycle Blvd. Crossing; 2- Bus Stop Access                                                                         |                                                                      | 4                             |
| 21                                    | same                           | same                        |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Bicycle Blvd. Crossing; 2- Bus Stop Access                                                                         | n/a                                                                  | t.b.d.                        |
| 22                                    | Chaucer (East)                 | 50'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 3                                                                                    | Bus Stop Access, but alternatives exist, particularly if new signal at Channing is built.                             |                                                                      | 2                             |
| 23                                    | Barcroft (East/West)           | 60'/60'                     |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | Bus Stop Access                                                                                                       |                                                                      | 4                             |
| 24                                    | Allison (East/West)            | 60'/80'                     |                |                                       | Class 3 Bicycle Route                                                |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Bus Stop Access; 2- Bicycle Route; 3- Key route to School west of 8th                                              |                                                                      | 4                             |
| 25                                    | Cowper (East)                  | 50'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 3                                                                                    | Inlet X-ing where higher ranking ones exist nearby.                                                                   |                                                                      | 1                             |
| 26                                    | Addison (West)                 | 60'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | Access to businesses                                                                                                  |                                                                      | 3                             |
| 27                                    | Addison (East)                 | 80'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 1 B                                                                                  | 1- Access to businesses; 2- Reduction of jay walking                                                                  |                                                                      | 6                             |
| 28                                    | University (East/West)         | 100'                        |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Key Node Intersection; 2- Bus Stop Access; 3- Access to businesses                                                 |                                                                      | 7                             |
| 29                                    | Hearst (East/West)             | 60'/60'                     |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | 1- Access to businesses; 2- Bus Stop Access                                                                           |                                                                      | 4                             |
| 30                                    | Delaware (East/West)           | 80'/80'                     |                |                                       | Class 2 (striped bicycle lane)                                       |                               |                            |                           |                                         |                               |                                           | 3                                                                                    | 1- Bus Stop Access; 2- Bicycle Route; but existing signal provides safety                                             |                                                                      | 4                             |
| 31                                    | Francisco (East)               | 50'                         | yes            |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | Important x-ing for School Access                                                                                     |                                                                      | 1                             |
| 32                                    | Virginia (East/West)           | 80'/80'                     |                |                                       | Bicycle Boulevard                                                    |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Bicycle Blvd. Crossing; 2- Bus Stop Access; 3- School Access                                                       |                                                                      | 4                             |
| 33                                    | same                           | n/a                         |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Bicycle Blvd. Crossing; 2- Bus Stop Access; 3- School Access                                                       | n/a                                                                  | t.b.d.                        |
| 34                                    | Midblock betw. Virginia/Cedar  | n/a                         |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 4                                                                                    | Long-term goal is the reduction of jay walking within Designated Nodes by introducing mid-block x-ings.               | n/a                                                                  | t.b.d.                        |
| 35                                    | Cedar (East/West)              | 70'/60'                     |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Key Node Intersection; 2- Bus Stop Access; 3- Access to businesses                                                 |                                                                      | 5                             |
| 36                                    | Jones (East/West)              | 60'/80'                     |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 3                                                                                    | Inlet X-ing where higher ranking ones exist nearby.                                                                   |                                                                      | 4                             |
| 37                                    | Page (East/West)               | 60'/60'                     |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | Bus Stop Access                                                                                                       |                                                                      | 4                             |
| 38                                    | Camella (East/West)            | 60'/60'                     |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | 1- Access to businesses; 2- Long blocks make quality x-ings at intersections more important.                          |                                                                      | 4                             |
| 39                                    | Midblock betw. Camella/Gilman  | n/a                         |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 4                                                                                    | Long-term goal is the reduction of jay walking within Designated Nodes by introducing mid-block x-ings.               | n/a                                                                  | t.b.d.                        |
| 40                                    | Gilman (East/West)             | 60'/80'                     |                |                                       | Class 2.5/Class 2 (striped bicycle lane)                             |                               |                            |                           |                                         |                               |                                           | 1 A                                                                                  | 1- Key Node Intersection; 2- Bus Stop Access; 3- Access to businesses                                                 |                                                                      | 5                             |
| 41                                    | Midblock betw. Gilman/Harrison | n/a                         |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 4                                                                                    | Long-term goal is the reduction of jay walking within Designated Nodes by introducing mid-block x-ings.               | n/a                                                                  | t.b.d.                        |
| 42                                    | Harrison (East/West)           | 60'/60'                     |                |                                       |                                                                      |                               |                            |                           |                                         |                               |                                           | 2                                                                                    | 1- Access to businesses; 2- Bus Stop Access; 3- Long blocks make quality x-ings at intersections more important.      |                                                                      | 4                             |
| 43                                    | at Berkeley/Albany City Limit  | n/a                         |                |                                       | Explore Incorporation of Entry Feature/ Coordinate w/ City of Albany |                               |                            |                           |                                         |                               |                                           | t.b.d.                                                                               | If pad/bike paths are implemented along Codomoos Creek, a x-ing at this location provide a safe connection across 8th | n/a                                                                  | t.b.d.                        |

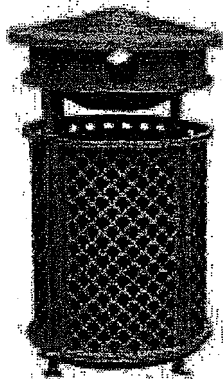
San Pablo Avenue Crosswalk and Intersection Improvements Matrix



*~~Benches (removable)~~*

*~~Canterbury International~~*

- ▣ ~~Modified Bowrey Bench~~
- ▣ ~~6 foot long, w/ back and additional center arm-rest~~
- ▣ ~~Paint with RAL 5008 to match other site furnishings, surface mount.~~



*~~Trash/Recycling Receptacle~~*

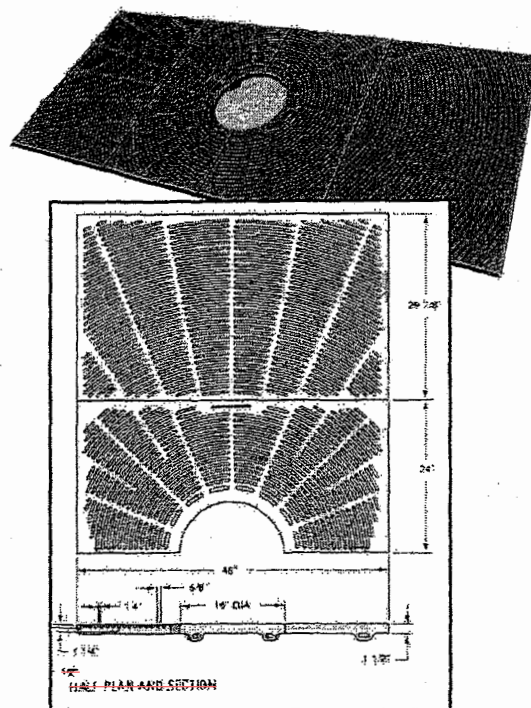
*~~Forms+Surfaces~~*

- ▣ ~~Urban Renaissance Receptacle SLURB-36SF~~
- ▣ ~~36 Gallon, side opening with dome top, fan grillwork (is City of Berkeley Standard)~~
- ▣ ~~Paint with RAL 5008 to match other street furnishings, surface mount.~~

### Tree Grates

#### Neenah Foundry Company

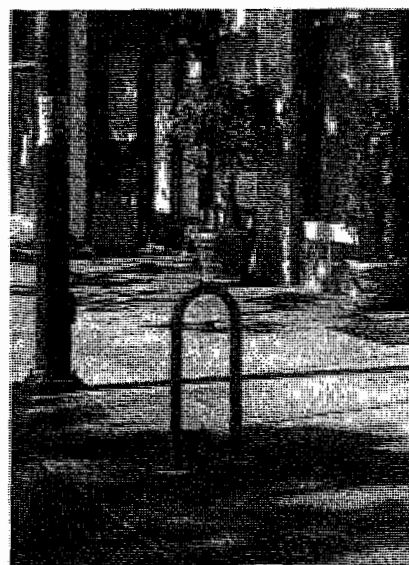
- R-9105 180° Rectangular
- Four piece 4'x 6' cast iron tree grate for frameless retrofit installation, 1/2" slot openings.



### Bicycle Racks

#### American Bicycle Security Company

- BR 3 - single loop for storage of 3 bicycles maximum, surface flanged, (is City of Berkeley Standard)
- Paint with RAL 5008 to match other street furnishings
- surface mount.



### *Special Paving at Crosswalks*

- ▣ ~~Ackerstone~~

### *Crosswalk Surface*

- ▣ ~~5 3/8" x 8 3/8" x 8" (WxLxT) Antique Kobble, precast concrete unit pavers, "Through Mix", w/ standard texture, color t.b.d.~~
- ▣ ~~Install in running bond pattern.~~

*Note: According to manufacturer, paver does not require a concrete base.*

### *Crosswalk Edges*

- ▣ ~~4" x 12" x 8" (WxLxT) Holland Stone 1~~
- ▣ ~~precast concrete unit pavers,~~
- ▣ ~~"Through Mix", w/ shotblast texture, color "pew-ter"~~
- ▣ ~~Install as 12" wide band on along either edge of Antique Kobble surface.~~

*Note: According to manufacturer, paver does not require a concrete base.*



**D. Sample Cost Estimates****Schematic Cost Estimates for typical Sets of Improvements****Table 1 - Cost Categories and Key Improvements Characteristics**

| Cost Category | Estimated Total for Proposed Improvements | Key Characteristics                                                                                                |
|---------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| 1             | \$32,000                                  | 50' ROW T-intersection; no bulb-outs; 1 crosswalk across San Pablo (except 2 at Francisco); (Chapter 3 - Figure 7) |
| 2             | \$95,000                                  | 60' ROW T-intersection; 2 bulb-outs; 1 crosswalks across San Pablo (Category 3 minus one crosswalk)                |
| 3             | \$125,000                                 | 60' ROW T-intersection; 2 bulb-outs; 2 crosswalks across San Pablo (Chapter 3 - Figure 5)                          |
| 4             | \$205,000                                 | 60' ROW Four-way intersection; 4 bulb-outs (except Delaware); 2 crosswalks across San Pablo (Chapter 3 - Figure 4) |
| 5             | \$275,000                                 | Ashby, Dwight, Cedar, and Gilman Intersections (Category 4 plus Special Crosswalk Paving); (Chapter 3 - Figure 6)  |
| 6             | \$130,000                                 | Single crossing through existing median; includes corral configuration in median (Chapter 3 - Figure 9)            |
| 7             | \$300,000                                 | University Avenue specific Improvements (Chapter - Figure 8)                                                       |

**Table 2 - Estimated Cost for Intersection and Crosswalk Improvements**

| Cost Category | Occurrence of Categories throughout Corridor | Cost per Occurrence | Total Cost  |
|---------------|----------------------------------------------|---------------------|-------------|
| 1             | 3                                            | \$32,000            | \$96,000    |
| 2             | 8                                            | \$95,000            | \$760,000   |
| 3             | 6                                            | \$125,000           | \$750,000   |
| 4             | 11                                           | \$205,000           | \$2,255,000 |
| 5             | 4                                            | \$275,000           | \$1,100,000 |
| 6             | 3                                            | \$130,000           | \$390,000   |
| 7             | 1                                            | \$300,000           | \$300,000   |
|               |                                              | Grand Total         | \$5,651,000 |

**Table 3 - Average Estimated Cost for Improvements between Intersections**

| Approx. Total Length of Street Segments between Intersections | Cost per 1000 feet of Improvements (on both sides of the street) | Total Cost  |
|---------------------------------------------------------------|------------------------------------------------------------------|-------------|
| 10,000 feet                                                   | \$500,000                                                        | \$5,000,000 |

**Table 4 - Estimated Cost for Corridor-wide Improvements**

|                                                             |                |
|-------------------------------------------------------------|----------------|
| Total Estimated Cost for all Intersection Improvements      | \$5,600,000    |
| Total Estimated Cost for Improvements between Intersections | \$5,000,000    |
| Estimated Cost for new Signals                              | \$750,000      |
| Schematic Total for Corridor-wide Improvements              | \$11,350,000 * |

\* Not included are costs for new medians and special gateway designs



**ATTACHMENT 1, EXHIBIT G**  
**DRAFT**  
**GENERAL PLAN AMENDMENTS**

**Land Use Element**

*Page LU-9*

The Land Use Element maintains the City's current industrial and manufacturing land use policies ~~of the 1993 West Berkeley Plan~~.

*Page LU-25*

Policy LU-47 San Pablo Avenue Specific Plan

Implement the San Pablo Avenue Specific Plan and take action to achieve the four desired outcomes of the Plan:

1. Increased Diversity and Supply of Housing
2. Increased Business Activity to Support a Thriving Community
3. Enhanced Interaction Between Public and Private Spaces
4. Enhanced Local and Citywide Access

*Page LU-29*

*Avenue Commercial*

These areas of Berkeley are characterized by pedestrian-oriented commercial development and multi-family residential structures. These areas are typically located on wide, multi-lane avenues served by transit or BART. Appropriate uses for these areas include: local-serving and regional-serving commercial, residential, office, community service, and institutional. Building intensity will generally range from a Floor Area Ratio (FAR) of less than 1.0 to a FAR of 8.0. Population density will generally range from 44 to 88 persons per acre.

Within the Southside Plan Area, residential development in the Telegraph Avenue Commercial (C-T) district is subject to a minimum density of 200 dwelling units per acre and minimum population density of 500 persons per acre. There is no residential density limit. This allows for greater flexibility in housing types to maximize housing opportunities in the Southside Plan Area.

Within the San Pablo Avenue Specific Plan Area, there is no minimum or maximum residential density limit. This allows for greater flexibility in housing types to maximize housing opportunities in the Specific Plan Area.

For information purposes, the compatible zoning districts for this classification are shown below with accompanying development standards.

| Zoning District                                       | Maximum FAR | Maximum Height  |
|-------------------------------------------------------|-------------|-----------------|
| South Area Commercial (C-SA):                         | 4.0         | 24-60 ft        |
| General Commercial (C-1) <sup>1</sup> :               | 3.0         | 35-50 ft        |
| Telegraph Avenue Commercial (C-T):                    | 3.0 – 8.0   | 50-85 ft        |
| West Berkeley Commercial (C-W) <sup>2</sup> :         | 3.0         | 40-50 ft        |
| <u>San Pablo Avenue Commercial (C-SP)<sup>2</sup></u> | <u>4.25</u> | <u>40-75 ft</u> |

<sup>1</sup> Please see the University Avenue Strategic Plan for a description and location of development nodes on University Avenue in the C-1 Zoning District.

~~<sup>2</sup> Please see the West Berkeley Plan for a description and location of development nodes on San Pablo Avenue in the C-W Zoning District~~

<sup>2</sup> Please see the San Pablo Avenue Specific Plan for a description and location of development nodes on San Pablo Avenue in the C-SP District.

Page LU-31

*Mixed Use-Residential*

These areas are intended to maintain and preserve areas of the city for lighter manufacturing and industrial uses and allow for additional uses, including residential, where determined appropriate by zoning, and only if the use will not weaken Berkeley's manufacturing and industrial economy. ~~Appropriate uses for these areas are identified in the West Berkeley Plan.~~ Within these areas, building intensity will generally range from a Floor Area Ratio (FAR) of less than 1 to an FAR of 1.5. Population density will generally range from 22 to 44 persons per acre, where housing is allowed.

For information purposes, the compatible zoning district for this classification is Mixed Use-Residential (MU-R), which allows a maximum FAR of 1 to 1.5 and a maximum building height of 28 to 35 feet.

Page LU-32

~~University Avenue and West Berkeley~~ Designated Nodes

Both the ~~West Berkeley~~ San Pablo Avenue Specific Plan and the University Avenue Strategic Plan established specific "nodes" along University Avenue and San Pablo Avenue in which specific regulatory policies and programs would be applied as an overlay to accomplish area plan goals for revitalization in these specific locations.

See the Berkeley Zoning Ordinance, the ~~West Berkeley~~ San Pablo Avenue Specific Plan, and the University Avenue Strategic Plan for more detail.

**Transportation Element**

Page T-1

The following plans and studies inform the Transportation Element:

- Downtown Plan, ~~West Berkeley~~ San Pablo Avenue Specific Plan, South Berkeley Plan, South Shattuck Strategic Plan, and University Avenue Strategic Plan.

**Environmental Management Element**

Page EM-9

Noise sources related to heavy manufacturing, located mainly in industrialized West Berkeley, were once a more dominant contributor to the noise environment. In the past, noise-related land use conflicts between West Berkeley and other more residential sectors of the city were at a minimum, given the distance between these areas. More recently, however, increased residential and commercial uses in West Berkeley have begun to threaten industrial uses, in part through a changing perception of environmental standards as they relate to the manufacturing process. The presumption in the past in most industrially zoned areas was that noise generated by an industrial use was an acceptable part of the manufacturing context. The Concept Plan for West Berkeley was adopted in 1991 and included policies to address these types of noise conflicts in order to maintain the historic mix of land uses in an environmentally responsible manner. ~~The West Berkeley Plan, adopted in 1993, calls for more stringent environmental review and regulation, including the mitigation of noise through both industrial and residential measures.~~

**Economic Development and Employment Element**

Page ED-6

In the early 1990s the City established the Berkeley-Oakland Recycling Market Development Zone (RMDZ) as part of a strategy to increase the number of environmental businesses in

Berkeley. This was followed in 1993 with a formal adoption of the "Environmental Economy" initiative. Also in 1993, the City adopted the West Berkeley Plan, which establishes an economic development strategy to maintain manufacturing in the mix of West Berkeley uses. In 1997 the City revised the Zoning Ordinance to implement the West Berkeley Plan. In 2000 the City adopted further revisions to provide appropriate locations for recycling uses, and other uses consistent with the West Berkeley Plan and the City's Environmental Economy initiative. In 2026, the City retired the West Berkeley Plan.

Page ED-8

**Policy ED-2 West Berkeley Industry**

Continue to ~~implement the West Berkeley Plan, with its central emphasis on~~ protecting and strengthening the city's manufacturing sector. (Also see Land Use Policies LU-33 and LU-34.)

Actions:

Publicize the economic, social, and environmental benefits of industry, emphasizing the health of Berkeley manufacturing, the "high-tech" dimensions of industry in Berkeley and the United States, manufacturing's comparatively high "multiplier" effect on the economy, and the community value of well-paying, high-benefit, low-bar-of-entry industrial employment.

A. Work with the West Berkeley Association of Industrial Companies and the sustainable business associations to maintain West Berkeley's attractiveness as a site of manufacturing and to facilitate relations with other business in West Berkeley and with West Berkeley residents and community members.

~~B. Continue to evaluate the effectiveness of the West Berkeley Plan.~~

~~C. B.~~ Focus business assistance and economic development efforts in West Berkeley on retention and expansion of industrial and Environmental Economy businesses.

~~D. C.~~ Examine use of land trusts, investment loans and funds, and business incubators to preserve land and buildings for industrial uses.

**Urban Design and Preservation Element**

Page UD-5

Recognizing the particular character of areas, the City Council has adopted a series of area plans, including the Waterfront Plan (1986), Downtown Plan (1990), South Berkeley Plan (1990), ~~West Berkeley Plan (1993)~~, South Shattuck Strategic Plan (1997), University Avenue Strategic Plan (1997), ~~and the Southside Plan (2011)~~, and the San Pablo Avenue Specific Plan (2026).

Page UD-21

**Policy UD-26 Pedestrian-Friendly Design**

Architecture and site design should give special emphasis to enjoyment by, and convenience and safety for, pedestrians. (Also see Land Use Policies LU-11, LU-20, LU-21, LU-26, and LU-27, LU-47, and Transportation Policy T-47.)

ORDINANCE NO. -N.S.

AMENDMENTS TO THE ZONING DISTRICTS AND MAP CHAPTER (BMC 23.108), COMMERCIAL DISTRICT CHAPTER (BMC 23.204), MANUFACTURING DISTRICT CHAPTER (BMC 23.206), SUPPLEMENTAL USE REGULATIONS CHAPTER (23.302), GENERAL DEVELOPMENT STANDARDS CHAPTER (23.304), LIVE/WORK CHAPTER (23.312), PARKING AND LOADING CHAPTER (23.322), ADMINISTRATIVE RESPONSIBILITY CHAPTER (23.402), AND SPECIFIC PERMIT REQUIREMENTS CHAPTER (23.406) TO ENACT THE SAN PABLO AVENUE SPECIFIC PLAN AND RETIRE THE WEST BERKELEY PLAN

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. Table 23.108-1 Zoning Districts within BMC Section 23.108.020(A) is amended to read as follows:

TABLE 23.108 1: ZONING DISTRICTS

| DISTRICT SYMBOL              | NAME OF DISTRICT                 |
|------------------------------|----------------------------------|
| <b>Residential Districts</b> |                                  |
| R-1                          | Residential Multi-Unit 1         |
| ES-R                         | Environmental Safety Residential |
| R-2                          | Residential Multi-Unit 2         |
| R-2A                         | Residential Multi-Unit 2A        |
| R-3                          | Multiple-family Residential      |
| R-4                          | Multi-family Residential         |
| R-5                          | High Density Residential         |
| R-S                          | Residential Southside            |
| R-SMU                        | Residential Southside Mixed Use  |
| R-BMU                        | Residential BART Mixed Use       |
| <b>Commercial Districts</b>  |                                  |
| C-C                          | Corridor Commercial              |
| C-U                          | University Avenue Commercial     |
| C-N                          | Neighborhood Commercial          |
| C-E                          | Elmwood Commercial               |
| C-NS                         | North Shattuck Commercial        |
| C-SA                         | South Area Commercial            |

| DISTRICT<br>SYMBOL             | NAME OF DISTRICT                           |
|--------------------------------|--------------------------------------------|
| C-T                            | Telegraph Avenue Commercial                |
| C-SO                           | Solano Avenue Commercial                   |
| C-DMU                          | Downtown Mixed-Use                         |
| C-W                            | West Berkeley Commercial                   |
| C-AC                           | Adeline Corridor Commercial                |
| <u>C-SP</u>                    | <u>San Pablo Commercial</u>                |
| <b>Manufacturing Districts</b> |                                            |
| M                              | Manufacturing                              |
| MM                             | Mixed Manufacturing                        |
| MU-LI                          | Mixed Use-Light Industrial                 |
| MU-R                           | Mixed Use-Residential                      |
| M-RD                           | Manufacturing, Research and<br>Development |
| <b>Special Districts</b>       |                                            |
| S                              | Specific Plan                              |
| U                              | Unclassified                               |

Section 2. That Table 23.204-1 Allowed Uses in the Commercial Districts within BMC Chapter 23.204.020 is amended to read as follows:

**Table 23.204-1: Allowed Uses in Commercial Districts**

| ZC = Zoning Certificate<br>AUP = Administrative Use Permit<br>UP(PH) = Use Permit<br>NP = Not Permitted<br>-- = Permitted with AUP, see 23.204.020(B)<br>[#] = Table Note Permit Requirement<br>* Use-Specific Regulations Apply | COMMERCIAL DISTRICTS                |         |        |        |        |         |        |        |        |                     |        |                | USE-SPECIFIC REGULATIONS                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------|--------|--------|--------|---------|--------|--------|--------|---------------------|--------|----------------|-------------------------------------------------------------------|
|                                                                                                                                                                                                                                  | C-C                                 | C-U     | C-N    | C-E    | C-NS   | C-SA    | C-T    | C-SO   | C-DMU  | C-W                 | C-AC   | <u>C-SP</u>    |                                                                   |
| <b>Residential Uses</b>                                                                                                                                                                                                          |                                     |         |        |        |        |         |        |        |        |                     |        |                |                                                                   |
| <b>Accessory Dwelling Unit</b>                                                                                                                                                                                                   | See 23.306—Accessory Dwelling Units |         |        |        |        |         |        |        |        |                     |        |                |                                                                   |
| <b>Dwellings</b>                                                                                                                                                                                                                 |                                     |         |        |        |        |         |        |        |        |                     |        |                |                                                                   |
| <b>Single-Family Residential</b>                                                                                                                                                                                                 | UP(PH)                              | UP(PH)* | UP(PH) | UP(PH) | UP(PH) | UP(PH)  | UP(PH) | UP(PH) | UP(PH) | UP(PH)              | UP(PH) | <u>UP(PH)*</u> | 23.204.060(B)(3);<br>23.302.070(H);<br><u>23.204.160(D)(3)(a)</u> |
| <b>Multi-Unit Residential</b>                                                                                                                                                                                                    | UP(PH)                              | UP(PH)* | UP(PH) | UP(PH) | UP(PH) | UP(PH)  | UP(PH) | UP(PH) | UP(PH) | UP(PH)              | UP(PH) | <u>UP(PH)</u>  | 23.204.060(B)(3);<br>23.302.070(H);<br><u>23.302.070(M)</u>       |
| <b>Group Living Accommodation</b>                                                                                                                                                                                                | UP(PH)                              | UP(PH)* | UP(PH) | UP(PH) | UP(PH) | UP(PH)  | UP(PH) | UP(PH) | UP(PH) | UP(PH)              | UP(PH) | <u>UP(PH)*</u> | 23.204.060(B)(3);<br>23.302.070(H);<br><u>23.204.160(D)(3)(a)</u> |
| <b>Hotel, Residential</b>                                                                                                                                                                                                        | UP(PH)                              | UP(PH)* | UP(PH) | UP(PH) | UP(PH) | UP(PH)  | UP(PH) | UP(PH) | UP(PH) | UP(PH)              | UP(PH) | <u>UP(PH)</u>  | 23.204.060(B)(3);<br>23.302.070(H)                                |
| <b>Mixed-Use Residential</b>                                                                                                                                                                                                     | UP(PH)                              | UP(PH)* | UP(PH) | UP(PH) | UP(PH) | UP(PH)* | UP(PH) | UP(PH) | UP(PH) | See Table 23.204-41 | UP(PH) | <u>UP(PH)*</u> | 23.204.060(B)(3);23.302.070(H);<br><u>23.302.070(M)</u>           |
| <b>Senior Congregate</b>                                                                                                                                                                                                         | See 23.302.070.I                    |         |        |        |        |         |        |        |        |                     |        |                |                                                                   |



| ZC = Zoning Certificate<br>AUP = Administrative Use Permit<br>UP(PH) = Use Permit<br>NP = Not Permitted<br>-- = Permitted with AUP, see 23.204.020(B)<br>[#] = Table Note Permit Requirement<br>* Use-Specific Regulations Apply | COMMERCIAL DISTRICTS |        |        |        |        |        |        |        |        |        |        |        | USE-SPECIFIC REGULATIONS  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U    | C-N    | C-E    | C-NS   | C-SA   | C-T    | C-SO   | C-DMU  | C-W    | C-AC   | C-SP   |                           |
| Housing                                                                                                                                                                                                                          |                      |        |        |        |        |        |        |        |        |        |        |        |                           |
| Public and Quasi-Public Uses                                                                                                                                                                                                     |                      |        |        |        |        |        |        |        |        |        |        |        |                           |
| Child Care Center                                                                                                                                                                                                                | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | AUP    |                           |
| Cemetery/Crema tory/Mausoleum                                                                                                                                                                                                    | NP                   | NP     | NP     | NP     | NP     | NP     | NP     | NP     | NP     | NP     | NP     | NP     |                           |
| Club/Lodge                                                                                                                                                                                                                       | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | NP     | UP(PH) | UP(PH) | NP     | UP(PH) | UP(PH) | UP(PH) | AUP    |                           |
| Columbaria                                                                                                                                                                                                                       | See 23.302.070.C     |        |        |        |        |        |        |        |        |        |        |        |                           |
| Community Care Facility                                                                                                                                                                                                          | AUP                  | AUP    | AUP    | AUP    | AUP    | AUP    | AUP    | AUP    | AUP    | ZC     | AUP    | ZC     |                           |
| Community Center                                                                                                                                                                                                                 | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | ZC     |                           |
| Emergency Shelter, 25 beds or fewer                                                                                                                                                                                              | ZC                   | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | 23.308-Emergency Shelters |
| Emergency Shelter, 26 to 60 beds                                                                                                                                                                                                 | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | ZC     | UP(PH) | UP(PH) | UP(PH) |                           |
| Emergency Shelter, more than 60 beds                                                                                                                                                                                             | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) |                           |

| ZC = Zoning Certificate<br>AUP = Administrative Use Permit<br>UP(PH) = Use Permit<br>NP = Not Permitted<br>-- = Permitted with AUP, see 23.204.020(B)<br>[#] = Table Note Permit Requirement<br>* Use-Specific Regulations Apply | COMMERCIAL DISTRICTS |        |        |        |        |        |        |        |        |        |        |         | USE-SPECIFIC REGULATIONS |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U    | C-N    | C-E    | C-NS   | C-SA   | C-T    | C-SO   | C-DMU  | C-W    | C-AC   | C-SP    |                          |
| Hospital                                                                                                                                                                                                                         | UP(PH)               | UP(PH) | NP     | NP     | NP     | NP     | NP     | NP     | UP(PH) | UP(PH) | NP     | UP(PH)  |                          |
| Library                                                                                                                                                                                                                          | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH)  |                          |
| Low Barrier Navigation Center                                                                                                                                                                                                    | ZC                   | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC      |                          |
| Mortuaries and Crematories                                                                                                                                                                                                       | UP(PH)               | UP(PH) | NP     | NP     | NP     | NP     | NP     | NP     | NP     | UP(PH) | NP     | UP(PH)  |                          |
| Municipal Animal Shelter                                                                                                                                                                                                         | –                    | –      | –      | –      | –      | –      | –      | –      | –      | –      | --     | –*      | 23.204.160(D)(3)(a)      |
| Nursing Home                                                                                                                                                                                                                     | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH)  |                          |
| Park/Playground                                                                                                                                                                                                                  | ZC                   | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | AUP    | ZC     | ZC      |                          |
| Public Safety and Emergency Service                                                                                                                                                                                              | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH)  |                          |
| Public Utility Substation/Tank                                                                                                                                                                                                   | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH)* | 23.204.160(D)(3)(a)      |
| Religious Assembly                                                                                                                                                                                                               | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | AUP    | UP(PH) | AUP     |                          |
| School                                                                                                                                                                                                                           | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH)  |                          |
| School,                                                                                                                                                                                                                          | AUP                  | AUP    | AUP    | AUP    | AUP    | AUP    | AUP    | AUP    | AUP    | UP(PH) | AUP    | AUP     |                          |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------------|---------------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U     | C-N     | C-E     | C-NS    | C-SA    | C-T     | C-SO    | C-DMU   | C-W     | C-AC    | C-SP           |                                 |
| Vocational                                                                                                                                                                                                                       |                      |         |         |         |         |         |         |         |         |         |         |                |                                 |
| Supportive Housing                                                                                                                                                                                                               | ZC*                  | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | <u>ZC*</u>     | 23.302.070.I-Supportive Housing |
| <b>Retail Uses</b>                                                                                                                                                                                                               |                      |         |         |         |         |         |         |         |         |         |         |                |                                 |
| Alcoholic Beverage Retail Sale                                                                                                                                                                                                   | UP(PH)*              | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | <u>UP(PH)*</u> | 23.310                          |
| Cannabis Retailer                                                                                                                                                                                                                | ZC*                  | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | <u>ZC*</u>     | 23.320; 12.21; and 12.22        |
| Cannabis Retailer, Delivery Only                                                                                                                                                                                                 | ZC*                  | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | ZC*     | --      | <u>ZC*</u>     | 23.320; 12.21; and 12.22        |
| Firearm/Munitions Business                                                                                                                                                                                                       | UP(PH)*              | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | NP      | UP(PH)  | UP(PH)  | <u>UP(PH)*</u> | 23.302.070(D)                   |
| Industrial and Mining Products                                                                                                                                                                                                   | —                    | —       | —       | —       | —       | —       | —       | —       | —       | —       | --      | ==             |                                 |
| Pawn Shop/Auction House                                                                                                                                                                                                          | UP(PH)               | —       | NP      | NP      | NP      | NP      | NP      | NP      | UP(PH)  | UP(PH)  | NP      | <u>UP(PH)</u>  |                                 |
| Pet Store                                                                                                                                                                                                                        | AUP                  | AUP     | AUP     | AUP     | AUP     | AUP     | AUP     | AUP     | AUP     | ZC      | AUP     | <u>ZC</u>      |                                 |
| Retail, General                                                                                                                                                                                                                  | ZC                   | ZC      | ZC*     | ZC*     | ZC*     | ZC      | ZC      | ZC*     | ZC      | ZC*     | ZC*     | <u>ZC*</u>     | 23.204.040(C)<br>23.204.040(D)  |

| ZC = Zoning Certificate<br>AUP = Administrative Use Permit<br>UP(PH) = Use Permit<br>NP = Not Permitted<br>-- = Permitted with AUP, see 23.204.020(B)<br>[#] = Table Note Permit Requirement<br>* Use-Specific Regulations Apply | COMMERCIAL DISTRICTS |         |         |         |         |         |         |         |        |         |         |                | USE-SPECIFIC REGULATIONS                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|----------------|--------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U     | C-N     | C-E     | C-NS    | C-SA    | C-T     | C-SO    | C-DMU  | C-W     | C-AC    | <u>C-SP</u>    |                                                                                            |
| Smoke Shop                                                                                                                                                                                                                       | UP(PH)*              | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | UP(PH)* | NP     | UP(PH)* | UP(PH)* | <u>UP(PH)*</u> | 23.302.070.I                                                                               |
| <b>Personal and Household Service Uses</b>                                                                                                                                                                                       |                      |         |         |         |         |         |         |         |        |         |         |                |                                                                                            |
| Personal and Household Services, General                                                                                                                                                                                         | ZC                   | ZC      | ZC      | ZC      | ZC      | ZC      | ZC      | ZC      | ZC     | ZC      | ZC      | <u>ZC</u>      |                                                                                            |
| Kennels and Pet Boarding                                                                                                                                                                                                         | NP                   | NP      | NP      | NP      | NP      | NP      | NP      | NP      | NP     | UP(PH)  | NP      | <u>UP(PH)*</u> | <u>23.204.160(D)(3)(a)</u>                                                                 |
| Laundromats and Cleaners                                                                                                                                                                                                         | AUP                  | AUP     | UP(PH)  | UP(PH)  | UP(PH)  | AUP     | AUP     | UP(PH)  | UP(PH) | AUP     | AUP     | <u>AUP</u>     |                                                                                            |
| Veterinary Clinic                                                                                                                                                                                                                | UP(PH)               | UP(PH)  | UP(PH)  | UP(PH)  | UP(PH)  | UP(PH)  | UP(PH)  | UP(PH)  | UP(PH) | UP(PH)  | UP(PH)  | <u>UP(PH)</u>  |                                                                                            |
| Video Tape/Disk Rental                                                                                                                                                                                                           | ZC                   | ZC      | ZC      | AUP     | ZC      | -       | ZC      | ZC      | ZC     | ZC      | NP      | <u>ZC</u>      |                                                                                            |
| <b>Office Uses</b>                                                                                                                                                                                                               |                      |         |         |         |         |         |         |         |        |         |         |                |                                                                                            |
| Business Support Services                                                                                                                                                                                                        | ZC                   | ZC      | ZC      | ZC      | ZC      | ZC      | ZC*     | ZC      | ZC     | ZC      | ZC      | <u>ZC*</u>     | 23.204.110(B)(4);<br><u>23.204.160(D)(3)(a)</u>                                            |
| Banks and Financial Services, Retail                                                                                                                                                                                             | AUP                  | AUP     | UP(PH)  | UP(PH)  | UP(PH)  | ZC      | AUP*    | UP(PH)  | ZC*    | AUP     | ZC      | <u>ZC*</u>     | 23.204.110 (B)(4);<br>23.204.130(B)(3);<br>23.204.130(D)(3);<br><u>23.204.160(D)(3)(a)</u> |
| Insurance                                                                                                                                                                                                                        | ZC                   | ZC      | ZC*     | ZC*     | ZC*     | ZC      | ZC*     | ZC*     | ZC*    | ZC      | ZC      | <u>ZC*</u>     | 23.204.040.D;23.204.110B.                                                                  |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|------|------|--------|---------|----------|--------|---------|---------|--------|---------------|---------------------------------------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U     | C-N  | C-E  | C-NS   | C-SA    | C-T      | C-SO   | C-DMU   | C-W     | C-AC   | <u>C-SP</u>   |                                                         |
| Agents, Title Companies, Real Estate Agents, Travel Agents                                                                                                                                                                       |                      |         |      |      |        |         |          |        |         |         |        |               | 4; 23.204.130.D.3;<br><br><u>23.204.160(D)(3)(a)</u>    |
| Medical Practitioners                                                                                                                                                                                                            | ZC                   | ZC      | AUP  | NP   | UP(PH) | ZC      | AUP*     | UP(PH) | ZC*     | ZC      | ZC     | <u>ZC</u>     | 23.204.040(B);<br>23.204.110(B)(4);<br>23.204.130(D)(3) |
| Non-Chartered Financial Institutions                                                                                                                                                                                             | UP(PH)*              | UP(PH)* | NP   | NP   | NP     | UP(PH)* | UP(PH)*) | NP     | NP      | UP(PH)* | UP(PH) | <u>NP</u>     | 23.302.070(F)<br>23.204.110(B)(4)                       |
| Office, Business and Professional                                                                                                                                                                                                | ZC                   | ZC      | AUP* | AUP* | ZC*    | ZC      | ZC*      | AUP*   | ZC*     | ZC      | ZC     | <u>ZC</u>     | 23.204.040(B);<br>23.204.110(B)(4);<br>23.204.130(D)(3) |
| <b>Food and Alcohol Service, Lodging, Entertainment, and Assembly Uses</b>                                                                                                                                                       |                      |         |      |      |        |         |          |        |         |         |        |               |                                                         |
| Adult-oriented Business                                                                                                                                                                                                          | UP(PH)*              | UP(PH)* | NP   | NP   | NP     | NP      | NP       | NP     | UP(PH)* | UP(PH)* | NP     | <u>UP(PH)</u> | 23.302.070.A                                            |
| Amusement Device Arcade                                                                                                                                                                                                          | See 23.204.040.A     |         |      |      |        |         |          |        |         |         |        |               | 23.302.070.B                                            |
| Bar/Cocktail Lounge/Tavern/Tap Room/Wine Tasting                                                                                                                                                                                 | AUP*                 | AUP*    | AUP* | AUP* | AUP*   | AUP*    | AUP*     | AUP*   | AUP*    | AUP*    | AUP*   | <u>AUP</u>    | 23.310                                                  |
| Commercial Recreation Center                                                                                                                                                                                                     | See 23.204.040.A     |         |      |      |        |         |          |        |         |         |        |               |                                                         |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------|--------|------|--------|--------|--------|--------|--------|--------|--------|------|--------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U    | C-N    | C-E  | C-NS   | C-SA   | C-T    | C-SO   | C-DMU  | C-W    | C-AC   | C-SP |                          |
| Entertainment Establishment                                                                                                                                                                                                      | UP(PH)               | UP(PH) | UP(PH) | NP   | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | AUP* | 23.204.160(D)(3)(b)      |
| Food Service Establishment, Under 3,000 Sq. Ft.                                                                                                                                                                                  | ZC*                  | ZC*    | ZC*    | ZC*  | ZC*    | ZC*    | ZC*    | ZC*    | ZC*    | ZC*    | ZC*    | ZC*  | 23.302.070(E)            |
| Food Service Establishment, 3,000 Sq. Ft. or larger                                                                                                                                                                              | AUP*                 | AUP*   | AUP*   | AUP* | AUP*   | AUP*   | AUP*   | AUP*   | AUP*   | AUP*   | AUP*   | AUP* | 23.302.070(E)            |
| Group Instruction, under 3,000 sq. ft.                                                                                                                                                                                           | ZC                   | ZC     | ZC     | ZC   | ZC     | ZC     | ZC*    | ZC     | ZC*    | ZC     | ZC     | ZC   |                          |
| Group Instruction 3,000 sq. ft. or larger                                                                                                                                                                                        | ZC                   | ZC     | AUP    | AUP  | ZC     | ZC     | ZC     | AUP    | ZC     | ZC     | ZC     | ZC   |                          |
| Health and Fitness Facility Under 7,500 sq. ft.                                                                                                                                                                                  | ZC                   | ZC     | ZC     | ZC   | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC   |                          |
| Health and Fitness Facility 7,500 sq. ft. or                                                                                                                                                                                     | ZC                   | ZC     | AUP    | AUP  | ZC     | ZC     | ZC     | AUP    | ZC     | ZC     | ZC     | ZC   |                          |



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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------|--------|--------|--------|---------|--------|--------|--------|----------|--------|----------|----------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U    | C-N    | C-E    | C-NS   | C-SA    | C-T    | C-SO   | C-DMU  | C-W      | C-AC   | C-SP     |                                                                                                          |
| larger                                                                                                                                                                                                                           |                      |        |        |        |        |         |        |        |        |          |        |          |                                                                                                          |
| Hotels, Tourist                                                                                                                                                                                                                  | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH)  | UP(PH) | UP(PH) | UP(PH) | UP(PH)   | UP(PH) | UP(PH)   |                                                                                                          |
| Motels, Tourist                                                                                                                                                                                                                  | UP(PH)               | UP(PH) | NP     | NP     | NP     | NP      | NP     | NP     | UP(PH) | UP(PH)   | NP     | UP(PH)   |                                                                                                          |
| Theater                                                                                                                                                                                                                          | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | NP     | UP(PH)  | UP(PH) | NP     | AUP    | UP(PH)   | UP(PH) | AUP      |                                                                                                          |
| <b>Vehicle Service and Sales Uses</b>                                                                                                                                                                                            |                      |        |        |        |        |         |        |        |        |          |        |          |                                                                                                          |
| Alternative Fuel Station                                                                                                                                                                                                         | UP(PH)               | UP(PH) | UP(PH) | NP     | UP(PH) | UP(PH)  | NP*    | UP(PH) | NP     | AUP*     | UP(PH) | AUP*     | 23.204.110(B)(2);<br>23.204.140(B)(3);<br><br><u>23.204.160(B)(3)</u>                                    |
| Gasoline Fuel Stations                                                                                                                                                                                                           | UP(PH)               | UP(PH) | UP(PH) | NP     | UP(PH) | UP(PH)  | NP*    | UP(PH) | NP     | UP(PH)*  | UP(PH) | UP(PH)*  | 23.204.140(B)(3);<br><br><u>23.204.160(B)(3)</u>                                                         |
| Large Vehicle Sales and Rental                                                                                                                                                                                                   | AUP                  | NP     | NP     | NP     | NP     | NP      | NP     | NP     | NP     | AUP* [1] | NP     | AUP* [1] | 23.204.140(B)(3);<br><br><u>23.204.160(B)(3);</u><br><br><u>23.204.160(D)(3)(a)</u>                      |
| Small Vehicle Sales and Service                                                                                                                                                                                                  | AUP                  | NP     | NP     | NP     | NP     | UP(PH)* | NP     | NP     | UP(PH) | UP(PH)*  | NP     | UP(PH)*  | 23.204.100(B)(3);<br>23.204.140(B)(3);<br><br><u>23.204.160(B)(3);</u><br><br><u>23.204.160(D)(3)(a)</u> |
| Tire Sales and Service                                                                                                                                                                                                           | UP(PH)               | NP     | NP     | NP     | NP     | NP      | NP     | NP     | NP     | UP(PH)*  | NP     | UP(PH)*  | 23.204.140(B)(3);                                                                                        |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----|-----|-----|------|---------|-----|------|--------|---------|------|---------|--------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U | C-N | C-E | C-NS | C-SA    | C-T | C-SO | C-DMU  | C-W     | C-AC | C-SP    |                                                                                                        |
|                                                                                                                                                                                                                                  |                      |     |     |     |      |         |     |      |        |         |      |         | 23.204.160(B)(3);<br>23.204.160(D)(3)(a)                                                               |
| Vehicle Parts Store                                                                                                                                                                                                              | ZC                   | NP  | ZC  | ZC  | ZC   | ZC      | ZC  | ZC   | NP     | AUP*[1] | ZC   | AUP*[1] |                                                                                                        |
| Vehicle Rentals                                                                                                                                                                                                                  | AUP                  | NP  | NP  | NP  | NP   | NP      | NP  | NP   | UP(PH) | AUP*[1] | NP   | AUP*[1] | 23.204.140(B)(3)<br>23.204.160(B)(3);<br>23.204.160(D)(3)(a)                                           |
| Vehicle Repair and Service                                                                                                                                                                                                       | AUP                  | NP  | NP  | NP  | NP   | NP      | NP  | NP   | NP     | AUP*[1] | NP   | AUP*[1] | 23.204.160(D)(3)(a)                                                                                    |
| Vehicle Sales, New                                                                                                                                                                                                               | AUP                  | NP  | NP  | NP  | NP   | UP(PH)* | NP  | NP   | UP(PH) | AUP*[1] | NP   | AUP*[1] | 23.204.140(B)(3)<br>23.204.160(B)(3);<br>23.204.160(D)(3)(a)                                           |
| Vehicle Sales, Used                                                                                                                                                                                                              | AUP                  | NP  | NP  | NP  | NP   | UP(PH)* | NP  | NP   | UP(PH) | UP(PH)* | NP   | UP(PH)* | 23.204.100(B)(3);<br>23.204.140(B)(3);<br>23.204.140(D)(4)<br>23.204.160(B)(3);<br>23.204.160(D)(3)(a) |
| Vehicle Wash                                                                                                                                                                                                                     | UP(PH)               | NP  | NP  | NP  | NP   | NP      | NP  | NP   | NP     | UP(PH)* | NP   | UP(PH)* | 23.204.140(B)(3)<br>23.204.160(B)(3);<br>23.204.160(D)(3)(a)                                           |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|-----|--------|------|--------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U    | C-N    | C-E    | C-NS   | C-SA   | C-T    | C-SO   | C-DMU  | C-W | C-AC   | C-SP |                          |
| Vehicle Wrecking                                                                                                                                                                                                                 | NP                   | NP     | NP     | NP     | NP     | NP     | NP     | NP     | NP     | NP  | NP     | NP   |                          |
| <b>Industrial and Heavy Commercial Uses</b>                                                                                                                                                                                      |                      |        |        |        |        |        |        |        |        |     |        |      |                          |
| Bus/Cab/Truck/Public Utility Depot                                                                                                                                                                                               | –                    | –      | –      | –      | –      | –      | –      | –      | –      | –   | –      | –*   | 23.204.160(D)(3)(a)      |
| Commercial Excavation                                                                                                                                                                                                            | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | –      | NP  | UP(PH) | NP   |                          |
| Contractors Yard                                                                                                                                                                                                                 | –                    | –      | –      | –      | –      | –      | –      | –      | –      | AUP | --     | NP   |                          |
| Dry Cleaning and Laundry Plant                                                                                                                                                                                                   | UP(PH)               | UP(PH) | NP     | –      | UP(PH) | NP     | NP     | NP     | UP(PH) | NP  | NP     | NP   |                          |
| Laboratory                                                                                                                                                                                                                       |                      |        |        |        |        |        |        |        |        |     |        |      |                          |
| Research and Development Under 20,000 sq. ft.                                                                                                                                                                                    | ZC                   | ZC     | --     | --     | ZC     | --     | ZC     | --     | ZC     | ZC  | --     | ZC   | 23.204.040(E)            |
| Research and Development, 20,000 sq. ft. or larger                                                                                                                                                                               | AUP                  | AUP    | --     | --     | AUP    | --     | AUP    | --     | AUP    | AUP | --     | AUP  | 23.204.040(E)            |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----|-----|-----|------|------|-----|------|-------|---------|------|-----------------|-------------------------------------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U | C-N | C-E | C-NS | C-SA | C-T | C-SO | C-DMU | C-W     | C-AC | <u>C-SP</u>     |                                                       |
| Commercial, Physical or Biological Testing                                                                                                                                                                                       | AUP                  | AUP | NP  | NP  | NP   | NP   | NP  | NP   | AUP   | NP      | NP   | <u>AUP</u>      | 23.204.040(E)                                         |
| Cannabis Testing                                                                                                                                                                                                                 | AUP                  | AUP | NP  | NP  | NP   | NP   | NP  | NP   | AUP   | AUP [2] | NP   | <u>AUP [2]</u>  |                                                       |
| <b>Manufacturing</b>                                                                                                                                                                                                             |                      |     |     |     |      |      |     |      |       |         |      |                 |                                                       |
| Construction Products                                                                                                                                                                                                            | –                    | –   | –   | –   |      | –    | –   | –    | –     | UP(PH)  |      | <u>NP</u>       |                                                       |
| Light Manufacturing                                                                                                                                                                                                              | –                    | –   | –   | –   |      | –    | –   | –    | –     | AUP [1] | --   | <u>AUP* [1]</u> | <u>23.204.160(B)(4)</u><br><u>23.204.160(D)(3)(a)</u> |
| Pesticides/Herbicides/Fertilizers                                                                                                                                                                                                | –                    | –   | –   | –   |      | –    | –   | –    | –     | UP(PH)  | --   | <u>NP</u>       |                                                       |
| Petroleum Refining and Products                                                                                                                                                                                                  | –                    | –   | –   | –   |      | –    | –   | –    | –     | UP(PH)  | --   | <u>NP</u>       |                                                       |
| Pharmaceuticals                                                                                                                                                                                                                  | –                    | –   | –   | –   |      | –    | –   | –    | –     | UP(PH)  | --   | <u>UP(PH)*</u>  | <u>23.204.160(D)(3)(a)</u>                            |
| Primary Production                                                                                                                                                                                                               | –                    | –   | –   | –   | NP   | –    | –   | –    | –     | UP(PH)  | --   | <u>NP</u>       |                                                       |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|----------------|-------------------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U    | C-N    | C-E    | C-NS   | C-SA   | C-T    | C-SO   | C-DMU   | C-W    | C-AC   | C-SP           |                                     |
| Manufacturing                                                                                                                                                                                                                    |                      |        |        |        |        |        |        |        |         |        |        |                |                                     |
| Semiconductors                                                                                                                                                                                                                   | –                    | –      | –      | –      | NP     | –      | –      | –      | –       | UP(PH) | --     | <u>UP(PH)*</u> | <a href="#">23.204.160(D)(3)(a)</a> |
| Material Recovery Enterprise                                                                                                                                                                                                     | –                    | –      | –      | –      | –      | –      | –      | –      | –       | –      | --     | <u>--*</u>     | <a href="#">23.204.160(D)(3)(a)</a> |
| Media Production                                                                                                                                                                                                                 | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH)* | AUP    | UP(PH) | <u>AUP</u>     | 23.204.130(B)(4)                    |
| Mini-storage                                                                                                                                                                                                                     | UP(PH)               | NP     | NP     | NP     | NP     | NP     | NP     | –      | UP(PH)  | NP     | NP     | <u>NP</u>      |                                     |
| Recycled Materials Processing                                                                                                                                                                                                    | –                    | –      | –      | –      | –      | –      | –      | –      | –       | –      | --     | <u>--*</u>     | <a href="#">23.204.160(D)(3)(a)</a> |
| Recycling Redemption Center                                                                                                                                                                                                      | AUP                  | AUP    | AUP    | AUP    | AUP    | AUP    | AUP    | AUP    | AUP     | AUP    | AUP    | <u>AUP*</u>    | <a href="#">23.204.160(D)(3)(a)</a> |
| Repair Service, Non-Vehicle                                                                                                                                                                                                      | –                    | –      | –      | –      | –      | –      | –      | –      | –       | AUP    | --     | <u>AUP*</u>    | <a href="#">23.204.160(D)(3)(a)</a> |
| Research and Development                                                                                                                                                                                                         | –                    | –      | –      | –      | –      | –      | –      | –      | –       | --     | --     | <u>--*</u>     | <a href="#">23.204.160(D)(3)(a)</a> |
| Services to Buildings and Dwellings                                                                                                                                                                                              | –                    | –      | –      | –      | –      | –      | –      | –      | –       | AUP    | --     | <u>AUP*</u>    | <a href="#">23.204.160(D)(3)(a)</a> |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|------|--------|-------------|-------------------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U    | C-N    | C-E    | C-NS   | C-SA   | C-T    | C-SO   | C-DMU  | C-W  | C-AC   | <u>C-SP</u> |                                     |
| Warehouse                                                                                                                                                                                                                        | UP(PH)               | NP     | NP     | NP     | NP     | NP     | NP     | –      | UP(PH) | NP   | NP     | <u>NP</u>   |                                     |
| Warehouse-Based Non-Store Retailer                                                                                                                                                                                               | –                    | –      | –      | –      | --     | –      | –      | –      | –      | –    | --     | <u>--*</u>  | <a href="#">23.204.160(D)(3)(a)</a> |
| Wholesale Trade                                                                                                                                                                                                                  | –                    | –      | –      | –      | --     | –      | –      | –      | –      | AUP  | --     | <u>AUP*</u> | <a href="#">23.204.160(D)(3)(a)</a> |
| <b>Incidental Uses</b>                                                                                                                                                                                                           |                      |        |        |        |        |        |        |        |        |      |        |             |                                     |
| Amusement Devices                                                                                                                                                                                                                | AUP*                 | AUP*   | AUP*   | AUP*   | AUP*   | AUP*   | AUP*   | AUP*   | AUP*   | AUP* | UP(PH) | <u>AUP*</u> | 23.302.070(B)                       |
| Alcoholic Beverage Service                                                                                                                                                                                                       | See 23.310           |        |        |        |        |        |        |        |        |      |        |             |                                     |
| Cafeteria, On Site                                                                                                                                                                                                               | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | UP(PH) | AUP  | UP(PH) | <u>AUP</u>  |                                     |
| Columbaria                                                                                                                                                                                                                       | See 23.302.070(C)    |        |        |        |        |        |        |        |        |      |        |             |                                     |
| Food and Beverage for Immediate Consumption                                                                                                                                                                                      | ZC                   | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC     | ZC   | ZC     | <u>ZC</u>   |                                     |
| Food Service Establishment, Under 3,000 sq. ft.                                                                                                                                                                                  | ZC*                  | ZC*    | ZC*    | ZC*    | ZC*    | ZC*    | ZC*    | ZC*    | ZC*    | ZC*  | ZC*    | <u>ZC*</u>  | 23.310.030                          |



| ZC = Zoning Certificate<br>AUP = Administrative Use Permit<br>UP(PH) = Use Permit<br>NP = Not Permitted<br>-- = Permitted with AUP, see 23.204.020(B)<br>[#] = Table Note Permit Requirement<br>* Use-Specific Regulations Apply | COMMERCIAL DISTRICTS |      |         |         |      |        |      |      |       |      |      |             | USE-SPECIFIC REGULATIONS |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------|---------|---------|------|--------|------|------|-------|------|------|-------------|--------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U  | C-N     | C-E     | C-NS | C-SA   | C-T  | C-SO | C-DMU | C-W  | C-AC | C-SP        |                          |
| Food Service Establishment, 3,000 sq. ft. or larger                                                                                                                                                                              | AUP*                 | AUP* | AUP*    | AUP*    | AUP* | AUP*   | AUP* | AUP* | AUP*  | AUP* | AUP* | <u>ZC*</u>  | 23.310.030               |
| Live Entertainment Unamplified                                                                                                                                                                                                   | ZC                   | ZC   | ZC      | ZC      | ZC   | ZC     | ZC   | ZC   | ZC    | ZC   | ZC   | <u>ZC</u>   |                          |
| Live Entertainment Amplified                                                                                                                                                                                                     | AUP                  | AUP  | AUP     | AUP     | AUP  | AUP    | AUP  | AUP  | AUP   | AUP  | AUP  | <u>AUP</u>  |                          |
| Manufacturing                                                                                                                                                                                                                    | AUP                  | AUP  | UP(PH)  | UP(PH)  | NP   | UP(PH) | AUP  | AUP  | AUP   | AUP  | AUP  | <u>AUP*</u> | <u>23.204.160(B)(4)</u>  |
| Retail Sale of Goods Manufactured On-Site                                                                                                                                                                                        | ZC                   | ZC   | ZC      | ZC      | ZC   | ZC     | ZC   | ZC   | ZC    | AUP  | ZC   | <u>ZC</u>   |                          |
| Storage of Goods (>25% gross floor area)                                                                                                                                                                                         | AUP*                 | AUP* | AUP*    | AUP*    | AUP* | AUP*   | AUP* | AUP* | AUP*  | AUP* | AUP  | <u>AUP*</u> | 23.302.020(C)            |
| Wholesale Activities                                                                                                                                                                                                             | AUP*                 | AUP* | UP(PH)* | UP(PH)* | NP   | AUP*   | AUP* | AUP* | AUP*  | AUP  | AUP  | <u>AUP</u>  | 23.204.080(B)(3)         |
| <b>Other Miscellaneous Uses</b>                                                                                                                                                                                                  |                      |      |         |         |      |        |      |      |       |      |      |             |                          |
| Art/Craft Studio                                                                                                                                                                                                                 | ZC                   | ZC   | ZC      | ZC      | ZC   | ZC     | ZC   | ZC   | ZC    | ZC   | ZC   | ZC          |                          |

| ZC = Zoning Certificate<br>AUP = Administrative Use Permit<br>UP(PH) = Use Permit<br>NP = Not Permitted<br>-- = Permitted with AUP, see 23.204.020(B)<br>[#] = Table Note Permit Requirement<br>* Use-Specific Regulations Apply | COMMERCIAL DISTRICTS |        |        |        |            |        |        |        |            |         |        |                   | USE-SPECIFIC REGULATIONS                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------|--------|--------|------------|--------|--------|--------|------------|---------|--------|-------------------|------------------------------------------------|
|                                                                                                                                                                                                                                  | C-C                  | C-U    | C-N    | C-E    | C-NS       | C-SA   | C-T    | C-SO   | C-DMU      | C-W     | C-AC   | C-SP              |                                                |
| ATM, Exterior and Attached to Bank                                                                                                                                                                                               | AUP                  | AUP    | AUP    | UP(PH) | AUP        | AUP    | AUP    | AUP*   | AUP        | AUP     | AUP    | <u>AUP*</u>       | 23.204.120(B)(2)<br><u>23.204.160(D)(3)(a)</u> |
| ATM, Interior or Exterior and Not With Bank                                                                                                                                                                                      | UP(PH)               | UP(PH) | UP(PH) | NP     | UP(PH)     | UP(PH) | UP(PH) | NP     | UP(PH)*    | AUP     | UP(PH) | <u>AUP*</u>       | 23.204.130(B)(2)<br><u>23.204.160(D)(3)(a)</u> |
| Circus/Carnival                                                                                                                                                                                                                  | UP(PH)               | UP(PH) | UP(PH) | UP(PH) | UP(PH)     | UP(PH) | UP(PH) | UP(PH) | UP(PH)     | UP(PH)  | UP(PH) | <u>UP(PH)</u>     |                                                |
| Drive-in Uses                                                                                                                                                                                                                    | UP(PH)               | NP     | NP     | NP     | UP(PH)     | UP(PH) | NP     | UP(PH) | NP         | NP      | UP(PH) | <u>NP</u>         |                                                |
| Home Occupations                                                                                                                                                                                                                 | See 23.302.040       |        |        |        |            |        |        |        |            |         |        |                   |                                                |
| Live/Work                                                                                                                                                                                                                        | See 23.312           |        |        |        |            |        |        |        |            |         |        |                   |                                                |
| Parking Lot/Structure                                                                                                                                                                                                            | See 23.302.070(-G)   |        |        |        |            |        |        |        |            |         |        |                   |                                                |
| Public Market, Open Air                                                                                                                                                                                                          | AUP                  | AUP    | AUP    | AUP    | AUP        | AUP    | AUP    | AUP    | AUP        | UP(PH)  | AUP    | <u>AUP</u>        |                                                |
| Public Market, Enclosed                                                                                                                                                                                                          | AUP                  | AUP    | AUP    | AUP    | AUP        | AUP    | AUP    | AUP    | AUP        | AUP [2] | AUP    | <u>ZC</u>         |                                                |
| Short-Term Rental                                                                                                                                                                                                                | See 23.314           |        | NP     | NP     | See 23.314 |        |        | NP     | See 23.314 |         | NP     | <u>See 23.314</u> |                                                |

| ZC = Zoning Certificate<br>AUP = Administrative Use Permit<br>UP(PH) = Use Permit<br>NP = Not Permitted<br>-- = Permitted with AUP, see 23.204.020(B)<br>[#] = Table Note Permit Requirement<br>* Use-Specific Regulations Apply | COMMERCIAL DISTRICTS                         |      |      |      |      |      |      |      |       |     |      |      | USE-SPECIFIC REGULATIONS |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|------|------|------|------|------|------|------|-------|-----|------|------|--------------------------|
|                                                                                                                                                                                                                                  | C-C                                          | C-U  | C-N  | C-E  | C-NS | C-SA | C-T  | C-SO | C-DMU | C-W | C-AC | C-SP |                          |
| Urban Agriculture, Low-Impact                                                                                                                                                                                                    | ZC*                                          | ZC*  | ZC*  | ZC*  | ZC*  | ZC*  | ZC*  | ZC*  | ZC*   | ZC  | ZC   | ZC   |                          |
| Urban Agriculture, High-Impact                                                                                                                                                                                                   | AUP*                                         | AUP* | AUP* | AUP* | AUP* | AUP* | AUP* | AUP* | AUP*  | AUP | AUP  | AUP  | 23.318                   |
| Wireless Telecommunication Facility                                                                                                                                                                                              | See 23.332—Wireless Communication Facilities |      |      |      |      |      |      |      |       |     |      |      |                          |
| Notes:<br>[1] Requires a Use Permit if either 5,000 sq. ft. or more of floor area or 10,000 square feet or more of lot area.<br>[2] Requires a Use Permit if more than 10,000 sq. ft.                                            |                                              |      |      |      |      |      |      |      |       |     |      |      |                          |

Section 3. That Table 23.204-2 New Floor Area Permit Requirements within BMC Chapter 23.204.030 is amended to read as follows:

**Table 23.204 2: New Floor Area Permit Requirements**

| DISTRICT/NEW GROSS FLOOR AREA                                                                                                                  | PERMIT<br>REQUIRED FOR<br>NEW FLOOR<br>AREA |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| C-C, C-U, <u>C-SP</u>                                                                                                                          |                                             |
| Less than 5,000 sq. ft.                                                                                                                        | ZC                                          |
| 5,000 sq. ft. or more                                                                                                                          | UP(PH)                                      |
| C-N, C-E, C-SO (any amount of new floor area)                                                                                                  | UP(PH)                                      |
| C-NS                                                                                                                                           |                                             |
| Less than 2,000 sq. ft.                                                                                                                        | ZC                                          |
| 2,000 sq. ft. or more                                                                                                                          | UP(PH)                                      |
| C-SA                                                                                                                                           |                                             |
| Less than 3,000 sq. ft.                                                                                                                        | ZC                                          |
| 3,000 sq. ft. or more                                                                                                                          | UP(PH)                                      |
| C-T                                                                                                                                            | -                                           |
| Less than 1,500 sq. ft.                                                                                                                        | AUP                                         |
| 1,500 sq. ft. or more                                                                                                                          | UP(PH)                                      |
| C-DMU                                                                                                                                          |                                             |
| Less than 10,000 sq. ft.                                                                                                                       | ZC                                          |
| 10,000 sq. ft. or more                                                                                                                         | UP(PH)                                      |
| C-W                                                                                                                                            |                                             |
| 5,000 sq. ft. or more except when an AUP is required below                                                                                     | UP(PH)                                      |
| 7,500 sq. ft. or less in a building containing only retail uses                                                                                | AUP                                         |
| 20,000 sq. ft. or less in a building with residential and retail space that is more than 15% and less than 33% of the floor area being created | AUP                                         |
| C-AC                                                                                                                                           |                                             |
| New Main Building or New Dwelling Unit                                                                                                         | UP(PH)                                      |
| Addition of 5,000 sq ft or more                                                                                                                | UP(PH)                                      |

Section 4. That Table 23.204-3 Tenant Space Reconfiguration Permit Requirements within BCM Chapter 23.204.030 is amended to read as follows:

**TABLE 23.204 3: Tenant Space Reconfiguration Permit Requirements**

| <b>District</b>                                                               | <b>Permit Required for Tenant Space Reconfiguration Project</b> |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------|
| C-C, C-U                                                                      |                                                                 |
| Less than 5,000 sq. ft.                                                       | ZC                                                              |
| 5,000 sq. ft. or greater                                                      | AUP                                                             |
| C-N, C-E, C-NS, C-SO (All reconfiguration projects)                           | AUP                                                             |
| C-SA, C-DMU, C-AC                                                             | No additional permit required                                   |
| C-T                                                                           |                                                                 |
| Increasing the number of individual tenant spaces                             | ZC                                                              |
| 5,000 sq. ft. or greater                                                      | AUP                                                             |
| Creating a tenant space less than 1,000 sq. ft.                               | AUP                                                             |
| C-W, <u>C-SP</u>                                                              |                                                                 |
| Less than 5,000 sq. ft                                                        | ZC                                                              |
| In existing buildings in a designated node affecting 5,000 sq. ft. or greater | AUP                                                             |

Section 5. That Table 23.204-4 Commercial Recreation Center Permit Requirements within BMC Chapter 23.204.040 is amended to read as follows:

**Table 23.204-4: Commercial Recreation Center Permit Requirements**

| <b>DISTRICT/USE SIZE</b>                                         | <b>PERMIT REQUIRED</b> |
|------------------------------------------------------------------|------------------------|
| C-C, C-U, C-T, C-DMU, C-W                                        |                        |
| Under 5,000 sq. ft indoor use                                    | ZC                     |
| 5,000 to 10,000 sq. ft. indoor use                               | AUP                    |
| Over 10,000 sq. ft. indoor use or outdoor use of any size        | UP(PH)                 |
| C-N, C-E, C-NS, C-SA, C-SO, C-AC                                 |                        |
| Under 3,000 sq. ft indoor use                                    | AUP                    |
| Over 3,000 sq. ft. indoor use or outdoor use of any size         | UP(PH)                 |
| <u>C-SP</u>                                                      |                        |
| <u>Under 10,000 sq. ft. indoor use</u>                           | <u>ZC</u>              |
| <u>Over 10,000 sq. ft. indoor use or outdoor use of any size</u> | <u>AUP</u>             |

Section 6. That Section 23.204.140(A) is amended to read as follows:

A. **District Purpose.** The purpose of the West Berkeley Commercial (C-W) district is to:

1. Implement the ~~West Berkeley Plan Commercial District~~ Avenue Commercial Land Use designation;
2. Provide locations for commercial services which primarily serve area residents and/or businesses;
3. Support the retention and attraction of a balance of both smaller and larger stores and restaurants;
4. Provide appropriate locations, ~~consistent with West Berkeley Plan policies,~~ for commercial services which serve a citywide or broader clientele;
5. Provide a relatively compact, clearly bounded set of commercial areas in West Berkeley, so as to both improve the quality of West Berkeley shopping environments and to prevent commercial overspill into industrial areas;
6. Encourage the intensification of commercial activity at designated nodes to help develop more pedestrian-oriented environments at those locations;
7. Increase the opportunities for development of housing in commercial areas to support local retailing and use of transit lines and opportunities for mixed use projects combining pedestrian-oriented neighborhood-serving uses with mixed income housing in locations abutting residential districts;
8. Encourage appropriately intense development in underutilized portions of commercial streets;
9. Promote development compatible with adjacent commercial, residential and industrial areas;
10. Provide a location for cultural and performing arts activities; and
11. promote environmental protection for the residents and workers both within and adjacent to the district from such detriments as noise, fumes, and other detrimental environmental effects.

Section 7. That Sections 23.204.140(B)(3) and (4) are amended to read as follows

### **~~3. Automotive Uses~~**

~~(a) As used in this paragraph, “automotive use” means a use classified in Table 23.204-1 as a vehicle service and sales use, except for vehicle parts store. “Automotive site” means a site which was legally used or approved for use as an automotive use as of March 1, 1997.~~

~~(b) On lots in the C-W district with frontage on San Pablo Avenue:~~



~~An automotive use may be established only on an automotive site; and  
If an automotive use on an automotive site is discontinued for a period of two years or more, it may not be re-established.~~

**3.4. Langendorf Building.** See Section 23.206.030.D– Additional Permit Requirements (Langendorf Building).

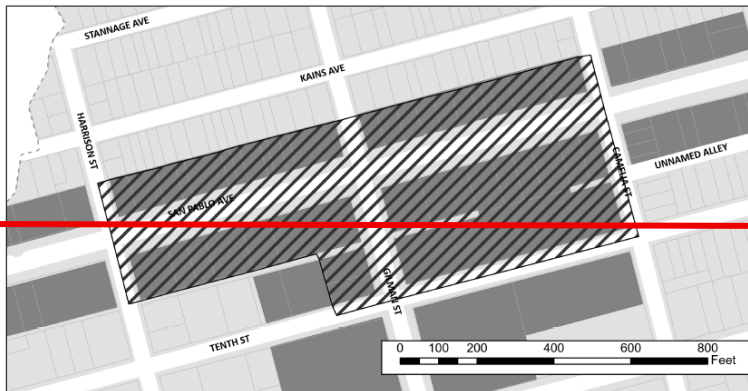
Section 8. That Section 23.204.140(D) is amended to read as follows

**D. Designated Nodes.**

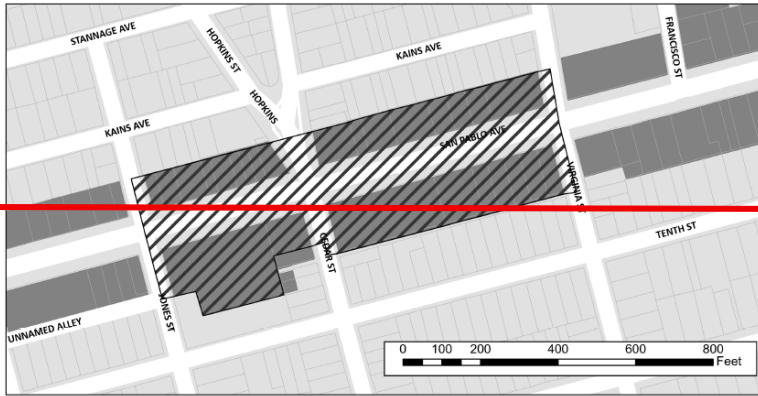
1. **Purpose.** The purposes of the designated nodes in the C-W district are to:
  - (a) Intensify retail, commercial, and mixed-use activity around major intersections;
  - (b) Reflect and reinforce the major existing and developing concentrations of pedestrian-oriented uses;
  - (c) Encourage intensified development around transit transfer points;
  - ~~(d) Help define the urban form of San Pablo Avenue by developing identifiable areas of concentrated development.~~
2. **Location.** Properties designated as nodes in the C-W district are shown in Figure 23.204-7: C-W Designated Nodes.
3. **Ground Floor Uses.** The ground floor of buildings in the designated nodes may be used only for the following:
  - (a) Retail sales
  - (b) Personal and household services
  - (c) Retail financial services (banks)
  - (d) Food and alcohol service
  - (e) Tourist Hotel and Tourist Motel
  - (f) Entertainment and assembly uses
  - (g) Gasoline/vehicle fuel stations
  - (h) Vehicle repair uses
  - (i) New car sales
  - (j) Used vehicles sales
  - (k) Required access to and lobbies serving upper-story uses

4. **Prohibited Uses.** The following uses are not permitted in the designated nodes:
- (a) Vehicle rentals
  - (b) Used vehicle sales when not principally in buildings
  - (c) Vehicle washes
  - (d) Tire sales and service
  - (e) Open air markets
  - (f) Circus/carnivals
  - (g) Public utility substation buildings, tanks
5. **Findings.** To approve a Use Permit or AUP for a project in a the designated node, the review authority must find that the project supports the development of a strong retail commercial and pedestrian-oriented environment at the node. Factors the review authority should consider when making this finding include:
- (a) The placement of store entrances relative to the street and parking lots; and
  - (b) The size and prominence of display windows and areas facing the sidewalk.

**Figure 23.204-7: C-W Designated Nodes**



← N      West Berkeley Commercial (C-W)      Node 1: Gillman and San Pablo



← N

West Berkeley Commercial (C-W)

Node 2: Cedar and San Pablo



← N

West Berkeley Commercial (C-W)

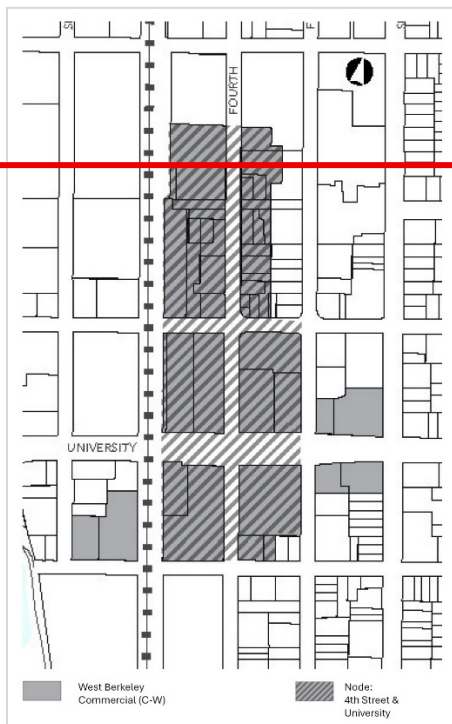
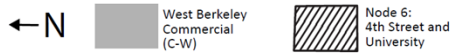
Node 3: University and San Pablo



← N West Berkeley Commercial (C-W) Node 4: Dwight and San Pablo



← N West Berkeley Commercial (C-W) Node 5: Ashby and San Pablo



**Section 9.** That BMC Section 23.204.160 be added to read as follows:

**A. District Purpose.** The purpose of the San Pablo Avenue Commercial (C-SP) district is to:

1. Implement the General Plan's designation for Avenue Commercial, as well as the policies of the San Pablo Avenue Specific Plan;
2. Encourage the intensification of commercial activity at designated nodes to help develop more pedestrian-oriented environments at those locations;

3. Increase the opportunities for development of housing in commercial areas to support local retailing and use of transit lines and opportunities for mixed use projects combining pedestrian-oriented neighborhood-serving uses with mixed income housing in locations abutting residential districts; and
4. Promote development compatible with adjacent commercial, residential and industrial areas.

B. Allowed Land Uses.

1. General. See Table 23.204-1.
2. Mixed Use Buildings. In all mixed-use buildings, all stories above the second story shall be used for residential uses.
3. Automotive Uses.
  - a) As used in this paragraph, “automotive use” means a use classified in Table 23.204-1 as a vehicle service and sales use, except for vehicle parts store. “Automotive site” means a site which was legally used or approved for use as an automotive use as of March 1, 1997.
  - b) On lots in the C-SP district with frontage on San Pablo Avenue:
    - i. An automotive use may be established only on an automotive site; and
    - ii. If an automotive use on an automotive site is discontinued for a period of two years or more, it may not be re-established.
4. Light Manufacturing Use. Light manufacturing is permitted with a Zoning Certificate subject to conformance with the following conditions to minimize potential negative impacts on surrounding properties:
  - a) Production methods shall be limited to the use of hand tools or small-scale, light mechanical equipment occurring solely within an enclosed building where such production requires no outdoor operations or storage, and do not produce noise, vibration, or air pollution that will endanger neighboring properties.
  - b) On-site sales of goods produced on site, as well as incidental sales, are permitted.
5. Temporary Uses. The following temporary uses are permitted with a Zoning Certificate as specified below:



- a) Public Market, Enclosed. A temporary public market is allowed within either a vacant commercial space or a space occupied by a legally established commercial use, for a period not to exceed three years.
- b) Food Service Establishment. A temporary food service establishment is allowed within either a vacant commercial space or a space occupied by a legally established commercial use, for a period not to exceed three years.

6. Outdoor Temporary Uses on Private Property. A temporary outdoor use may be conducted as follows:

- a) The following businesses are not covered by this subsection:
  - i. Delivery-Only (Cannabis) Retailers.
  - ii. Liquor Stores/Wine Shops.
  - iii. Adult-Oriented Businesses.
  - iv. Smoke Shops.
  - v. Firearm/Munitions Businesses
- b) Zoning Certificate.
  - i. A business may conduct business outdoors on a temporary basis subject to approval of a Zoning Certificate and compliance with 23.204.160(B)(5)(d)(iv) operating standards.
  - ii. An application for a Zoning Certificate must be accompanied by a site plan, business description and operational plan that certifies compliance with 23.204.160(B)(5)(d)(vii) operating standards.
  - iii. The operator of the temporary use must have the written permission of the property owner.
- c) Time Period. An outdoor temporary use allowed in this subsection shall not exceed one year. A time extension is not allowed unless approved by the Zoning Officer.
- d) Operating Standards.
  - i. A 10-foot setback is required from any property in a residential district.

- ii. Operating Hours are limited to 9 a.m. to 9 p.m. Operating Hours include the time that the business is open for customer access to the departure of the last patron.
- iii. Temporary outdoor lighting fixtures must be oriented in a manner to direct light away from adjacent parcels.
- e) Existing Parking and Loading. Non-residential parking and loading requirements on private property are temporarily suspended if the outdoor use displaces areas designated for these purposes.
- f) Temporary Fixtures and Structures. Movable fixtures such as tables and chairs, umbrellas, heaters, generators, trucks or trailers must be stored in a secure place on private property when not in use.
- g) Safety.
  - i. If the Temporary Outdoor Use is located within an active parking lot, a business must provide temporary barriers to separate vehicle traffic from pedestrians and commercial activity.
  - ii. If the Temporary Outdoor Use fully occupies a parking lot, a business must provide temporary barriers to prevent vehicle traffic from entering the parking lot.
- h) Remedies. A Zoning Certificate for a Temporary Outdoor Use may be revoked for non-compliance with any conditions in this subsection.

C. Additional Permit Requirements. See BMC Section 23.204.030- Additional Permit Requirements

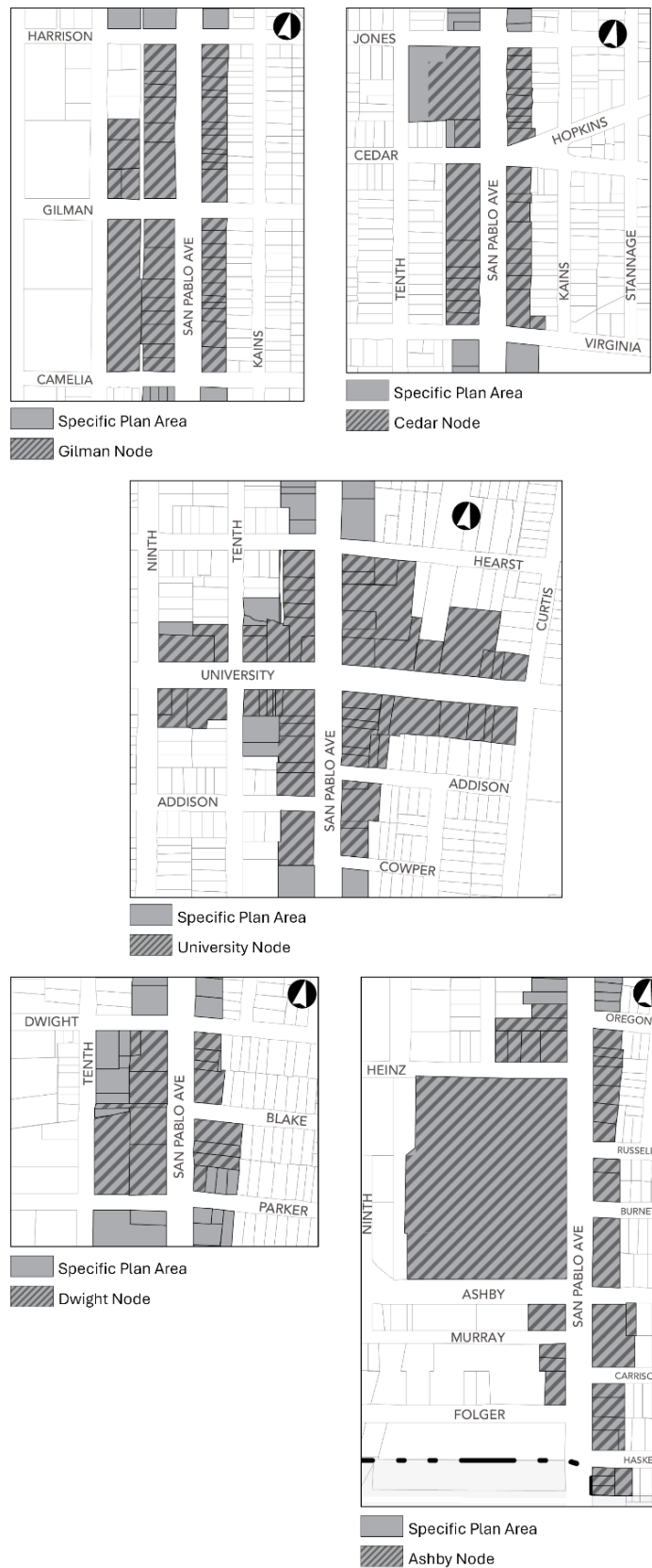
D. San Pablo Avenue Designated Nodes.

- 1. Purpose. The purposes of the designated nodes in the C-SP district are to:
  - a) Intensify commercial activity around major intersections;
  - b) Reflect and reinforce the major existing and developing concentrations of pedestrian-oriented uses;
  - c) Help define the urban form of San Pablo Avenue by developing identifiable areas of concentrated commercial activity.

- d) Encourage commercial uses that promote social interaction and collaboration.
- 2. Location. Properties designated as nodes in the C-SP district are shown in Figure 23.204-8: C-SP Designated Nodes.
- 3. Ground Floor Uses.
  - a) Prohibited Uses. The following uses are prohibited on the Ground Floor in designated nodes:
    - i. ATM, Exterior and Attached to Bank.
    - ii. ATM, Interior or Exterior and Not with Bank.
    - iii. Banks and Financial Services, Retail.
    - iv. Bus/Cab/Truck/Public Utility Depot.
    - v. Business Support Services.
    - vi. Group Living Accommodation.
    - vii. Insurance Agents, Title Companies, Real Estate Agents, Travel Agents.
    - viii. Kennels and Pet Boarding.
    - ix. Large Vehicle Sales and Rental.
    - x. Live/Work units.
    - xi. Manufacturing.
    - xii. Material Recovery Enterprise.
    - xiii. Multi-Unit Residential
    - xiv. Municipal Animal Shelter.
    - xv. Parking Lot/Structure.
    - xvi. Public Utility Substation Buildings, Tanks.
    - xvii. Recycled Materials Processing.
    - xviii. Recycling Redemption Center.
    - xix. Repair Service, Non-Vehicle.
    - xx. Research and Development.
    - xxi. Services to Buildings and Dwellings.
    - xxii. Single-Family Residential.

- xxiii. Small Vehicle Sales and Service.
- xxiv. Tire Sales and Service.
- xxv. Used vehicle sales when not principally in buildings.
- xxvi. Vehicle Repair and Service.
- xxvii. Vehicle Rentals.
- xxviii. Vehicle Sales, new.
- xxix. Vehicle Wash.
- xxx. Warehouse-Based Non-Store Retailer.
- xxxi. Wholesale Trade.
- b) Zoning Certificate Exceptions. Entertainment establishments are permitted in designated nodes with a Zoning Certificate.
- c) Prohibited Uses, Ground Floor. Prohibited uses are permitted on the ground floor where located behind a non-prohibited use. The prohibited use must meet the following standards.
  - i. Occupy a minimum of 50-foot depth of the ground floor street frontage; and
  - ii. Occupy the full extent of the building frontage, excluding required utilities, driveways, pedestrian access and residential lobby.
- 4. Findings. To approve a Use Permit or AUP for a project in a designated node, the review authority must find that the project supports the purposes in Section 23.204.160(D)(1).

Figure 23.204-8. C-SP Designated Nodes



D. Development Standards.1. Basic Standards. See Table 23.204-45.**TABLE 23.204-45: C-SP DEVELOPMENT STANDARDS**

| <u>BASIC STANDARDS</u>                         | <u>PROJECT LAND USE</u>     |                                      | <u>SUPPLEMENTAL STANDARDS</u>                                                 |
|------------------------------------------------|-----------------------------|--------------------------------------|-------------------------------------------------------------------------------|
|                                                | <u>NON-RESIDENTIAL</u>      | <u>RESIDENTIAL ONLY OR MIXED-USE</u> |                                                                               |
| <u>Lot Area Minimum</u>                        |                             |                                      | <u>23.304.020– Lot Requirements</u>                                           |
| <u>New Lots</u>                                | <u>No minimum</u>           | <u>No minimum</u>                    |                                                                               |
| <u>Per Group Living Accommodation Resident</u> |                             |                                      |                                                                               |
| <u>Residential Density</u>                     |                             |                                      | <u>23.106.100 – Residential Density</u>                                       |
| <u>Minimum (du/acre)</u>                       | <u>No minimum</u>           | <u>No minimum</u>                    |                                                                               |
| <u>Maximum (du/acre)</u>                       | <u>No maximum</u>           | <u>No maximum</u>                    |                                                                               |
| <u>Private Open Space, Minimum</u>             |                             |                                      | <u>23.204.160(E)(3) – Private Open Space</u>                                  |
| <u>Per Dwelling Unit or Live/Work Unit</u>     | <u>No minimum</u>           | <u>40 sq. ft.</u>                    |                                                                               |
| <u>Per Group Living Accommodation Resident</u> |                             | <u>No minimum</u>                    |                                                                               |
| <u>Floor Area Ratio, Maximum</u>               | <u>3.0</u>                  | <u>4.25</u>                          |                                                                               |
| <u>Main Building Height, Minimum</u>           | <u>No minimum</u>           | <u>No minimum</u>                    | <u>23.304.050– Building Height</u>                                            |
| <u>Main Building Height, Maximum</u>           | <u>40 ft. and 3 stories</u> | <u>75 ft. and 7 stories</u>          |                                                                               |
| <u>Lot Line Setbacks, Minimum</u>              | <u>See Table 23.204-46</u>  | <u>See Table 23.204-46</u>           | <u>23.304.030– Setbacks</u>                                                   |
|                                                |                             |                                      | <u>23.304.131 – Non-Residential Districts Abutting a Residential District</u> |



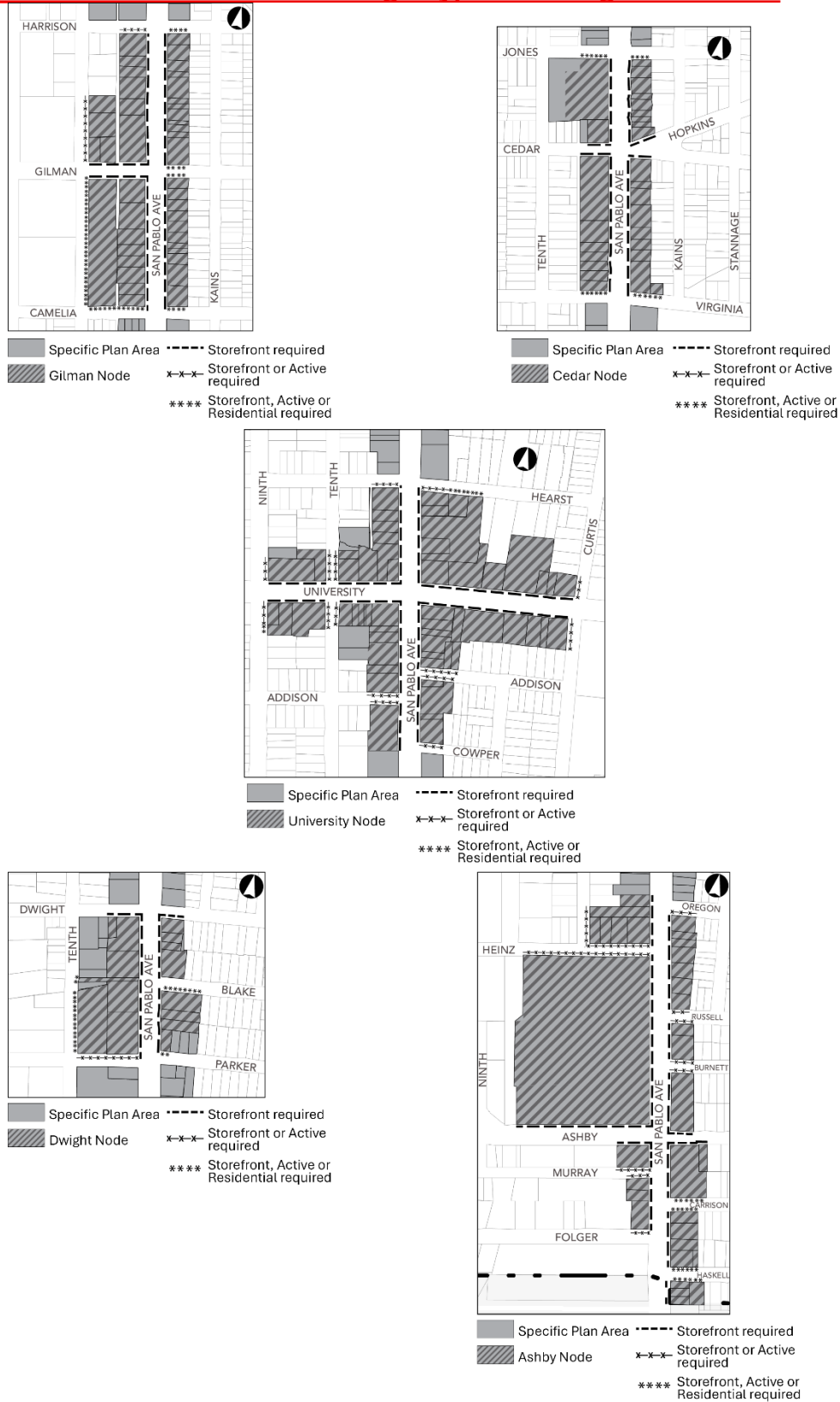
|                                     |                   |                   |                                                                  |
|-------------------------------------|-------------------|-------------------|------------------------------------------------------------------|
| <u>Building Separation, Minimum</u> | <u>No minimum</u> | <u>No minimum</u> | <u>23.304.040 – Building Separation in Residential Districts</u> |
| <u>Lot Coverage, Maximum</u>        | <u>100%</u>       | <u>100%</u>       | <u>23.304.120– Lot Coverage</u>                                  |

2. Minimum Setbacks. Minimum setbacks apply to the ground floor only and are based on the ground floor frontage type either required or allowed. Figure 23.204-9: Ground-Floor Frontage Types in Designated Nodes shows the locations where certain ground-floor frontage types are required within Designated Nodes. Outside of Designated Nodes, any ground floor frontage type is allowed. Table 23.204-46: C-SP Ground Floor Setback Standards shows the required ground-floor lot line setbacks in the C-SP district. Required frontage types are described in the San Pablo Avenue Specific Plan Design Standards document.
3. Parapet Walls. For roofs with parapet walls, building height is measured to the top of the roof. Parapets may exceed the height limit by up to 5 feet as of right.

**TABLE 23.204-46: C-SP GROUND-FLOOR SETBACK STANDARDS**

| <u>LOT LINE &amp; PROJECT GROUND FLOOR FRONTAGE TYPE</u>                                                                                                                                                                                                                                                                                                 | <u>REQUIRED SETBACK</u>                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| <u>Front [1]</u>                                                                                                                                                                                                                                                                                                                                         |                                              |
| <u>Storefront and Active</u>                                                                                                                                                                                                                                                                                                                             | <u>No minimum</u>                            |
| <u>Residential and Live/Work [2]</u>                                                                                                                                                                                                                                                                                                                     | <u>Minimum 5 ft.</u><br><u>Maximum 8 ft.</u> |
| <u>Rear</u>                                                                                                                                                                                                                                                                                                                                              | <u>No minimum</u>                            |
| <u>Interior Side [3]</u>                                                                                                                                                                                                                                                                                                                                 | <u>No minimum</u>                            |
| <u>Street Side</u>                                                                                                                                                                                                                                                                                                                                       | <u>No minimum</u>                            |
| <u>Notes:</u><br><u>[1] Applies to parcels fronting a public street or a privately-owned public open space.</u><br><u>[2] Applies also to the second floor when the ground-floor clear ceiling height is less than 12 feet, measured from sidewalk grade.</u><br><u>[3] Applies also to frontage along an abutting mid-block public access easement.</u> |                                              |

**Figure 23.304-9: Ground Floor Frontage Types in Designated Nodes**



4. Private Open Space Requirements. The following standards apply to the C-SP district only and supersede requirements in Section 23.304.090 – Usable Open Space.
  - (a) Purpose. These requirements are intended to provide high quality private open spaces for active and passive recreation. They establish minimum standards for the size and location of such spaces, as well as provisions for privacy.
  - (b) Applicability. Private open space required in Table 23.204-45 may be satisfied by providing common private open space and/or personal private open space.
  - (c) Definitions.
    - a. For the purposes of this section, Common Private Open Spaces are courtyards, sport courts, outdoor dining areas, community rooms, recreational amenities, rooftop amenities, play areas, and gardens for communal use within a development.
    - b. For the purposes of this section, Personal Private Open Space is an individual yard, terrace, balcony, porch, or deck that is directly accessible from the associated residential unit.
  - (d) General Standards. Private Open Space may not contain areas designated for off-street parking and loading, service areas, driveways, required walkways or other features used for access to dwelling units.
  - (e) Design Standards. Common and Personal Private Open Space design shall comply with the standards listed in the San Pablo Avenue Specific Plan Design Standards.
5. Public Open Space Incentives. To encourage the creation of high-quality, publicly accessible open space within private development in the C-SP district, a development project may provide up to 70 percent of the total private open space required in Table 23.204-45 through one or more of the following types of public open space.
  - (a) Sidewalk Expansion. For the purposes of this section, a sidewalk expansion is an additional ground-floor setback beyond the minimum or maximum required in Table 23.204-46.
    - i. Location. Applies only to parcels fronting San Pablo Avenue, Gilman Street, Cedar Street, Hopkins Street, University Avenue, Dwight Way, and Ashby Avenue.

- ii. Design. Sidewalk design shall comply with the standards listed in the San Pablo Avenue Specific Plan Design Standards. The final design shall be approved by the Public Works Department.
- iii. Incentive. Each square foot of sidewalk space provided beyond the required ground-floor setback is counted as 1.5 square feet of Private Open Space as required in this section.

(b) Privately Owned Public Open Space (POPOS). For the purposes of this section, POPOS are courtyards, plazas, parks, walkways and gardens for use by the public on privately owned land.

- i. Location. POPOS must be located within a designated node, as shown in Figure 23.204-8.
- ii. Design. POPOS design shall comply with the standards listed in the San Pablo Avenue Specific Plan Design Standards.
- iii. Maintenance. Maintenance of the POPOS shall be the responsibility of the property owner.
- iv. Incentive. A POPOS is allowed the following incentives, subject to meeting all of the requirements in this section:
  - a. Each square foot of POPOS is counted as 2 square feet of private open space as required in this section; and
  - b. Wavier of any plan review fees levied by the City related only to the POPOS.

c) Side Street Plaza. For the purposes of this section, a Side Street Plaza is a conversion of a minor street that intersects with San Pablo Avenue into a plaza through either limiting or removing vehicle access.

- i. Location. The applicant shall propose a location consistent with Policy PR-P.14 Side-Street Plazas in the San Pablo Avenue Specific Plan. The final location shall be approved by the Public Works Department.
- ii. Design. Side Street Plazas shall comply with the standards listed in the San Pablo Avenue Specific Plan

Design Standards. The final design shall be approved by the Public Works Department.

- iii. Ownership and Maintenance. The ownership and maintenance of the Side Street Plaza shall be defined through an ordinance and a Memorandum of Understanding between the property owner and the City.
- iv. Incentive. A Side Street Plaza is allowed the following incentives, subject to meeting all of the requirements in this section:
  - a. 1 square foot of Side Street Plaza credited in lieu of 2 square feet of required Private Open Space.
  - b. Waiver of any plan review fees levied by the City related only to the Side Street Plaza.
  - c. Waiver of any additional City regulations and/or fees, at the discretion of the City.

(d) Mid-Block Passages. For the purposes of this section, a mid-block passage is a privately-owned, publicly accessible path within a development project that provides a mid-block connection to enhance pedestrian and multimodal circulation.

- i. Location. Mid-block passages are permitted on lots that: (1) exceed 170 linear feet of site frontage along either San Pablo Avenue or University Avenue; and (2) have frontage on opposite sides of a block.
- ii. Design. Mid-block passages shall comply with the standards listed in the San Pablo Avenue Specific Plan Design Standards.
- iii. Incentive. Each square foot of mid-block passage is counted as 1.5 square feet of Private Open Space as required in this chapter.

#### E. Design Standards.

- 1. Applicability. New buildings and alterations to existing buildings, with the exception of automotive uses on an automotive site (BMC Section 23.204.160(B)(3) (Automotive Uses), shall be reviewed for compliance with the San Pablo Avenue Specific Plan Design Standards document.
- 2. Exceptions. The Design Review Committee or Design Review staff may grant exceptions to the design standards set forth in the San Pablo

Avenue Specific Plan Design Standards document upon making the findings required for such exceptions included in that document.

F. Permit Findings. To approve any AUP or Use Permit for a project in the C-SP district, the review authority must make the findings in Section 23.406.040-Use Permits and find that the proposed use or structure:

1. Is consistent with the purpose of the district; and
2. Encourages utilization of public transit in the area of the proposed building.

Section 10. That the lines “Multi-Unit Residential” and “Mixed-Use Residential” in Table 23.206-1: Allowed Land Uses in Manufacturing Districts within BMC Section 23.206.020 are amended to read as follows:

|                         | Manufacturing Districts |    |       |         |      | Use-Specific Standards<br>Applies to uses with an asterisk following the permit requirement (e.g., ZC*) |
|-------------------------|-------------------------|----|-------|---------|------|---------------------------------------------------------------------------------------------------------|
|                         | M                       | MM | MU-LI | MU-R    | MR-D |                                                                                                         |
| <b>Residential Uses</b> |                         |    |       |         |      |                                                                                                         |
| Multi-Unit Residential  | NP                      | NP | NP*   | ZC*     | NP   | 23.206.090(B)(8);<br>23.406.070(C)(2)(d);<br><u>23.206.090(E)</u>                                       |
| Mixed-Use Residential   | NP                      | NP | NP*   | UP(PH)* | NP   | 23.206.090(B)(7);<br><u>23.206.090(E)</u>                                                               |

Section 11. That Section 23.206.040(R) is amended to read as follows

**R. Vocational Schools in the MU-LI and M-RD Districts.** A vocational school in the MU-LI or M-RD district must provide training for occupations and/or industries found within the area bounded by the City of Albany to the north, the City of Emeryville/Oakland to the south, San Pablo Avenue to the east and the Eastshore Freeway to the west in the West Berkeley Plan area.

Section 12. That Section 23.206.050(A)(4) is amended to read as follows

4. **Replacement Space.** Floor area occupied by a protected industrial use that is changed to a non-protected use must be replaced within the area bounded by the City of Albany to the north, the City of Emeryville/Oakland to the south, San Pablo Avenue to the east and the Eastshore Freeway to the west ,in the West Berkeley Plan area, by a comparable space devoted to one or more of protected industrial uses.



Section 13. That Section 23.206.050(B)(4)(a) is amended to read as follows

- (a) To approve a permit required by Table 23.206-9, the review authority must find that space occupied by the existing non-industrial protected use will be replaced with a comparable space within the area bounded by the City of Albany to the north, the City of Emeryville/Oakland to the south, San Pablo Avenue to the east and the Eastshore Freeway to the west in the West Berkeley Plan area, which is reserved for use by any protected use in the same category. Such replacement space may not qualify for exemption under Paragraph 3 (Owner-Occupied Exemption) above or by reason of having been established after July 6, 1989.

Section 14. That Section 23.206.060(A)(1) is amended to read as follows

1. Implement the ~~West Berkeley Plan Manufacturing District~~ Manufacturing Land Use designation;

Section 15. That Section 23.206.070(A)(1) is amended to read as follows

1. Implement the ~~West Berkeley Plan MM~~ Manufacturing Land Use designation;

Section 16. That Section 23.206.080 is amended to read as follows

**23.206.080 MU-LI Mixed Use-Light Industrial District**

A. **District Purpose.** The purpose of the Mixed Use-Light Industrial (MU-LI) district is to:

1. Implement the ~~West Berkeley Plan Light Manufacturing District~~ Land Use designation;
2. Encourage development of a mixed use-light industrial area for a range of compatible uses;
3. Encourage development of an area where light manufacturers can operate free from the economic, physical and social constraints caused by incompatible uses;
4. Encourage the creation and continuation of well-paid jobs which do not require advanced degrees;
5. Provide for the continued availability of manufacturing and industrial buildings for manufacturing uses, especially of larger spaces needed by medium sized and larger light manufacturers;

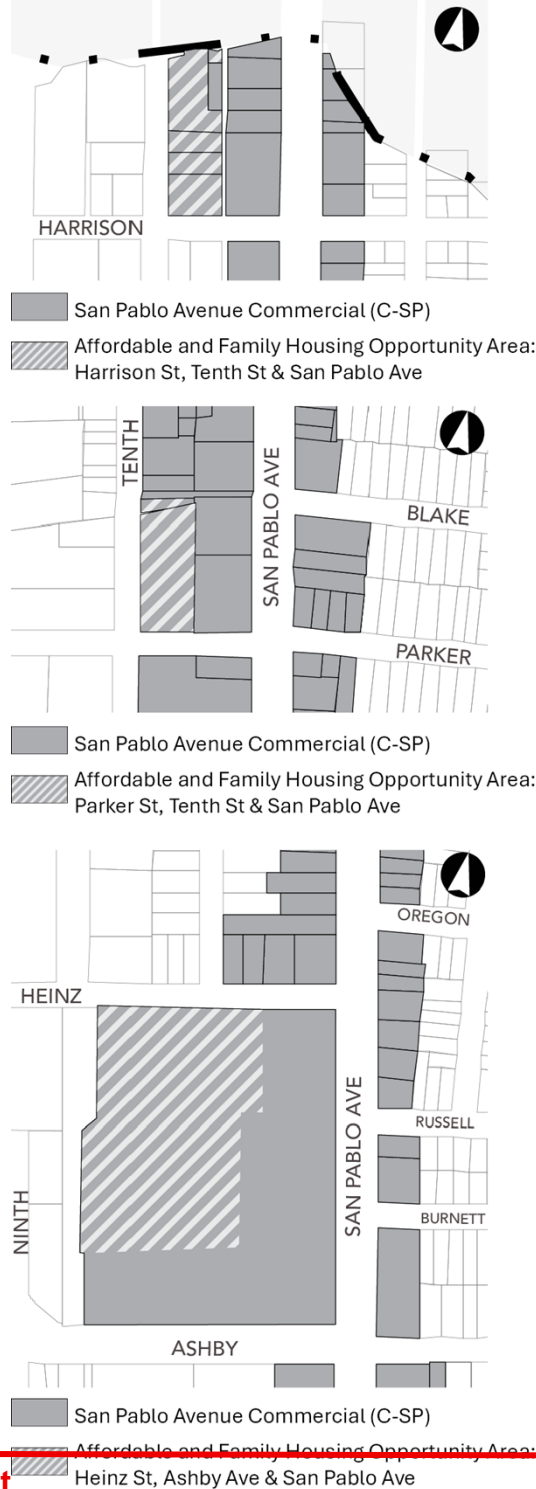
6. Provide opportunities for office development when it will not unduly interfere with light manufacturing uses and/or the light manufacturing building stock;
7. Provide the opportunity for laboratory development and research and development facilities in appropriate locations;
8. Support the development of businesses which contribute to the maintenance and improvement of the environment;
9. Allow on-site ancillary retail as a tool to maintain and enhance the economic viability of manufacturers in the district; and
10. Maintain and improve the quality of the West Berkeley environment, while allowing the lawful and reasonable operation of light industrial uses.

**B. Land Use Regulations.**

1. **Allowed Land Uses.** See Table 23.206-1: Allowed Land Uses in Manufacturing Districts
2. **Use Permit Not Required.** An existing use in the MU-LI district may be modified or intensified without a Use Permit if:
  - (a) A Use Permit is not required by this chapter; and
  - (b) The Zoning Officer determines that the modification or intensification of the use can reasonably be expected not to increase any impact regulated under environmental performance standards.
3. **Alcoholic Beverage Retail Sales.** Alcoholic beverage retail sales are allowed in the MU-LI district only when incidental to food product stores.
4. **Theaters.** Only live stage performances are allowed in a theater in the MU-LI district. Motion picture theaters are not permitted.
5. **Vehicle Wrecking.** Permits required for vehicle wrecking the MU-LI district is determined by size of lot, not floor area.
6. **Affordable and Family Housing Opportunity Areas.** To increase affordable housing production and expand the supply of family-sized units, the MU-LI district shall include an Affordable and Family Housing Opportunity Area as shown in Figure 23.206-1. Multi-unit and mixed-use residential uses shall be allowed within the Affordable and Family Housing Opportunity Area with a UP(PH), provided that the development project either:
  - a) Offers 100 percent of the residential units, excluding any manager's unit, at a rent that is affordable to households earning less than 60 percent of the Area Median Income (AMI); or

- b) Sells 100 percent of the residential units at a price that is affordable to an appropriate-sized household whose income is no more than 80 percent of the AMI; or
- c) Provides at least 50 percent of the residential units as either two- or three-bedroom units.

**Figure 23.206-1: Affordable and Family Housing Opportunity Area in the MU-LI**



**District**

**C. Additional Permit Requirements.** See Section 23.206.030-Additional Permit Requirements.

**D. Outdoor Recreation Sub-Zone.**

1. ~~An Outdoor Recreation Sub-zone may be designated by the City Council, upon recommendation of the Planning Commission. In an Outdoor Recreation Sub-zone, parks and outdoor recreational uses are permitted with a Use Permit.~~
2. ~~Properties designated as an Outdoor Recreation Sub-zone must be:~~
  - a) ~~Designated specifically for outdoor recreational use in the West Berkeley Plan;~~
  - b) ~~Owned or under acquisition by a public agency which is subject to the Zoning Ordinance;~~
  - c) ~~At least 5 contiguous acres in area;~~
  - d) ~~Not primarily occupied by a conforming use as designated in the West Berkeley Plan; and~~
  - e) ~~At least 1,000 feet from any other Outdoor Recreation Sub-zone.~~
3. ~~The initial designation of an Outdoor Recreation Sub-zone expires five years from the designation date. To permit outdoor recreational uses after that date, the Council must renew the Outdoor Recreation Sub-zone designation.~~

#### E. Development Standards.

1. Basic Standards. See Table 23.206-12: ~~for development standards in the MU-LI district~~ Development Standards.

**TABLE 23.206-12: MU-LI DEVELOPMENT STANDARDS**

| BASIC STANDARDS                              |            | SUPPLEMENTAL STANDARDS      |
|----------------------------------------------|------------|-----------------------------|
| Lot Area, Minimum                            | No minimum | 23.304.020-Lot Requirements |
| Usable Open Space Per Dwelling Unit, Minimum | n/a        |                             |
| Floor Area Ratio, Maximum                    | 2.0        |                             |
| Main Building Height, Maximum                | 45 ft.     | 23.304.050-Building Height  |
| Lot Line Setbacks, Minimum                   |            | 23.304.030-Setbacks         |
| Front                                        | No minimum |                             |
| Rear                                         | No minimum |                             |
| Interior Side                                | No minimum |                             |
| Street Side                                  | No minimum |                             |

|                              |            |  |
|------------------------------|------------|--|
| Building Separation, Minimum | No minimum |  |
| Lot Coverage, Maximum        | 100%       |  |

2. *Affordable and Family Housing Opportunity Areas. Multi-unit and mixed-use residential projects on parcels located within the Affordable and Family Housing Opportunity Area as shown in Figure 23.206-1 shall comply with the development standards in the San Pablo Commercial (C-SP) District (see 23.204.160).*

F. **Permit Findings.** See Section 23.206.110 – Permit Findings.

Section 17. That Section 23.206.090(A)(1) is amended to read as follows

1. Implement the ~~West Berkeley Plan~~ Mixed ~~Residential District~~ Use Land Use designation;

Section 18. That Section 23.206.110(A) ~~within BMC Chapter 23.206~~ is amended to read as follows

- A. All Manufacturing Districts. To approve an AUP or a Use Permit in a Manufacturing District, the review authority must find that the project:
1. Is consistent with the purposes of the district;
  2. Is compatible with the surrounding uses and buildings;
  3. Complies with the policies of the adopted West Berkeley General Plan; and
  4. Meets any applicable performance standards for off-site impacts.

Section 19. That Table 23.302-2 Permit Requirements for Outdoor Uses within BMC Chapter 23.302 is amended to read as follows:

**TABLE 23.302 2: Permit Requirements for Outdoor Uses**

| DISTRICT/USE CHARACTERISTICS [1]                                | PERMIT REQUIRED |
|-----------------------------------------------------------------|-----------------|
| All Commercial Districts Except for C-W                         |                 |
| Not abutting a residential district                             | AUP             |
| Abutting a residential district                                 | UP(PH)          |
| <u>C-W, C-SP</u>                                                |                 |
| Not abutting a residential district and less than 10,000 s. ft. | AUP             |
| Abutting a residential district                                 | UP(PH)          |
| 10,000 sq. ft. or more                                          | UP(PH)          |



|                                                                                                                                                                                                                |        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| M, MM, M-RD [2]                                                                                                                                                                                                |        |
| Less than 20,000 sq. ft.                                                                                                                                                                                       | ZC     |
| 20,000 sq. ft. or more                                                                                                                                                                                         | AUP    |
| MU-LI                                                                                                                                                                                                          |        |
| Less than 20,000 sq. ft.                                                                                                                                                                                       | ZC     |
| 20,000 to 30,000 sq. ft.                                                                                                                                                                                       | AUP    |
| More than 30,000 sq. ft.                                                                                                                                                                                       | UP(PH) |
| MU-R                                                                                                                                                                                                           |        |
| Not abutting a residential district                                                                                                                                                                            | AUP    |
| Abutting a residential district                                                                                                                                                                                | UP(PH) |
| Notes:<br>[1] Size is measured as the lot area of the outdoor activity or storage<br>[2] In the M, MM, and M-RD districts, permits are required only for activity or storage not ancillary to a permitted use. |        |

Section 20. That section 23.302.020(D)(5) within BMC Chapter 23.302.020 is amended to read as follows:

5. **C-W and C-SP Districts.** In the C-W and C-SP districts, uses outside of a building must be permitted or incidental to permitted use in the district.

Section 21. That Table 23.302-1 Allowed Hours of Operation within BMC Chapter 23.302 is amended to read as follows:

| DISTRICT                                                                                                                     | ALLOWED HOURS OF OPERATION            | PERMIT REQUIRED TO EXTEND HOURS |
|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|
| C-C, C-U, C-NS, C-AC, C-W <del>nodes</del> , <u>C-SP</u> , <u>C-N</u> , <u>C-E</u> , <u>C-SO</u> , <u>C-SA</u> , <u>MU-R</u> | 6:00 a.m. – 12:00 midnight            | AUP                             |
| <del>C-N, C-E, C-SO, C-SA, C-W outside nodes, MU-R</del>                                                                     | <del>6:00 a.m. — 12:00 midnight</del> | <del>AUP</del>                  |
| C-T, C-DMU                                                                                                                   | 24 hours per day 7 days a week        | N/A                             |

Section 22. That Section 23.302.070(E)(3) is amended to read as follows:

3. **C-SPW District Requirements.**

- (a) Food service drive-through is not permitted on properties fronting San Pablo Avenue.

Section 23. That Table 23.302-7 Permit Requirements for Parking Lots/Structures within BMC Chapter 23.302.070 is amended to read as follows:

**Table 23.302-7: Permit Requirements for Parking Lots/Structures**

| DISTRICT                        | PERMIT REQUIRED                                                                                                                                                                                                                                                                                                                  |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Residential Districts</b>    |                                                                                                                                                                                                                                                                                                                                  |
| R-3                             | Use Permit for all parking lots and structures. [1]                                                                                                                                                                                                                                                                              |
| R-S, R-SMU, R-BMU               | Use Permit for parking structures only. Parking lots are not permitted, except on lots between Acton Street and Virginia Gardens and between Peralta Avenue and Northside Avenue in the R-BMU.                                                                                                                                   |
| All other residential districts | Use Permit for all parking lots and structures.                                                                                                                                                                                                                                                                                  |
| <b>Commercial Districts</b>     |                                                                                                                                                                                                                                                                                                                                  |
| C-C, C-U                        | Zoning Certificate for parking lots and structures with 5 spaces or fewer. Use Permit for more than 5 spaces.                                                                                                                                                                                                                    |
| C-SO                            | AUP for parking lots and structures with 5 spaces or fewer. Use Permit for more than 5 spaces.                                                                                                                                                                                                                                   |
| C-DMU                           | AUP for parking lots with 8 spaces or fewer. Use Permit for all parking structures. Lots with more than 8 spaces not permitted.                                                                                                                                                                                                  |
| C-N, C-E, C-NS, C-SA            | Use Permit for all parking lots and structures.                                                                                                                                                                                                                                                                                  |
| C-T                             | Use Permit for all parking structures. All parking lots not permitted.                                                                                                                                                                                                                                                           |
| C-W, <u>C-SP</u>                | AUP for parking lots and structures with 10 spaces or fewer. Use Permit for parking lots and structures with more than 10 spaces. <u>[2]</u>                                                                                                                                                                                     |
| <b>Manufacturing Districts</b>  |                                                                                                                                                                                                                                                                                                                                  |
| M, MM                           | AUP for parking lots and structures with 10 or fewer spaces exclusively for uses in the district. Use Permit for parking lots and structures with any number of spaces not exclusively for uses in the district.                                                                                                                 |
| MU-LI, M-RD                     | Zoning Certificate for parking lots and structures with 10 or fewer spaces exclusively for uses in the district. AUP for parking lots and structures with 11 spaces or more exclusively for uses in the district. Use Permit for parking lots and structures with any number of spaces not exclusively for uses in the district. |
| MU-R                            | Zoning Certificate for parking lots and structures exclusively for uses in the district. Use Permit for parking lots and structures not exclusively for uses in the district.                                                                                                                                                    |

**Notes:**

[1] Parking lots and structures in the R-3 district are not permitted within the Southside Plan area

[2] Parking lots and structures in the C-SP district are not permitted within Designated Nodes (see Section 23.204.160(D)).

Section 24. That Table 23.304-3 within BMC Chapter 23.304.030 is amended to read as follows:

**Table 23.304-3: Setbacks Adjacent to Residential Districts**

|                                                                                                                                                                                                                                                                                                                                                                                     | Minimum Lot Line Setback when Lot Line Abuts or Confronts a Lot in a Residential District |                                                                |               |                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------|---------------|-------------------------------------------------------|
| District                                                                                                                                                                                                                                                                                                                                                                            | Front                                                                                     | Rear                                                           | Interior Side | Street Side                                           |
| C-C, C-U, C-N, C-E, C-NS, C-SA, C-SO, C-DMU, C-W, C-AC, MU-LI                                                                                                                                                                                                                                                                                                                       | Same as required in adjacent Residential District [1]                                     | 10 feet or 10% of the lot depth, whichever is less             | 5 ft.         | Same as required in adjacent Residential District [1] |
| <u>C-SP</u>                                                                                                                                                                                                                                                                                                                                                                         | <u>5 ft. [2]</u>                                                                          | <u>No minimum</u>                                              | <u>5 ft.</u>  | <u>5 ft. [2]</u>                                      |
| C-T                                                                                                                                                                                                                                                                                                                                                                                 | No minimum                                                                                |                                                                | 5 ft.         | 4 ft.                                                 |
| MU-R                                                                                                                                                                                                                                                                                                                                                                                | 10 ft. [1]                                                                                | 10 feet or 10% of the lot width, whichever is less <u>[32]</u> |               |                                                       |
| Notes:<br>[1] In the MU-LI and MU-R districts, setback may be reduced to the smaller of front setbacks on abutting lot with an AUP.<br>[2] Applies only to the portion of the parcel located within 30 ft. of an abutting Residential District.<br>[32] This applies to lots that abut or confront a lot either in a Residential District or containing one or more dwelling units. |                                                                                           |                                                                |               |                                                       |

Section 25. That Section 23.304.050(C) is amended to read as follows

*C. Parapets Allowed Above Height Limit.* Parapets may exceed the height limit by up to five feet as of right in the following districts:

1. The R-3, R-S, R-SMU, and C-T districts located within the Southside Plan boundaries.
2. The C-DMU district (see Section 23.204.130(E)(1)(b)).
3. The R-BMU district (see Section 23.202.150(F)).
4. The C-AC district (see Section 23.204.150(E)(4)).
5. The C-SP district (see Section 23.204.160(E)(3)).

Section 26. That Section 23.304.140 is amended to read as follows

A. **Downtown Area Plan.** Projects in the Downtown Area Plan boundaries are subject to the applicable mitigation measure in the adopted Mitigation Monitoring Program of the Downtown Area Plan Final EIR.

**B. Southside Plan.**

1. **Mitigation Measures.** Projects in the Southside Plan boundaries are subject to the applicable mitigation measures in the adopted Mitigation Monitoring Program the Southside Plan Final EIR.
2. **Permit Findings.** To approve an AUP or Use Permit for a project in the Southside Plan boundaries, the review authority must find that the project complies with the Southside Plan's adopted Mitigation Monitoring Program (MMP).

~~C. **West Berkeley Plan.** Projects in the West Berkeley Plan boundaries are subject to the applicable mitigation measure in the adopted Mitigation Monitoring Program of the West Berkeley Plan Final EIR.~~

~~D. C.~~ **Adeline Corridor Plan.** Projects in the Adeline Corridor Plan boundaries are subject to the applicable mitigation measure in the adopted Mitigation Monitoring Program of the Adeline Corridor Plan Final EIR.

~~E. D.~~ **Ashby and North Berkeley BART Stations Transit-Oriented Development Zoning Project.** Projects in the Ashby and North Berkeley BART Stations Transit-Oriented Development Zoning Project boundaries are required to implement all the applicable mitigation measures in the adopted Mitigation Monitoring Program of the Ashby and North Berkeley BART Stations Transit-Oriented Development Zoning Project EIR.

~~E. **San Pablo Avenue Specific Plan.** Projects in the San Pablo Avenue Specific Plan boundaries are subject to the applicable mitigation measure in the adopted Mitigation Monitoring Program of the 2023-2031 Housing Element Update Final EIR.~~

Section 27. That Section 23.312.040(E) be added to read as follows

~~E. **C-SP District.** In addition to the standards in Subsection A (All Districts) above, the following live/work standards apply in the C-SP district.~~

- ~~1. **Only ground floor space may be changed to live/work units.**~~
- ~~2. **Live/work units are prohibited in C-SP Designated Nodes (see Section 23.204.160(D)).**~~

Section 28. That Section 23.312.050(D)(1) is amended to read as follows

1. Establishment of a live/work unit will not interfere with the lawful operation of manufacturers and other industries existing in or adjacent to the district ~~and~~

~~will not impede the lawful future establishment of manufacturers and other industries permitted under the West Berkeley Plan.~~

Section 29. That Section 23.322.050(B)(2)(c)(1) within BMC Chapter 23.322 is amended to read as follows

- i. The parking requirement modification will ~~implement the West Berkeley Plan goals and policies related to~~ improvement and support ~~for~~ alternative transportation, as well as pedestrian improvements and activity, ~~and similar policies.~~

Section 30. That the line “Modifications to Development Standards in West Berkeley Plan Area” in Table 23.402-1 in BMC Chapter 23.402.020(B) is amended to read as follows

|                                                                              |            |          |    |    |   |          |    |        |
|------------------------------------------------------------------------------|------------|----------|----|----|---|----------|----|--------|
| Modifications to Development Standards in West Berkeley <del>Plan Area</del> | 23.406.080 | Evaluate | -- | -- | - | Decision | -- | Appeal |
|------------------------------------------------------------------------------|------------|----------|----|----|---|----------|----|--------|

Section 31. That Section 23.406.060(A)(1) is amended to read as follows

1. Facilitate the implementation of the General Plan and area plans, ~~including the West Berkeley Plan;~~

Section 32. That Section 23.406.070(B)(1)(a) is amended to read as follows

1. Design Review is required for:
  - a) Projects in all Non-Residential Districts except for Residential Uses in the MU-R zoning district, and projects located within the San Pablo Avenue Specific Plan Area.

Section 33. That Section 23.406.080 within BMC Chapter 23.406 is amended to read as follows

**23.406.080 – Modification of Development Standards in West Berkeley ~~Plan Area~~**

- A. **Purpose.** A Modification of Development Standards is a discretionary approval to modify land use and development standards for development projects in ~~the West Berkeley Plan area.~~ For the purposes of this section, West Berkeley is defined as the area bounded by the City of Albany to the north, the City of Emeryville/Oakland

to the south, San Pablo Avenue to the east and the Eastshore Freeway to the west.

The purpose of these modifications is to:

1. Facilitate the implementation of the West Berkeley General Plan;
2. Facilitate the reuse of large and multi-user sites which might otherwise prove difficult to reuse;
3. Facilitate the development and reuse of large, multi-user sites as integrated units in a stable and desirable environment to benefit occupants, the neighborhood, and the city as a whole; and
4. Allow modifications of standards when:
  - (a) The modifications serve the overall purposes of their districts and the West Berkeley General Plan on large, complex sites; and
  - (b) The design of the project is compatible with the design and character of the surrounding area.

B. **Eligibility.** A project must satisfy the following criteria to be eligible for a Modification of Development Standards.

1. More than 50 percent of the site area must be within a C-W, C-SP, MU-LI, MM or M district.
2. The site must be either:
  - (a) At least five contiguous acres within the City boundary under a single ownership and not primarily being used occupied by a conforming use conforming to the West Berkeley Plan; or
  - (b) Less than five acres and forms a full city block bounded on all sides by public streets (exclusive of alleys), mainline railroad tracks, and/or the borders of the City.

C. **Allowed Modifications.** The ZAB may allow modifications to the following land use and development standards:

1. Permitted location of land uses within a building, site, or district.
2. Development standards including but not limited to, height, yards, open space, and parking.

D. **Project Phases.** The ZAB may approve a Modification of Development Standards application to allow a project to be built in phases.

E. **Limitation.** A Modification of Development Standards may not allow any modification that would violate Section 23.206.050 (Protected Uses).

F. **Review Authority.** The ZAB takes action on all Modification of Development Standards applications.



G. **Public Notice and Hearing.** The ZAB shall review and act on a Modification of Development Standards application at a noticed public hearing in compliance with Chapter 23.404 (Common Permit Requirements).

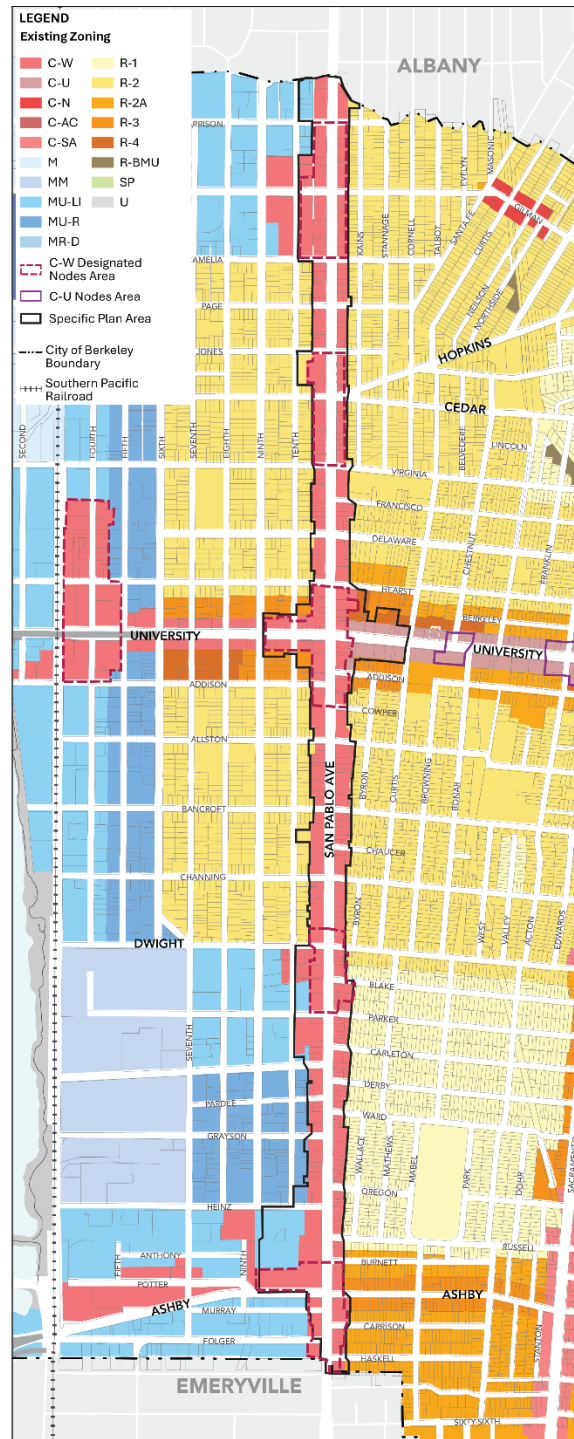
H. **Findings for Approval.**

1. To approve a Modification of Development Standards, the ZAB shall make all of the following findings:
  - (a) The site is eligible for a Modification of Development Standards under Subsections B (Eligibility) and E (Limitation);
  - (b) The project is likely to advance the purposes of the ~~West Berkeley~~ General Plan and this section;
  - (c) The project supports the attraction and/or retention of the types of businesses reflected in the purpose statement of the applicable district.
  - (d) The modification is necessary and appropriate for the development of the proposed project.
2. To approve a Modification of Development Standards, the ZAB shall also make all required Use Permit findings in Section 23.406.040 (Use Permits) and any additional Use Permit findings required by the Zoning Ordinance for the use or development in the applicable district.

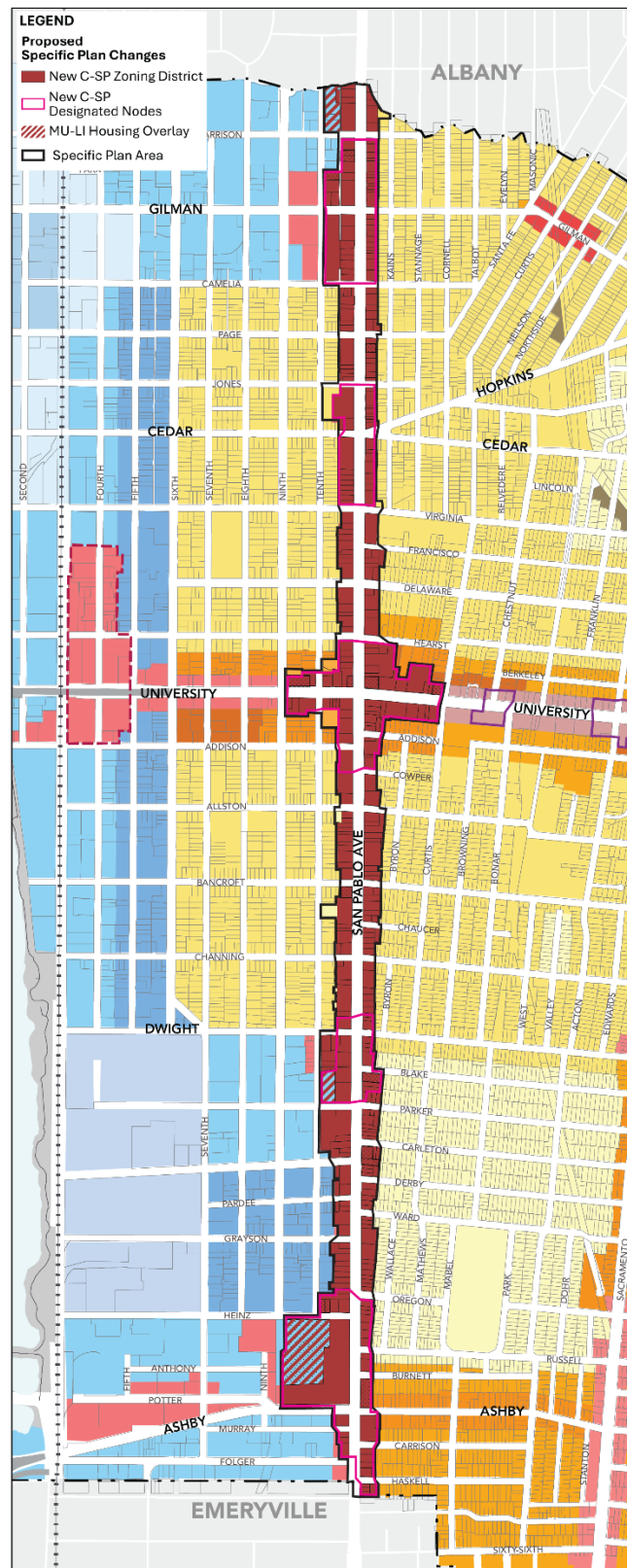
Section 34. Copies of this Ordinance shall be posted for two days prior to adoption in the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way. Within 15 days of adoption, copies of this Ordinance shall be filed at each branch of the Berkeley Public Library and the title shall be published in a newspaper of general circulation.

## EXISTING AND PROPOSED ZONING MAPS

Map 1. Project Area – Existing West Berkeley Commercial Zoning District (C-W)



Map 2. Project Area – Proposed San Pablo Avenue Commercial Zoning District (C-SP)





Planning and Development Department  
Land Use Planning Division

STAFF REPORT

June 3, 2026

TO: Members of the Planning Commission

FROM: Justin Horner Principal Planner

SUBJECT: Public Hearing: San Pablo Avenue Specific Plan Adoption

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RECOMMENDATION

Receive a staff presentation, consider public comments, and adopt a resolution (Attachment 1) recommending that the City Council:

1. Adopt the San Pablo Avenue Specific Plan (Attachment 2) and San Pablo Avenue Specific Plan Design Standards Document (Attachment 3).
2. Amend the Zoning Map, Zoning Ordinance, University Avenue Strategic Plan, and General Plan (Attachment 1, Exhibits A, B, and E).
3. Retire the West Berkeley Plan and San Pablo Avenue Public Improvements Plan (Attachment 1, Exhibits C and D).

SUMMARY

City staff are proposing amendments to the Zoning Map, Zoning Ordinance, and conforming amendments to the University Avenue Strategic Plan, and General Plan as part of the proposed adoption of the San Pablo Avenue Specific Plan (Specific Plan) and associated San Pablo Avenue Specific Plan Design Standards Document (Design Standards Document). The full text of the Zoning Ordinance and General Plan changes can be found in Attachment 1. The Specific Plan identifies goals, policies and programs that address citywide and regional goals for housing production and affordability, and support small businesses, multimodal streets, and cultural vitality. The Design Standards Document provides a set of standards to support Specific Plan implementation. As part of adoption of the Specific Plan, staff are proposing to retire the West Berkeley Plan and San Pablo Avenue Public Improvements Plan.

The Planning Commission provided comments at its April 3, 2024, December 4, 2024, November 5, 2025, and March 18, 2026 meetings and now staff are requesting that the Planning Commission provide a recommendation to City Council on the proposed Specific Plan and implementing legislation.

## FISCAL IMPACTS OF RECOMMENDATION

The proposed Specific Plan and implementing legislation are intended to support housing production and affordability, and small businesses along the San Pablo Avenue corridor, which would result in additional contributions to the tax base and economic vitality in Berkeley. Therefore, the proposed amendments may result in an increase in employment, property tax, business license tax and sales tax revenues due to increased business activity in the Specific Plan area.

## CURRENT SITUATION AND ITS EFFECTS

As described in the Land Use Chapter of the Specific Plan, land uses along San Pablo Avenue have been shifting away from the historically regional-serving, auto-oriented land use pattern of primarily commercial and light industrial businesses and towards higher density residential and local-serving commercial uses. This transition is beginning to transform the Specific Plan Area into a more vibrant, mixed-use district.

The Specific Plan would supersede the 1993 West Berkeley Plan for all properties within the Specific Plan Area while carrying forward the West Berkeley Plan's key goals related to land use and community character. Further, based on Commission and Council feedback, the West Berkeley Plan is proposed to be retired with adoption of the Specific Plan. Also, the Specific Plan would supersede the San Pablo Avenue Public Improvements Plan, which is proposed to be retired with adoption of the Specific Plan (see *Summary of Proposed Plan Retirements* below). All future development projects would be required to comply with the Specific Plan, the Design Standards Document, and the Berkeley Municipal Code (BMC). The Design Standards Document and BMC Title 23 contain the design standards and zoning regulations that implement the Specific Plan.

## BACKGROUND

There are three prior actions by City Council that led to the development of a Specific Plan for San Pablo Avenue: 1) a 2015 City Council referral to develop a plan to guide development on San Pablo Avenue; 2) acceptance of a 2021 grant awarded by the Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC), which designated San Pablo Avenue as a Priority Development Area;<sup>1</sup> and 3) adoption of the 2023–2031 Housing Element Update, which established the development of a San Pablo Avenue Specific Plan as a programmatic goal.<sup>2</sup>

As shown in Table 1 below, the Specific Plan development process began in June 2023 with an assessment of existing conditions and initial community engagement efforts, which consisted of a pop-up event at the Harvest Festival and targeted intercept survey to gather input on the current condition and future development of San Pablo Avenue. In January 2024, an open house was held to collect input on existing conditions. In August 2024, a Community Assessment Report ([Link 1- Community Assessment Report](#)) and Policy Options and Development Framework ([Link 2 - Policy Options and Development Framework](#)) were published. In September 2024, a community workshop was held to collect input on the findings of these reports. The following month,

<sup>1</sup> [Priority Development Areas \(PDAs\) | Metropolitan Transportation Commission](#).

<sup>2</sup> [City of Berkeley Housing Element Update 2023-2031](#).

a survey was conducted that provided insights into priorities for policy development. Then, a walking tour was held to gather input on development scenarios. At the December 4, 2024, Planning Commission meeting, staff provided a project update and Commissioners provided feedback on policy options related to these reports ([Link 3 – December 4, 2024 Planning Commission presentation](#)). The project team incorporated feedback from the Commission, as well as feedback received through community engagement efforts, into the Public Review Draft Plan (Draft Plan) published in October 2025 ([Link 4 – Public Review Draft Specific Plan](#)).

In October 2025, a second open house was held to gather input in advance of publishing the Public Review Draft Specific Plan. The Planning Commission and City Council provided feedback on the Draft Plan at their November 5 and November 6 meetings, respectively ([Link 5 – November 5, 2025 Planning Commission presentation](#)), ([Link 6 – November 6, 2025 City Council presentation](#)). In response to comments received, the project team conducted additional analysis and developed policy options for feedback from the Planning Commission. At the March 18, 2026 Planning Commission meeting, staff received comments from the public and Commissioners regarding the following policy topics: maximum building height, voluntary commercial in-lieu fee, local density bonus program, allowed uses, and retirement of the West Berkeley Plan ([Link 7 – March 18, 2026 Planning Commission presentation](#)).

Since the March Planning Commission meeting, the project team has refined the Specific Plan policies, Design Standards Document and associated zoning regulations and prepared the Specific Plan and Design Standards Document for adoption. In addition, staff provided a memorandum to the Transportation Infrastructure Commission at its April 16, 2026 meeting describing transportation-related changes made to the Specific Plan in response to community feedback on the Public Review draft ([Link 8 – Transportation Infrastructure Commission Memorandum, April 16, 2026](#)).

**Table 1 - Community Outreach Process**

|                    |                                                                       |
|--------------------|-----------------------------------------------------------------------|
| October 21, 2023   | Harvest Festival Pop-Up Event                                         |
| November 1, 2023   | Planning Commission Information Item                                  |
| November 2023      | Targeted Survey Results                                               |
| January 24, 2024   | Community Open House #1                                               |
| April 4, 2024      | Planning Commission Status Update and Overview #1                     |
| September 26, 2024 | Community Workshop                                                    |
| October 2024       | Community Survey Results                                              |
| November 16, 2024  | Walking Tour                                                          |
| December 4, 2024   | Planning Commission Status Update and Overview #2                     |
| October 29, 2025   | Community Open House #2                                               |
| November 5, 2025   | Planning Commission Planning Commission Status Update and Overview #3 |
| November 6, 2025   | City Council Worksession                                              |
| March 18, 2026     | Planning Commission Planning Commission Status Update and Overview #4 |



|                |                                                              |
|----------------|--------------------------------------------------------------|
| April 16, 2026 | Transportation Infrastructure Commission<br>Information Item |
| June 3, 2026   | Planning Commission Recommendation                           |

## DISCUSSION

The project for Planning Commission consideration and recommendation to City Council includes adoption of the Specific Plan, as well as a Design Standards Document, Zoning Ordinance and Map amendments, corresponding General Plan text and Map amendments to ensure consistency with the Specific Plan, and retirement of the West Berkeley Plan and San Pablo Avenue Public Improvements Plan. The section describes each of the project components in more detail.

### **Summary of Specific Plan**

The proposed Specific Plan includes six chapters, consisting of:

- The Introduction chapter (Chapter 1) provides context about Specific Plan Area conditions, the purpose of the document, and the community engagement process.
- The Vision & Desired Results chapter (Chapter 2) provides long-term vision, brief historical context, goals and planning framework for the Specific Plan Area.
- Three chapters focus on Land Use, Economic Development, and Streets, Mobility, and the Public Realm (Chapters 3 through 5), that each include goals, policies and standards.
- The Implementation chapter (Chapter 6) describes implementation measures or a preliminary set of next steps to achieve the long-term vision of the Specific Plan. The Specific Plan would be monitored and updated on a regular basis to reflect progress, lessons learned, changing circumstances, new opportunities, and community priorities over time.

A stand-alone Design Standards Document would implement urban design-related policies by articulating design requirements at the site, building and public realm levels for new development and alterations of existing buildings.

The following sections briefly describe the policies contained in each chapter and Design Standards Document, as they have been refined based on feedback received on the Draft Plan.

#### *Land Use (Chapter 3)*

The following policies aim to increase the diversity and supply of housing, and to support commercial vitality and reduce ground floor vacancies while promoting active, pedestrian-oriented development and public realm improvements. For more details about how these policies would be implemented through zoning, see Summary of Zoning and Plan Changes below.

- Establish the San Pablo Commercial (C-SP) Zoning District (*Figure 1*)

Currently, the Specific Plan Area is largely within the West Berkeley Commercial (C-W) district; a few parcels are split-zoned C-W and Mixed-Use Light Industrial (MU-LI), University Commercial (C-U), or residential (R-1, R-2, R-3) districts. The Specific Plan would re-zone these parcels within the Specific Plan Area to a new district – San Pablo Commercial (C-SP) to implement the Specific Plan's land use policies.

- Focus Commercial Uses within Designated Nodes

The existing C-W district includes Designated Nodes at key intersections where development standards and permitted uses concentrate neighborhood-serving commercial uses. The Specific Plan would continue this framework and expand the number of permitted uses in Designated Nodes to increase flexibility for long-term commercial viability.

- Expand Allowed Primary and Temporary Uses

Compared to the existing C-W district, the C-SP district would allow for a more active, flexible, and community-oriented mixed-use environment with certain industrial uses allowed where compatible with residential uses. To support commercial vitality, temporary uses that include retail, enclosed public markets<sup>3</sup>, food service establishments, and commercial uses located outdoors would be allowed with a zoning certificate, subject to meeting performance standards.

- Allow Affordable and Family-Friendly Housing on certain MU-LI Parcels

The Specific Plan would permit mixed-use and multi-family developments on certain MU-LI parcels within the Specific Plan Area, as long as the applicant dedicates either: 1) 100% of residential units as deed-restricted affordable housing or 2) at least 50% of residential units as “family-sized” (two or three-bedrooms). The C-SP development standards would apply to eligible projects. The affordability requirement for rental units would be to households earning less than 60 percent of the Area Median Income (AMI); for ownership units, the sales price would be affordable to households earning no more than 80 percent of the AMI.

- Local Density Bonus

The Specific Plan would establish a pilot San Pablo Avenue Density Bonus Program by developing an affordable-housing benefit for new residential ownership (condominium) projects that is exclusively met through paying an in-lieu fee to the City's Affordable Housing Trust Fund. This program would align with a recently adopted Council referral to facilitate lower-cost ownership opportunities in Berkeley ([Link 9 - April 14, 2026 Council Referral](#)).

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<sup>3</sup> A facility or location where people regularly gather for the sale and purchase of food, beverages, flowers, crafts, and other similar goods. Public markets are open daily, year-round, in a permanent location, with multiple vendors that are owner-operated. (b) Enclosed. A public market conducted indoors.  
[https://berkeley.municipal.codes/BMC/23.502.020\(P\)\(20\)](https://berkeley.municipal.codes/BMC/23.502.020(P)(20))

- Public Open Space Enhancements

The Specific Plan includes incentives to create high-quality, publicly accessible open space within private development projects to enhance the pedestrian environment and support placemaking. A development project applicant could choose to substitute private open space for any of the following four types of public open space: sidewalk expansion, privately-owned publicly accessible open spaces (POPOS), side-street plazas, or mid-block passages.

- Ground Floor Form Types

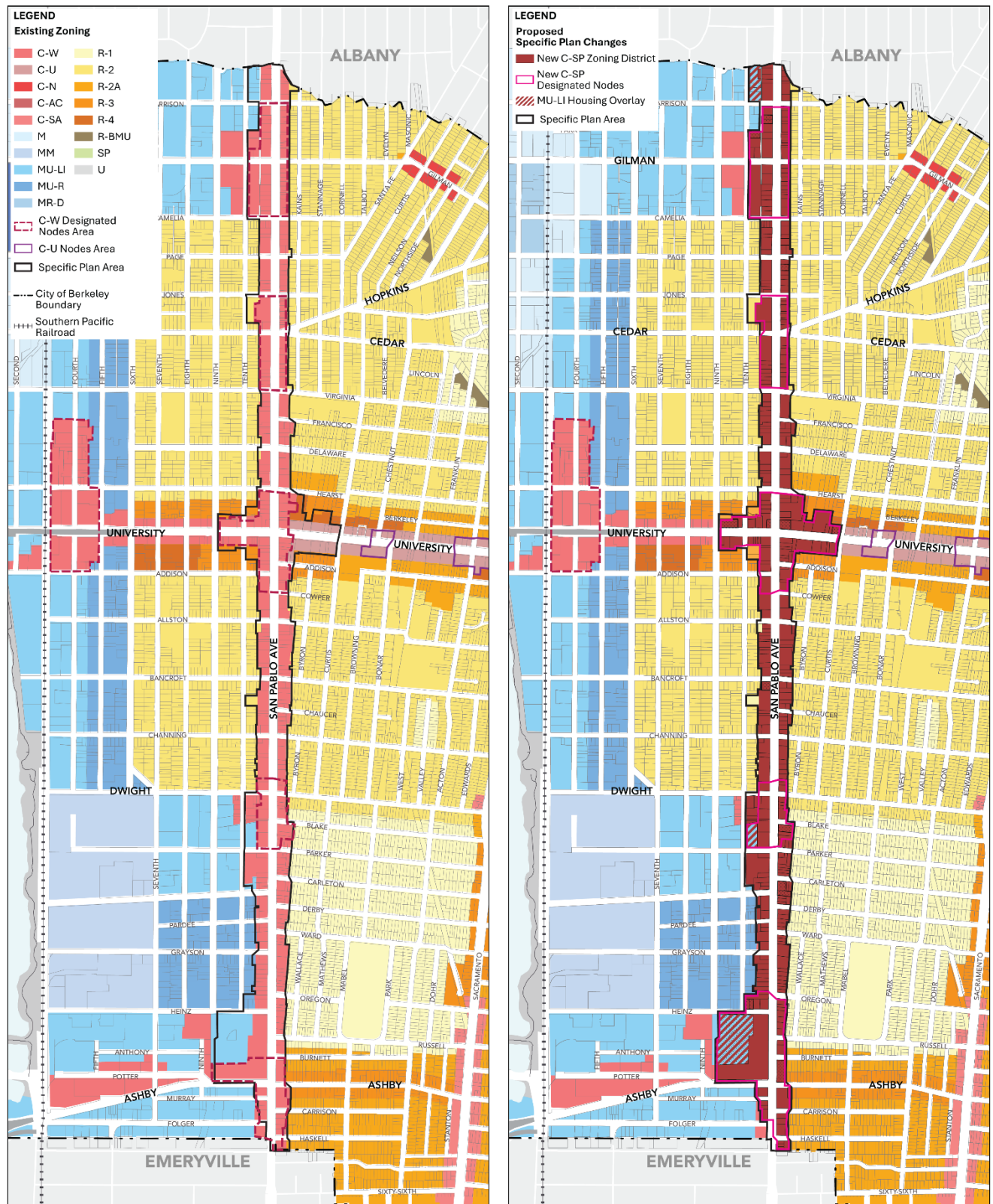
The Specific Plan establishes four ground floor form types—Storefront, Active, Residential, and Live/Work—with tailored design standards to support an adaptable and walkable public realm and prioritize transparency, architectural articulation, and seamless adaptability between various commercial uses. Outside of Designated Nodes, any form type can be selected to meet the requirement. Also, more than one form type can be combined within a single development.

- The Storefront form type is intended to encourage a strong retail-oriented commercial frontage, where residential use is allowed behind the commercial frontage. This form type would be required on parcels fronting San Pablo Avenue, University Avenue, and certain side streets within Designated Nodes.
- The Active form type is intended to be functional for a range of non-residential uses and residential amenity spaces. This form type would be allowed on certain side streets within Designated Nodes as an alternative to Storefront.
- The Residential form type is intended to foster social interaction and street activation while providing appropriate transitions between public and private space. This form type would be allowed in a few locations within the Cedar and Dwight Nodes; it is also allowed outside of Designated Nodes.
- The Live/Work form type is intended to support the unique needs of spaces that combine living and working and provide a storefront character to enhance the pedestrian environment. This form type would only be allowed outside of Designated Nodes.

- Development Standards

The Specific Plan includes new development standards to encourage additional housing development in the Specific Plan Area (see *Summary of Zoning and Plan Changes* section below). The proposed Design Standards Document provides objective standards to further the vision of the Specific Plan by promoting a built form and architectural character that reinforces San Pablo Avenue's distinctive place in the city, that supports walking, and sustains a diverse, active and safe public realm.

Figure 1 – Existing and Proposed Zoning Map



*Economic Development (Chapter 4)*

The Specific Plan's economic development policies support the land use policies by aiming to retain and grow local businesses, activate vacant and underutilized spaces, and strengthen the relationship between public and private spaces so that the Specific Plan Area is a place of economic opportunity and cultural vitality.

- Business Activation

To expand opportunities for existing business and support development of new businesses, the Specific Plan: 1) introduces a maker space use (a light manufacturing use) that is limited to hand tools and small-scale equipment occurring solely within an enclosed building; and 2) would allow retail and office space with approval of a Zoning Certificate to support co-working spaces.

- Technical Assistance

The Specific Plan proposes to strengthen the identity of the area as a lively and inclusive commercial district by building the capacity of existing neighborhood groups, associations and businesses to organize corridor-specific initiatives and events.

- Business Improvement District (BID) Feasibility Study

The Specific Plan proposes to study the feasibility of forming one or more BIDs. The study would assess different boundaries and implementation approaches and establish a pilot in one or two Designated Nodes – focusing on Designated Nodes where public investments and community business interest are concentrated, long-term businesses with pedestrian-oriented storefronts are clustered, and planned or completed mixed-use development are increasing residential density.

- Establish a Process to Prioritize Public Investment in Designated Nodes

Concentrating resources within the Designated Nodes would deliver visible, coordinated improvements that can attract new businesses, enhance safety, and build community identity. The Specific Plan seeks to establish a process to prioritize public investments in Designated Nodes.

*Streets and Mobility (Chapter 5)*

Community feedback emphasized the importance of making San Pablo Avenue easier to cross, more comfortable to walk and bike along, and better connected to the surrounding neighborhoods and regional destinations. To support this transition, the Specific Plan includes transportation policies that: 1) provide local context to inform updates of the City's Pedestrian and Vision Zero Action Plans expected to begin in 2026 or 2027; 2) call for implementation of mobility hubs in collaboration with MTC and AC Transit; 3) improve safety by managing vehicle speeds and lowering speed limits; and 4) improve multimodal connectivity at key intersections (see Appendix D to the Specific Plan).

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*Public Realm (Chapter 5)*

The Specific Plan proposes policies and standards for the public realm that make it easy to reach businesses, transit, homes, and parking while also offering spaces to gather, exercise, and socialize.

- Sidewalks

To serve the range of uses and infrastructure located within sidewalks, the Specific Plan establishes design standards for each of three zones: Pedestrian, Amenity, and Frontage. Where sidewalk widths are narrower than preferred in the Berkeley Pedestrian Plan (2020),<sup>4</sup> the Specific Plan would encourage widening as properties are redeveloped. In addition, the Outdoor Commerce Use Fee would be waived for 10 years from permit issuance where sidewalks are widened for commercial uses.<sup>5</sup>

- Streetscape

The Specific Plan updates streetscape standards from the existing San Pablo Avenue Public Improvement Plan (2003) for pedestrian-scale lighting, street furnishing, bus stop improvements, medians, trees, and landscaping. Elements of the streetscape standards would apply to side streets within the Specific Plan Area, including University Avenue.

- Side Street Plazas

The Specific Plan encourages converting minor streets into side street plazas by limiting or removing vehicle access at certain intersections along San Pablo Avenue that generally extend only a few blocks east/west of San Pablo Avenue or that lack a median break. Implementation approaches include public-private partnerships, a future BID, and as an open space incentive in new development.

- Parklets and Curb Extension Common Spaces

On side streets within the Specific Plan Area, parklets and curb extensions offer opportunities to create community gathering areas, outdoor business spaces and streetscape landscaping within the public right-of-way. To encourage development of these spaces, the Specific Plan proposes waving the Sidewalk Seating Permit fee for up to 10 years from permit issuance.<sup>6</sup>

- Pocket Parks and Plazas

There are no publicly owned park, plazas, or other community spaces located along San Pablo Avenue. Community feedback throughout the planning process emphasized a strong desire for accessible public open space along San Pablo Avenue. The Specific Plan suggests future

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<sup>4</sup> [City of Berkeley, Pedestrian Plan. Appendix B: Engineering and Design Guidance, page B-8.](#)

<sup>5</sup> [Outdoor Commerce, Sidewalk Seating, and Parklets | City of Berkeley](#)

<sup>6</sup> Ibid.



evaluation of the feasibility of acquiring underutilized parcels for a public park along San Pablo Avenue.

### *Design Standards Document*

To help achieve the Specific Plan's vision of a built form and architectural character that reinforces San Pablo Avenue's distinctive place in the city, supports walking, and sustains a diverse, active and safe public realm, a Design Standards Document is proposed for adoption with the Specific Plan. The document has been developed with a goal to not adversely affect project feasibility, with language that is objective yet flexible. Compliance would be mandatory. Projects that comply with the applicable standards would be exempt from the City's Design Review process; however, a project proponent could request an exception to any standard, and that exception would be reviewed through the existing Design Review process and certain findings would need to be made. The document is organized into five sections:

1. **Introduction.** Describes the purpose and applicability of the standards, the guiding principles, and administrative process to revise them.
2. **Site Design.** Provides standards for the arrangement of activities on the site, primarily in relation to the adjacent public space. The site design section includes standards for pedestrian and vehicular access, as well as parking and service locations within a development site.
3. **Building Design.** Provides architectural standards, including façade modulation and articulation, windows, colors and materials, roofs, and parking garages.
4. **Pedestrian-Level Design.** Provides standards primarily at the ground floor that relate to the building's interaction with sidewalks, adjacent buildings, and open space. The pedestrian-level design section includes standards for ground-floor frontages, as well as private and public open space, as well as standards for service and utilities, private parklets and public art.
5. **Glossary.** Defines technical terms not otherwise included in the Zoning Ordinance (BMC Title 23).

### *Summary of Zoning and Plan Changes*

To implement the Specific Plan, staff are proposing the following Zoning Ordinance text and Zoning Map amendments to create a new District (C-SP), as well as conforming amendments to the University Avenue Strategic Plan and General Plan. The Specific Plan Area encompasses the 2.35-mile San Pablo Avenue corridor within the city limit. Parcels included in the Specific Plan Area front and are adjacent to San Pablo Avenue. In addition, parcels fronting University Avenue between Ninth Street and Curtis Street are included, as well as various parcels fronting side streets parallel to San Pablo Avenue (see Figure 1: Existing and Proposed Zoning Map).

*Zoning District Boundary*

The City of Berkeley Zoning Map would be amended to re-designate the Specific Plan Area to a new District - C-SP. The zoning district boundary would be slightly more expansive than the existing C-W district, as described in the *Land Use* section above.

*Zoning District Purposes*

The C-SP District purposes are to implement the General Plan's designation for Avenue Commercial, encourage intensification of commercial activity at Designated Nodes, and increase opportunities for housing, as well as to promote development that is compatible with adjacent commercial, residential and industrial areas.

*Allowed Uses and Permit Thresholds*

Compared to the existing C-W district, the allowed uses in the C-SP District encourage more public and quasi-public uses, discourage industrial uses that are incompatible with residential development, and maintain the existing restrictions on automotive uses located on San Pablo Avenue.

*Temporary Uses*

As described in the *Land Use* section above, certain temporary uses would be allowed with a Zoning Certificate. Retail, enclosed public markets, and food service establishments could occupy either a vacant or occupied commercial tenant space for up to three years. Temporary outdoor uses would be allowed for one year with a Zoning Certificate subject to compliance with performance standards, such as setbacks from residential properties, operating hours of 9:00 a.m. to 9:00 p.m., and submittal of site, operational, and business plans. Temporary outdoor uses would be allowed in existing surface parking lots with safety measures in order to activate underutilized spaces.

*Designated Nodes*

The proposed C-SP district would maintain the existing Designated Node structure established in the West Berkeley Plan. In the current C-W district, ground floor use regulations allow a narrow set of uses. The proposed C-SP district instead would list prohibited ground floor uses, which do not meet the Designated Node purposes to concentrate pedestrian-oriented uses.

*Development Standards*

As shown in Tables 2 and 3 below, the proposed C-SP district would increase development capacity from the existing C-W district for mixed-use buildings only. Key changes include an increase in the maximum allowed building height and FAR, and setbacks would apply only at the ground floor and would vary based on ground floor form type.

**Table 2 – Development Standards**

| Development Standard           |         | Existing C-W |           | Proposed C-SP <sup>[1]</sup> |
|--------------------------------|---------|--------------|-----------|------------------------------|
|                                |         | Single-Use   | Mixed-Use | Mixed-Use                    |
| Min. Open Space <sup>[2]</sup> |         | 40 sq. ft.   |           | No change                    |
| Max. FAR                       |         | 3.0          |           | 4.25                         |
| Max. Height                    | Stories | 3            | 4         | 7                            |
|                                | Feet    | 40 ft.       | 50 ft.    | 75 ft.                       |
| Min. Density                   |         | N/A          |           | 145 du/ac                    |
| Min. Setbacks                  |         | See Table 2  |           |                              |

Notes:

[1] No changes proposed to existing development standards for single-use projects.

[2] Per dwelling unit or live/work unit.

**Table 3 – Development Standards – Proposed Ground-Floor Setbacks**

| Setback                              | Existing C-W                                       | Proposed C-SP                          |                                |
|--------------------------------------|----------------------------------------------------|----------------------------------------|--------------------------------|
| Not adjacent to residential district |                                                    |                                        |                                |
| Front [1]                            | No minimum                                         | Storefront or Active Frontage          | No minimum                     |
|                                      |                                                    | Residential and Live/Work Frontage [2] | Minimum 5 ft.<br>Maximum 8 ft. |
| Interior Side                        |                                                    | No minimum [3]                         |                                |
| Street Side                          |                                                    | No minimum                             |                                |
| Rear                                 |                                                    | No minimum                             |                                |
| Adjacent to residential district     |                                                    |                                        |                                |
| Front                                | Same as required in Residential district           | Any frontage type                      | 5 ft. [4]                      |
| Interior Side                        | 5 ft.                                              |                                        | No change                      |
| Street Side                          | Same as required in Residential district           |                                        | 5 ft. [4]                      |
| Rear                                 | 10 feet or 10% of the lot depth, whichever is less |                                        | No minimum                     |

[1] In the C-SP district, parcels fronting a public street or a privately-owned public open space.

[2] Applies also to the second floor when the ground-floor clear ceiling height is less than 12 feet, measured from sidewalk grade.

[3] Applies also to frontage along an abutting mid-block public access easement.

[4] Applies only to the portion of the parcel located within 30 ft. of an abutting Residential District.

### *Setbacks*

For parcels not adjacent to a residential district, a minimum and maximum front setback would be required only for residential and live-work frontages. To support an active, pedestrian-oriented public realm, the front setback would also apply to the second floor when the ground-floor clear ceiling height is less than 12 feet, measured from finished grade. No minimum interior side, street side or rear setback would be required.

For parcels adjacent to a residential district, a 5-foot minimum front and street side setback would be required only to the portion of the parcel located within 30 feet of the residential district. The existing 5-foot minimum interior side setback would remain, and no minimum rear setback would be required to account for the additional front and side street setback.

### *Open Space – Private*

To provide high quality private open spaces for active and passive recreation and account for public open space incentives, private open space requirements would be established that apply only in the C-SP District. Specifically, the District defines two types of private open space: common and personal. Common private open spaces are courtyards, sport courts, outdoor dining areas, community rooms, recreational amenities, rooftop amenities, play areas, and gardens for communal use. Personal private open space is an individual yard, terrace, balcony, porch, or deck that is directly accessible from the associated residential unit. These areas would be required to comply with design standards that support social interaction while providing a suitable level of privacy for residents. A development project could satisfy the minimum requirement by providing any amount of common and/or personal open space.

### *Open Space – Public*

To encourage the creation of high-quality, publicly accessible open space within private development in the C-SP District, a development project could provide up to 70 percent of the total required private open space through one or more of the following types of public open space:

- **Sidewalk Expansion.** Defined as an additional ground-floor setback beyond the minimum or maximum required, and would apply only to parcels fronting San Pablo Avenue, Gilman Street, Cedar Street, Hopkins Street, University Avenue, Dwight Way, and Ashby Avenue. A design that would comply with the Specific Plan standards and be approved by the Public Works Department would receive credit for 1.5 square feet of private open space per square foot of sidewalk.
- **Privately Owned Public Open Space (POPOS).** Defined as courtyards, plazas, parks, walkways and gardens for use by the public on privately owned land, POPOS are allowed only within a Designated Node. A design that would comply with the Specific Plan standards could receive credit for 2 square feet of private open space per square foot of POPOS, and a waiver of plan review fees related to the POPOS. Ownership and maintenance would be defined through an ordinance and memorandum of understanding.

- **Side Street Plaza.** Defined as a conversion of a minor street that intersects with San Pablo Avenue into a plaza through either limiting or removing vehicle access. A project applicant could propose a location and design consistent with the related Specific Plan policy (PR-P.14) and subject to approval by the Public Works Department. A qualifying project would receive credit for 2 square feet of required private open space per square foot of side street plaza, as well as a waiver of any plan review fees related to the plaza as well as additional regulations or fees at the City's discretion. Ownership and maintenance would be defined through an ordinance and memorandum of understanding.
- **Mid-Block Passage.** Defined as a privately-owned, publicly accessible path within a development project that provides a mid-block connection to enhance pedestrian and multimodal circulation, mid-block passages would be allowed on lots that both exceed 170 linear feet and front San Pablo Avenue or University Avenue and have frontage on opposite sides of a block. A design that would comply with the Specific Plan standards would receive credit for 1.5 square feet of private open space per square foot of mid-block passage.

### ***Summary of Proposed Plan Amendments***

Adoption of the Specific Plan and associated Zoning Ordinance amendments requires the following conforming amendments to the University Avenue Strategic Plan and General Plan:

- **University Avenue Strategic Plan.** The Specific Plan Area would be amended to remove the existing San Pablo Avenue Node, as this area overlaps with the Specific Plan area and would therefore be superseded by the Specific Plan and C-SP zoning district (see Attachment 1, Exhibit B).
- **General Plan.** The Land Use Element would be amended to add a new policy – LU-47: San Pablo Avenue Specific Plan – to implement the Specific Plan and take action to achieve its desired outcomes. The C-SP district would be added as a compatible zoning district to the existing Avenue Commercial land use designation. The land use diagram would be revised to apply the Avenue Commercial land use designation to the Specific Plan Area. In addition, the Urban Design and Preservation Element would be amended to add reference to the Specific Plan (see Attachment 1, Exhibit E).

### ***Summary of Proposed Plan Retirements***

The following would be retired with adoption of the Specific Plan:

- **San Pablo Avenue Public Improvements Plan (SPAPIP).** Adopted on December 7, 2004, the SPAPIP was developed to support pedestrians, cyclists, drivers, and transit users, while also revitalizing the area along and surrounding San Pablo Avenue. While many improvements have been completed, the SPAPIP itself is now outdated and would be replaced/superseded by this Specific Plan. The SPAPIP's recommendations served as a foundation for the Specific Plan's public realm framework, informing its policies, programs and design standards (see Attachment 1, Exhibit D).

- West Berkeley Plan (WBP).** Adopted in 1993 and amended in 2011, the WBP serves as the guiding document for land use, economic development, and urban design within West Berkeley. The Specific Plan would supersede portions of the WBP where the two plans overlap. Staff assessed the WBP and found that nearly all of its implementation measures have been completed (November 5, 205 PC presentation - [Link 5](#)). The evaluation also reaffirmed that the WBP is primarily implemented through the City's Zoning Ordinance. The City Council and Planning Commission expressed support for retiring the WBP as part of adoption of the Specific Plan (see Attachment 1, Exhibit C).

*Summary of Proposed San Pablo Avenue Specific Plan Zoning Amendments*

**Table 4**, below, provides a summary of the proposed amendments included in the Ordinance, including the specific code sections modified, a description of the changes, and the corresponding rationale.

**Table 4 - Summary of Proposed Zoning Amendments**

| Ord Section                                     | BMC Section and Title                                         | Description of Changes                                                                                | Rationale                                                            |
|-------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>Title 23, Division 1- General Provisions</b> |                                                               |                                                                                                       |                                                                      |
| 1                                               | 23.108.020 – Zoning Districts                                 | Add San Pablo Commercial (C-SP) zoning district                                                       | Establish the C-SP district                                          |
| <b>Title 23, Division 2- Zoning Districts</b>   |                                                               |                                                                                                       |                                                                      |
| 2                                               | 23.204.020 -Allowed Uses in Commercial Districts.             | Add C-SP permit thresholds                                                                            | Establish the C-SP                                                   |
| 3 & 4                                           | 23.204.030-Additional Permit Requirements.                    | Add C-SP permit thresholds for construction of new floor area and tenant space configurations         | Establish the C-SP district                                          |
| 5                                               | 23.204.040 – Use-Specific Permit Requirements and Regulations | Add C-SP permit thresholds for commercial recreation centers                                          | Establish the C-SP district                                          |
| 6, 7, 8                                         | 23.204.140 C-W West Berkeley Commercial District.             | References to West Berkeley Plan removed.                                                             | Retire the West Berkeley Plan.                                       |
|                                                 |                                                               | Automotive uses regulations on lots with frontage on San Pablo Avenue moved to the new C-SP district. | Continue the existing policy regarding auto uses on San Pablo Avenue |



|                                      |                                                       |                                                                                                                                           |                                                                                                                                  |
|--------------------------------------|-------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
|                                      |                                                       | Reference to San Pablo Avenue and Nodes within the Specific Plan Area removed.                                                            | Establish the C-SP district                                                                                                      |
| 9                                    | 23.204.160 C-SP San Pablo Avenue Commercial           | Add C-SP district to the Zoning Ordinance.                                                                                                | Establish the C-SP district                                                                                                      |
| 10                                   | 23.206.020 Allowed Uses in Manufacturing Districts.   | Allow multi-unit and mixed-use residential within the MU-LI district to support affordable and family-friendly housing opportunity areas. | Allow certain types of housing on certain MU-LI zoned sites within the Specific Plan Area.                                       |
| 11                                   | 23.206.040 Use-Specific Regulations.                  | References to West Berkeley Plan removed.                                                                                                 | Retire the West Berkeley Plan.                                                                                                   |
| 12, 13                               | 23.206.050 Protected Uses.                            |                                                                                                                                           |                                                                                                                                  |
| 14                                   | 23.206.060 M Manufacturing District.                  |                                                                                                                                           |                                                                                                                                  |
| 15                                   | 23.206.070 MM Mixed Manufacturing District.           |                                                                                                                                           |                                                                                                                                  |
| 16                                   | 23.206.080 MU-LI Mixed-Use Light Industrial District. | References to West Berkeley Plan removed.<br><br>Add affordable and family-friendly housing opportunity areas.                            | Retire the West Berkeley Plan.<br><br>Allow certain types of housing on certain MU-LI zoned sites within the Specific Plan Area. |
| 17                                   | 23.206.090 MU-R Mixed-Use Residential District.       | References to West Berkeley Plan removed.                                                                                                 | Retire the West Berkeley Plan.                                                                                                   |
| 18                                   | 23.206.110 Permit Findings.                           |                                                                                                                                           |                                                                                                                                  |
| Title 23, Div 3- Citywide Provisions |                                                       |                                                                                                                                           |                                                                                                                                  |
| 19, 20, 21                           | 23.302.020 General Use Regulations.                   | Add C-SP district to the Zoning Ordinance                                                                                                 | Establish the C-SP district                                                                                                      |
| 22, 23                               | 23.302.070 Use-Specific Regulations                   |                                                                                                                                           |                                                                                                                                  |
| 24                                   | 23.304.030 Setbacks                                   | Add C-SP setbacks requirements adjacent to residential districts.                                                                         |                                                                                                                                  |
| 25                                   | 23.304.050 Building Height                            | Allow parapets to exceed the height limit by up to 5 feet as of right.                                                                    |                                                                                                                                  |

|                                              |                                                                             |                                                                                                                           |                                                                                |
|----------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 26                                           | 23.304.140 Area Plans                                                       | References to West Berkeley Plan removed, reference to San Pablo Avenue Specific Plan added                               | Retire the West Berkeley Plan.<br><br>Implement San Pablo Avenue Specific Plan |
| 27                                           | 23.312.040 Live/Work Standards                                              | C-SP Live/Work standards.                                                                                                 | Establish the C-SP district.                                                   |
| 28                                           | 23.312.050 Live/Work Findings                                               | References to West Berkeley Plan removed.                                                                                 | Retire the West Berkeley Plan.                                                 |
| 29                                           | 23.322.050 Parking Reductions                                               |                                                                                                                           |                                                                                |
| Title 23, Div 4 – Permits and Administration |                                                                             |                                                                                                                           |                                                                                |
| 30                                           | 23.402.020 Review and Decision-Making Authority                             | References to West Berkeley Plan removed.                                                                                 | Retire the West Berkeley Plan.                                                 |
| 31                                           | 23.406.060 Master Use Permits                                               |                                                                                                                           |                                                                                |
| 32                                           | 23.406.070 Design Review                                                    | Exempt projects that comply with the San Pablo Avenue Specific Plan Design Standards from the Design Review requirements. | Implement San Pablo Avenue Specific Plan and Design Standards                  |
| 33                                           | 23.406.080 Modification of Development Standards in West Berkeley Plan Area | References to West Berkeley Plan removed.                                                                                 | Retire the West Berkeley Plan.                                                 |

**ENVIRONMENTAL REVIEW**

Adoption of the proposed San Pablo Avenue Specific Plan and Design Standards Document, as well as implementation of conforming Zoning Ordinance and Zoning Map amendments and associated General Plan text and map amendments, and retirement of the West Berkeley Plan and San Pablo Avenue Public Improvements Plan (proposed project) is consistent with Housing Element Update Program 27. The proposed project would increase allowable density, height, and building bulk to facilitate mixed-use and residential development within the Plan area. The environmental impacts of implementing the Housing Element Update were previously analyzed in the 2023 Housing Element Update Environmental Impact Report (2023 EIR- [Link 10](#)). The proposed zoning changes represent a refinement of the policies evaluated in the 2023 EIR.

California Public Resources Code Section 21080.085 establishes a statutory exemption from CEQA for rezoning undertaken to implement the schedule of actions, such as Program 27, in a housing element, such as the Housing Element Update, that has been

approved by the California Department of Housing and Community Development.<sup>7</sup> The exemption also applies to General Plan amendments necessary to ensure consistency between a General Plan and a proposed rezoning.

While the statutory exemption applies to the proposed actions, out of an abundance of caution, staff have also prepared, pursuant to Section 15164 of the California Environmental Quality Act (CEQA) Guidelines, an Addendum to the previously certified Housing Element Update EIR. Under CEQA Guidelines Section 15162(a), once an EIR has been certified for a project, a subsequent or supplemental EIR is required only if substantial changes are proposed to the project, substantial changes occur in the circumstances under which the project is undertaken, or new information of substantial importance becomes available that would result in new significant environmental impacts or a substantial increase in the severity of previously identified significant impacts. Based on the analysis contained in the Addendum, none of these conditions are present. Therefore, preparation of a subsequent or supplemental EIR is not required.

#### NEXT STEPS

- City Council will conduct a Public Hearing.
- Adoption by the City Council is anticipated later this year.
- Project updates, public documents, and subscription options for email notifications are available on the [San Pablo Avenue Specific Plan webpage](#).

#### CONTACT PERSON

Justin Horner, Principal Planner, Planning and Development Department, 510-981-7476

#### ***Attachments:***

1. Planning Commission Resolution 2026-10
  - a. Exhibit A Draft Zoning Ordinance Amendments
  - b. Exhibit B Draft University Avenue Strategic Plan Amendments
  - c. Exhibit C Draft West Berkeley Plan Amendments
  - d. Exhibit D Draft San Pablo Avenue Public Improvements Plan Amendments
  - e. Exhibit E Draft General Plan Amendments
2. Final Draft San Pablo Avenue Specific Plan
3. Final Draft San Pablo Avenue Specific Plan Design Standards Document
4. Draft CEQA Addendum
5. Public Hearing Notice

#### ***Links:***

1. [Community Assessment Report, August 2024](#) (Linked)
2. [Policy Options and Development Framework Memorandum, August 2024](#) (Linked)

<sup>7</sup> California Department of Housing and Community Development, *Memo Re: California Environmental Quality Act (CEQA) Reforms for Housing Element Rezoning (Public Resources Code Section 21080.085)*, May 19, 2026. <https://www.hcd.ca.gov/sites/default/files/docs/planning-and-community/memos/ceqa-rezone-exemption-memo-051926.pdf>

3. [Planning Commission Presentation, December 4, 2024](#) (Linked)
4. [Public Review Draft Plan and Appendices, October 2025](#) (Linked)
5. [Planning Commission Presentation, November 5, 2025](#) (Linked)
6. [City Council Worksession Presentation, November 6, 2025](#) (Linked)
7. [Planning Commission Presentation, March 18, 2026](#) (Linked)
8. [Transportation Infrastructure Commission Memorandum, April 16, 2026](#) (Linked)
9. [April 14, 2026 City Council Referral – Establish a Citywide Local Density Bonus Program to Facilitate Lower-Cost Ownership Homes \(Condominiums\)](#) (Linked)
10. [2023 Housing Element Update Environmental Impact Report \(EIR\)](#) (Linked)

ATTACHMENT 1

PLANNING COMMISSION  
RESOLUTION NO. 2026-10

A RESOLUTION OF THE CITY OF BERKELEY PLANNING COMMISSION RECOMMENDING THE CITY COUNCIL ADOPT PROPOSED AMENDMENTS TO TITLE 23 OF THE BERKELEY MUNICIPAL CODE AND THE ZONING MAP TO CREATE THE SAN PABLO COMMERCIAL ZONING DISTRICT AND ADOPT THE SAN PABLO AVENUE SPECIFIC PLAN AND DESIGN STANDARDS DOCUMENT, AS WELL AS CONFORMING AMENDMENTS TO THE UNIVERSITY AVENUE STRATEGIC PLAN, THE WEST BERKELEY PLAN, THE SAN PABLO AVENUE PUBLIC IMPROVEMENTS PLAN, AND THE GENERAL PLAN LAND USE ELEMENT AVENUE COMMERCIAL LAND USE DESIGNATION AND LAND USE DIAGRAM TO REDESIGNATE CERTAIN PARCELS WITHIN THE PROJECT AREA TO BE CONSISTENT WITH ASSOCIATED TEXT AMENDMENTS.

**WHEREAS**, the City of Berkeley ("City"), in accordance with the provisions of California Government Code Section 65300 et seq., is required to adopt a General Plan for its long-range development, and further to periodically update that plan to reflect current conditions; and

**WHEREAS**, the City adopted the West Berkeley Plan in 1993, and adopted amendments to that plan in 1999 and 2011; and

**WHEREAS**, the City adopted the University Avenue Strategic Plan in 1996; and

**WHEREAS**, the City adopted the San Pablo Avenue Public Improvements Plan in 2003; and

**WHEREAS**, the amendments do not change the designation of any parcel to reduce the intensity of use allowed under the existing General Plan or zoning pursuant to Gov. Code section 66300(b)(1); and

**WHEREAS**, the adopted Housing Element Update (HEU) includes "Program 27 – Priority Development Areas (PDAs), Commercial and Transit Corridors" to develop a San Pablo Avenue Specific Plan to increase allowed densities and/or development capacity, and study design standards, public improvements, and mechanisms to incentivize affordable housing by December 2025; and

**WHEREAS**, on July 14, 2015, the City Council forwarded to the Planning Commission a referral to develop a Plan to guide development on San Pablo Avenue; and

**WHEREAS**, on July 13, 2021, the City Council adopted resolution No. 69,953-N.S. accepting a \$750,000 Priority Development Area (PDA) planning grant from the Metropolitan Transportation Commission (MTC) to develop the San Pablo Avenue Specific Plan; and

**WHEREAS**, the City held community engagement workshops on the following dates: January 24, 2024, September 26, 2024, and October 29, 2025; and

**WHEREAS**, the Planning Commission held discussions on the San Pablo Specific Plan

on the following dates: April 3, 2024, December 4, 2024, November 5, 2025, and March 18, 2026; and

**WHEREAS**, on June 3, 2026, the Planning Commission held a public hearing and considered all public comments received, the presentation by City staff, the staff report, and all other pertinent documents regarding the proposed request; and

**WHEREAS**, on May 15, 2026, a public hearing notice was provided to tribes with traditional lands or places located within the geographical areas affected by the proposed changes, pursuant to Government Code Section 65352.3(a)(2), for the public hearing held on June 3, 2026.

**WHEREAS**, a public hearing notice was published in the Berkeley Voice and posted in three public places pursuant to California Government Code Section 65090 on May 15, 2026 and May 22, 2026 for the public hearing held on June 3, 2026; and

**WHEREAS**, all documents constituting the record of this proceeding are and shall be retained by the City of Berkeley Planning and Development Department, Land Use Planning Division, at 1947 Center Street, Berkeley, California; and

**WHEREAS**, in connection with the amendments, an Addendum to the certified Final Environmental Impact Review (EIR) pursuant to Section 15164 of the CEQA Guidelines has been prepared that describes the changes the proposed Project would have to the HEU, and compares the impacts of those changes to the impacts of the HEU identified in the EIR; and

**WHEREAS**, the Addendum to the certified Final EIR determined that potential impacts associated with the proposed Project are consistent with potential impacts disclosed and analyzed in the EIR. That is, the proposed Project would not result in any new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the EIR. Further, no new information of substantial importance exists which would require major revisions of the HEU EIR. Therefore, none of the conditions outlined in CEQA Guidelines Section 15162(a)(1-2) requiring preparation for a subsequent EIR have been met. Further, none of the conditions outlined in CEQA Guidelines Section 15162(a)(3)(A-D) requiring preparation of a subsequent EIR have been met; and

**WHEREAS**, based on the analysis contained in the Addendum, no further evaluation of environmental impacts is required for the proposed Project, no subsequent EIR is required pursuant to CEQA Guidelines Section 15162, and the Addendum is the appropriate level of environmental analysis and documentation for the proposed Project pursuant to CEQA Guidelines Section 15164, and therefore the Mitigation Monitoring and Reporting Program in the Final EIR sufficiently addresses impacts from the proposed Project; and

**WHEREAS**, the Addendum demonstrates that the proposed Project was analyzed as HEU Program 27 in the 2023 EIR and the Addendum further demonstrates that the Project proposes to modify HEU Program 27 but these modifications do not result in the need to prepare a subsequent or supplemental EIR. Consequently, pursuant to CEQA Guidelines Section 15168(c)(2), no further environmental review is required; and

**NOW, THEREFORE, IT BE RESOLVED** that the Planning Commission does hereby recommend to the City Council of the City of Berkeley to: 1) Adopt an Ordinance amending the Zoning Ordinance and Zoning Map to establish a San Pablo Commercial (C-SP) zoning district; 2) Amend the General Plan and Land Use Diagram to incorporate the C-SP zoning district into



the existing Avenue Commercial (AC) land use designation and redesignate certain parcels within the project area to be consistent with the C-SP zoning district; 3) Amend the University Avenue Strategic Plan to conform to the C-SP zoning district text and map amendments; 4) Retire the West Berkeley Plan; and 5) Retire the San Pablo Avenue Public Improvement Plan.

Pursuant to Berkeley Municipal Code Section 23.412.060, the Planning Commission makes the following findings to support its recommendation for the zoning ordinance amendments:

- (1) **The proposed amendments are consistent with the General Plan and any applicable specific plan or area plan.** The Zoning Ordinance amendments are consistent and compatible with the General Plan, as the proposed San Pablo Commercial (C-SP) district will support a pedestrian-friendly, visually attractive area of pedestrian scale and serve neighborhood needs by providing ground-floor commercial standards and permitting a range of commercial uses that are compatible with residential uses, consistent with General Plan Policy LU-27.
- (2) **The proposed amendments are consistent with state law.** The Zoning Ordinance amendments are consistent with state law because they do not reduce the intensity of use allowed under the existing General Plan or zoning pursuant to Gov. Code section 66300(b)(1). Further, staff prepared an Addendum to the HEU EIR in accordance with CEQA Guidelines to evaluate the potential environmental effects of adoption and implementation of the proposed zoning and General Plan and West Berkeley Plan amendments.
- (3) **The proposed amendments will not be detrimental to the public interest, health, safety, convenience, or welfare.** The Zoning Ordinance amendments serve the public interest by facilitating implementation of the San Pablo Specific Plan. The Plan goals include increased diversity and supply of housing, increased business activity to support a thriving community, enhanced interaction between public and private spaces, and enhanced local and citywide access. The Zoning Ordinance amendments will not result in the immediate approval of any specific development project. Any future development project will continue to be subject to the City's development and environmental review procedures.
- (4) **The proposed amendments are internally consistent with other applicable provisions of the Zoning Ordinance.** The Zoning Ordinance amendments to create the C-SP district and retire the West Berkeley Plan include non-substantive revisions to the Zoning Ordinance to ensure internal consistency.
- (5) **The affected site is physically suitable in terms of design, location, shape, size, and other characteristics to ensure that the permitted land uses and development will comply with the Zoning Ordinance and General Plan and contribute to the health, safety, and welfare of the property, surrounding properties, and the community at large.** The affected sites are physically suitable for the proposed Zoning Map Amendments to create the C-SP district, as the changes implement General Plan policies related to commercial land use designations.

Pursuant to California Government Code Section 65354, the Planning Commission makes the following findings to support its recommendation for the General Plan, University Avenue Strategic Plan, West Berkeley Plan, and San Pablo Avenue Public Improvement Plan text and map amendments included as Exhibits B through E of this resolution:

- (1) **The proposed amendment is in the public interest.** The proposed General Plan, University Avenue Strategic Plan, West Berkeley Plan, and San Pablo

Avenue Public Improvement Plan amendments serve the public interest by facilitating additional housing capacity and production in a transit-rich area of the city to better meet housing demand, increase business activity to support a thriving community, enhance interaction between public and private spaces, and improve local and citywide access to and from the Plan Area;

- (2) **The proposed amendment is consistent and compatible with the General Plan.** The proposed General Plan, University Avenue Strategic Plan, West Berkeley Plan, and San Pablo Avenue Public Improvement Plan amendments support a pedestrian-friendly, visually attractive area of pedestrian scale and serve neighborhood needs by providing ground-floor commercial standards and permitting a range of commercial uses that are compatible with residential uses, consistent with General Plan Policy LU-27. Further, the amendments ensure internal consistency among General Plan elements. The potential effects of the proposed amendment have been evaluated and have been determined not to be detrimental to the public health, safety, or welfare. The General Plan amendments would not be detrimental to the public health, safety and welfare of the City because they would facilitate development that would be completed in compliance with current building and fire codes and regulations; and would be subject to the City's standard conditions of approval regarding noise and air quality, waste diversion, toxics and stormwater requirements, as well as applicable mitigation measures included in the Housing Element Update EIR.

**I HEREBY CERTIFY** the foregoing resolution was passed and adopted by the Planning Commission of the City of Berkeley, at a regular meeting thereof, held on the 3rd day of June 2026, by the following vote:

**AYES: Commissioners Hauser, Twu, Owens, Merker and Chair Marthinsen**

**NOES: Commissioners Kahn and Oatfield**

**ABSENT: Commissioner Wang**

**ABSTAIN: None**

A handwritten signature in dark ink, appearing to read 'Justin Horner', is written over a light blue rectangular stamp. The signature is fluid and cursive.

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**Justin Horner**  
**SECRETARY TO THE PLANNING COMMISSION**

ATTACHMENT 4: West Berkeley Plan Implementation Measure Assessment Table  
from Planning Commission meeting  
March 18, 2026

| Chapter               | Implementation Measures                                                                                                        | Status     | Notes                                                                                                                                                                                                       |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Land Use              | 1.1 Rezoning                                                                                                                   | COMPLETE   | <a href="#">Manufacturing Zoning districts</a>                                                                                                                                                              |
|                       | 1.2 Redevelopment Plan Amendments                                                                                              | N/A        | Redevelopment Agency was dissolved                                                                                                                                                                          |
|                       | 1.3 Truck Weight Ordinance                                                                                                     | COMPLETE   | BMC Chapter 14.56 (Movement of Heavy Vehicles and Equipment (Ordinance 6799-NS; 2004)                                                                                                                       |
|                       | 2.1 Consolidated Parking                                                                                                       | INCOMPLETE | Neither site available for parking now                                                                                                                                                                      |
|                       | 3.1 Inventory of Industrial Space                                                                                              | COMPLETE   | Ordinance 65,210 -NS - 2011 West Berkeley Plan Update - inventory conducted as part of the update                                                                                                           |
| Economic Development  | 1. Target Industrial retention and attraction program                                                                          | COMPLETE   | <a href="#">(i.e. Manufacturing Week)</a>                                                                                                                                                                   |
|                       | 2. Large Site Reuse Project                                                                                                    | COMPLETE   | Ordinance 65,210 -NS - 2011 West Berkeley Plan Update                                                                                                                                                       |
|                       | 3. Major Employer Training Project                                                                                             | COMPLETE   | OED - Confirmed Complete                                                                                                                                                                                    |
|                       | 1. Rezoning                                                                                                                    | COMPLETE   | <a href="#">Manufacturing Zoning districts</a>                                                                                                                                                              |
|                       | 2. Arts and Crafts Ordinance Review                                                                                            | COMPLETE   | Ordinance 65,210 -NS, 2011 West Berkeley Plan Update, and Berkeley Business zoning updates                                                                                                                  |
|                       | 3. Mitigations as ordinance related to housing, child care and others                                                          | COMPLETE   | Inclusionary Housing ordinance - Family Dare Care use updates                                                                                                                                               |
|                       | 4. Coordination with County                                                                                                    | ONGOING    |                                                                                                                                                                                                             |
|                       | B.1 Building Buyout Program                                                                                                    | COMPLETE   | Mitigation for Durkee project                                                                                                                                                                               |
|                       | B.2 Buyouts of Retiring Owners                                                                                                 | COMPLETE   | <a href="#">Project Equity</a>                                                                                                                                                                              |
|                       | B.3 Employment/Training System                                                                                                 | COMPLETE   | <a href="#">First Source</a>                                                                                                                                                                                |
|                       | B.4 Recognition system                                                                                                         | COMPLETE   | <a href="#">Berkeley Manufacturing Week; Green Business Certification</a>                                                                                                                                   |
|                       | B.5. Business Assistance                                                                                                       | COMPLETE   | <a href="#">OED Business Assistance</a>                                                                                                                                                                     |
|                       | C.1 Business Directory                                                                                                         | COMPLETE   | Developed internally OED Economic snapshot.                                                                                                                                                                 |
|                       | D.1. San Pablo Ave Economic Development Study                                                                                  | COMPLETE   | <a href="#">San Pablo Avenue Specific Plan</a>                                                                                                                                                              |
|                       | D.2. Redevelopment Feasibility Study                                                                                           | N/A        | Redevelopment Agency was dissolved                                                                                                                                                                          |
|                       | D.3 Economic Development Organization -                                                                                        | COMPLETE   | Explored - OED marked complete                                                                                                                                                                              |
| Environmental Quality | 1.1 Centralize and Coordinate Environmental Information                                                                        | COMPLETE   | <a href="https://berkeleyca.gov/your-government/public-records/community-right-know-hazardous-materials">https://berkeleyca.gov/your-government/public-records/community-right-know-hazardous-materials</a> |
|                       | 1.2 Development and Implement work program for the Community Environmental Advisory Commission                                 | COMPLETE   | <a href="#">California Environmental Recording System</a>                                                                                                                                                   |
|                       | 1.3 Revise and resubmit to state Citywide Chemical Emergency Response Plan                                                     | COMPLETE   | <a href="#">The CEAC is now the Environment and Climate Commission</a>                                                                                                                                      |
|                       | 1.4 Provide Risk management and communication program assistance to manufacturers and other businesses.                        | COMPLETE   | Toxics' Area Plan: reviewed by state every 3 years                                                                                                                                                          |
|                       | 1.5 Work with businesses to improve existing odor problems                                                                     | ONGOING    |                                                                                                                                                                                                             |
|                       | 1.6 Continue to review new and expanded uses for odorous potential                                                             | COMPLETE   | <a href="#">Air District regulates</a>                                                                                                                                                                      |
|                       | 1.7 Provide assistance to businesses through the Recycle Market Development Zone (RMDZ)                                        | ONGOING    |                                                                                                                                                                                                             |
|                       | B.1 Map source sites and groundwater contamination plumes                                                                      | COMPLETE   | <a href="#">Recycling Market Development Zone through CalRecycle</a>                                                                                                                                        |
|                       |                                                                                                                                | COMPLETE   | <a href="#">CalEnviroScreen</a>                                                                                                                                                                             |
|                       | B.2 Construct acoustic berm along western edge of Aquatic Park via Aquatic Park Master Plan                                    | INCOMPLETE | Studied; found infeasible; barriers upgraded at Aquatic Park; acoustic berm was found to be too costly because of the need for concrete piers and a retaining wall. \$13M - likely higher now.              |
|                       | C.1 Implement 1991 Hazardous Material Importation Regulation Act                                                               | COMPLETE   | regulation required by state law                                                                                                                                                                            |
|                       | C.2. Create a hazard ranking system for use in charging fees and evaluating Use Permits                                        | COMPLETE   | <a href="#">Fees scale for larger haz mat quantities on-site</a>                                                                                                                                            |
|                       | C.3 Develop and Implement standard Use Permit conditions for hazardous waste hauling                                           | COMPLETE   | <a href="#">Regulated by Department of Toxic Substances Control</a>                                                                                                                                         |
|                       | C.4 Adopt requirement for pollution prevention planning                                                                        | COMPLETE   | Toxics                                                                                                                                                                                                      |
|                       | C.5 Implement Non-Point Discharge Program (runoff program)                                                                     | COMPLETE   | Storm Water Management Plan                                                                                                                                                                                 |
|                       | C.6. Work with BAAQMD to ensure clean air measures are implemented                                                             | ONGOING    |                                                                                                                                                                                                             |
|                       | C.7. Implement Ozone Depletion Ordinance                                                                                       | COMPLETE   | <a href="https://berkeley.municipal.codes/BMC/11.62">https://berkeley.municipal.codes/BMC/11.62</a>                                                                                                         |
|                       | C.8 Revision of Noise Ordinance                                                                                                | COMPLETE   | <a href="https://berkeley.municipal.codes/BMC/13.40.050">https://berkeley.municipal.codes/BMC/13.40.050</a>                                                                                                 |
|                       | C.9 Improve consideration of noise in Use Permit decisions                                                                     | COMPLETE   | <a href="https://berkeley.municipal.codes/BMC/13.40.050">https://berkeley.municipal.codes/BMC/13.40.050</a>                                                                                                 |
|                       | D.1. Study requirements for increase public notification for environmental review when related to hazardous materials.         | COMPLETE   | no study was conducted however increased notification and state requirements have been implemented through CERS and permit requirements through the Toxics Division; exceptions to exemptions               |
|                       | D.2. Study possibility of extending tax credits or other incentives for pollution preventions, source and toxic use reduction. | INCOMPLETE | Study not conducted. State offers various incentives (cap and trade, Carl Moyer, California Pollution Control Financing Authority, etc)                                                                     |
|                       |                                                                                                                                |            | <a href="https://berkeley.municipal.codes/BMC/11.50">https://berkeley.municipal.codes/BMC/11.50</a>                                                                                                         |
|                       | D.3 Research more comprehensive Hazardous Materials Transportation Ordinance                                                   | COMPLETE   | <a href="#">Yes: Railway Study</a>                                                                                                                                                                          |
|                       | D.4. Research a Mandatory Commercial Hazardous waste recycling Ordinance                                                       | COMPLETE   | Nicole Kim: supereded by designated hauling out of Berkeley                                                                                                                                                 |
|                       | D.5 Identify sources of night noise and develop appropriate mitigations when possible                                          | INCOMPLETE |                                                                                                                                                                                                             |

ATTACHMENT 4: West Berkeley Plan Implementation Measure Assessment Table  
from Planning Commission meeting  
March 18, 2026

| Chapter                     | Implementation Measures                                                                                                                                               | Status      | Notes                                                                                                                                                                                                                                                                                           |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Physical Form               | 1.1 Redevelopment Area Public Improvement                                                                                                                             | N/A         | Redevelopment Agency was dissolved<br><a href="https://aquaticpark.org/wp-content/uploads/2023/08/AqPk-Sound-Barrier-Options-2000.pdf">https://aquaticpark.org/wp-content/uploads/2023/08/AqPk-Sound-Barrier-Options-2000.pdf</a>                                                               |
|                             | 1.2 Soundwall Design and Construction Monitoring                                                                                                                      | INCOMPLETE  | <a href="#">Caltrans found the "living sound wall" would cost \$13 million because of concrete piers and retaining wall, rendering project infeasible.</a>                                                                                                                                      |
|                             | 1.3 News rack Ordinance-Explore the feasibility-given both aesthetic and First Amendment concerns--of an Ordinance regulating the placement and design of news racks. | COMPLETE    | <a href="https://berkeley.municipal.codes/BMC/16.44">https://berkeley.municipal.codes/BMC/16.44</a>                                                                                                                                                                                             |
|                             | 1.4 Train Station Design Concept                                                                                                                                      | COMPLETE    |                                                                                                                                                                                                                                                                                                 |
|                             | 1.5 Facade Improvement Program - seek funding to develop a facade and signage improvement.                                                                            | INCOMPLETE  | Likely attempted to seek funds however no signage or facade improvement program is in place                                                                                                                                                                                                     |
|                             | 1.6 4th St. Area Strategic Plan                                                                                                                                       | INCOMPLETE  |                                                                                                                                                                                                                                                                                                 |
|                             | 1. 7 Development of Design Guidelines for various areas                                                                                                               | IN PROGRESS | SPA SP                                                                                                                                                                                                                                                                                          |
|                             | 1.8 Gateway Improvement Studies                                                                                                                                       | IN PROGRESS | SPA SP                                                                                                                                                                                                                                                                                          |
|                             | 1.9 1-80 Corridor Visual Improvement Study                                                                                                                            | COMPLETE    | <a href="https://www.alamedactc.org/wp-content/uploads/2019/08/1-80-Gilman-Visual-Impact-Assessment-Aug2018.pdf">https://www.alamedactc.org/wp-content/uploads/2019/08/1-80-Gilman-Visual-Impact-Assessment-Aug2018.pdf</a>                                                                     |
|                             | 1.10 Billboard Amortization removing billboards from San Pablo Avenue                                                                                                 | IN PROGRESS | SPA SP                                                                                                                                                                                                                                                                                          |
|                             | 1.11 Zoning Ordinances Changes for and between Nodes                                                                                                                  | COMPLETE    | Sign Ordinance has been amendmended since WBP adoption                                                                                                                                                                                                                                          |
|                             | 1.12 Sign Ordinance Amendment                                                                                                                                         | COMPLETE    |                                                                                                                                                                                                                                                                                                 |
|                             | 1.13 Review of Major Public Improyements                                                                                                                              | ONGOING     |                                                                                                                                                                                                                                                                                                 |
|                             | 2.1 Designation as Certified Local Government-Apply to State Historic Preservation Office for certification as a Certified Local Government.                          | COMPLETE    | <a href="#">Certified: March 1, 2000</a>                                                                                                                                                                                                                                                        |
|                             | 2.2 Completion of West Berkeley Historic Survey (with BAHA)                                                                                                           | INCOMPLETE  | Shifted to citywide historic statement and survey via HE EIR mitigation; HE EIR says we shoud do this citywude, which would include West Berkeley. So, still in GP                                                                                                                              |
|                             | 2.3 Research for Landmark Designation on State Historic Resources Inventory building                                                                                  | COMPLETE    | <a href="#">4 local landmarks and 1 landmark district established post 1993 in WBP area</a>                                                                                                                                                                                                     |
|                             | 2.4 Historic signs program-Install signs at historic buildings and sites,                                                                                             | COMPLETE    | <a href="https://berkeleyplaques.org/">https://berkeleyplaques.org/</a>                                                                                                                                                                                                                         |
|                             | 2.5 Elementary educational program                                                                                                                                    | INCOMPLETE  |                                                                                                                                                                                                                                                                                                 |
|                             | 2.6 Heritage Area Designation                                                                                                                                         | INCOMPLETE  | "when residents suport such efforts"                                                                                                                                                                                                                                                            |
|                             | 3.1 Codomices Creek Regulation and Improvement                                                                                                                        | ONGOING     | Updates to the creek ordinance in 2006<br><a href="https://berkeleyca.gov/city-services/streets-sidewalks-sewers-and-utilities/city-trees-and-coast-live-oak-ordinance">https://berkeleyca.gov/city-services/streets-sidewalks-sewers-and-utilities/city-trees-and-coast-live-oak-ordinance</a> |
|                             | 3.2 Tree Planting Program                                                                                                                                             | COMPLETE    | Email Nelson Lam                                                                                                                                                                                                                                                                                |
|                             | 3.3 Aquatic Park Access Improvements: Improve access to Aquatic Park                                                                                                  | COMPLETE    | Email Nelson Lam                                                                                                                                                                                                                                                                                |
|                             | 3.4 Other Aquatic Park Master Plan Improvements                                                                                                                       | COMPLETE    | Seek funding to improve facilities and services at neighborhood parks - Measure F                                                                                                                                                                                                               |
|                             | 3.5 Neighborhood park Improvements/addition                                                                                                                           | COMPLETE    | TDM ordinance                                                                                                                                                                                                                                                                                   |
| Transportation              | 1.1 Trip Reduction Ordinance                                                                                                                                          | COMPLETE    | Bicycle Plan                                                                                                                                                                                                                                                                                    |
|                             | 1.2 Bikeway Redesignations                                                                                                                                            | COMPLETE    | Approached them and they were not interested (TDM)- continue to approach                                                                                                                                                                                                                        |
|                             | 2.1 Employee Shuttles                                                                                                                                                 | ONGOING     | "Work with AC Transit..."                                                                                                                                                                                                                                                                       |
|                             | 2.2 Transit improvements                                                                                                                                              | ONGOING     | <a href="https://www.cahighways.org/ROUTE080.html">https://www.cahighways.org/ROUTE080.html</a>                                                                                                                                                                                                 |
|                             | 2.3 Freeway reconfiguration                                                                                                                                           | COMPLETE    |                                                                                                                                                                                                                                                                                                 |
|                             | 2.4 Bikeway Improvements                                                                                                                                              | ONGOING     |                                                                                                                                                                                                                                                                                                 |
|                             | 2.5 Bicycle Facilities                                                                                                                                                | ONGOING     |                                                                                                                                                                                                                                                                                                 |
|                             | 2.6 Improvements for pedestrians                                                                                                                                      | ONGOING     |                                                                                                                                                                                                                                                                                                 |
|                             | 2.7 5th St. Extension                                                                                                                                                 | COMPLETE    | likely assessed and found to not be viable solution to congestion                                                                                                                                                                                                                               |
|                             | 2..8 Street System Improvements                                                                                                                                       | COMPLETE    |                                                                                                                                                                                                                                                                                                 |
|                             | 3.1 Train Station Design Concept                                                                                                                                      | COMPLETE    |                                                                                                                                                                                                                                                                                                 |
|                             | 3.2 Centralized Parking Demand and Cost Analysis                                                                                                                      | COMPLETE    | Sites conveyed/developed<br><a href="https://aquaticpark.org/wp-content/uploads/2024/06/APIP_Study_2008_W_TechnicalReportAndAppendices.pdf">https://aquaticpark.org/wp-content/uploads/2024/06/APIP_Study_2008_W_TechnicalReportAndAppendices.pdf</a> Aquatic Park Improvement Program (2008)   |
|                             | 3.3 Aquatic Park Access Study                                                                                                                                         | COMPLETE    | Berkeley Bowl West did not include this.                                                                                                                                                                                                                                                        |
|                             | 3.4 9th Street Connection Study                                                                                                                                       | COMPLETE    |                                                                                                                                                                                                                                                                                                 |
| Housing and Social Services | Miles Development Agreement Housing Programs                                                                                                                          | COMPLETE    |                                                                                                                                                                                                                                                                                                 |
|                             | West Berkeley's housing programs will generally be those adopted in the 1990                                                                                          | COMPLETE    | updated in each iteration of the Housing Element                                                                                                                                                                                                                                                |

## NOTICE OF PUBLIC HEARING BERKELEY CITY COUNCIL

**The public may participate in this hearing by remote video or in-person.**

The Department of Planning and Development is proposing amendments to the City's Zoning Ordinance (Title 23), Zoning Map, and University Avenue Strategic Plan, West Berkeley Plan, San Pablo Avenue Public Improvements Plan, and General Plan Amendments (Plans) respond to a City Council referral and the requirements of the City's 2023-2031 Housing Element to develop a San Pablo Avenue Specific Plan to increase allowed densities and/or development capacity, and study design standards, public improvements, and mechanisms to incentivize affordable housing, and implement a Priority Development Area (PDA) planning grant from the Metropolitan Transportation Commission (MTC) to develop the San Pablo Avenue Specific Plan.

The recommended Zoning Ordinance and Map amendments require conforming edits to the City's Plans before they can be adopted by the City Council. The proposed Plan amendments include revisions to the Avenue Commercial land use description and designations, as well as technical edits to reflect the recommended Zoning Ordinance amendments.

Proposed amendments affect the following Chapters of Title 23: 23.108 (Zoning Districts and Map), 23.204 (Commercial Districts), 23.206 (Manufacturing Districts), 23.302 (Supplemental Use Regulations), 23.304 (General Development Standards), 23.312 (Live/Work), 23.322 (Parking and Loading), 23.402 (Administrative Responsibility), 23.406 (Specific Permit Requirements), and the Zoning Map.

LOCATION: The proposed Zoning Ordinance amendments would apply to parcels currently located in the West Berkeley Commercial (C-W), University Commercial (C-U), Mixed-Use Light Industrial (MU-LI), Multiple-Family Residential (R-3), Residential Multi-Unit 2 (R-2), Multi-Family (R-4), and Mixed-Use Residential (MU-R) zoning districts.

The hearing will be held on September 29, 2026, at 6:00 p.m. in the School District Board Room, located at 1231 Addison Street, Berkeley CA 94702.

A copy of the agenda material for this hearing will be available on the City's website at <https://berkeleyca.gov/> as of September 17, 2026. **Once posted, the agenda for this meeting will include a link for public participation using Zoom video technology, as well as any health and safety requirements for in-person attendance.**

For further information, please contact Principal Planner Justin Horner at [jhorner@berkeleyca.gov](mailto:jhorner@berkeleyca.gov). Written comments should be mailed or delivered directly to the City Clerk, 2180 Milvia Street, Berkeley, CA 94704, or e-mailed to [council@berkeleyca.gov](mailto:council@berkeleyca.gov) in order to ensure delivery to all Councilmembers and inclusion in the agenda packet.

Communications to the Berkeley City Council are public record and will become part of the City's electronic records, which are accessible through the City's website. **Please note: e-**

**mail addresses, names, addresses, and other contact information are not required, but if included in any communication to the City Council, will become part of the public record.** If you do not want your e-mail address or any other contact information to be made public, you may deliver communications via U.S. Postal Service or in person to the City Clerk. If you do not want your contact information included in the public record, please do not include that information in your communication. Please contact the City Clerk at (510) 981-6900 or [clerk@berkeleyca.gov](mailto:clerk@berkeleyca.gov) for further information.

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**Public Hearing required by BMC 23.404.040, BMC 23.412.050 and Govt Code 65853; notice provided according to Govt Code 65090 and BMC 23.404.040.**

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I hereby certify that the Notice for this Public Hearing of the Berkeley City Council was posted at the display case located near the walkway in front of the Maudelle Shirek Building, 2134 Martin Luther King Jr. Way, as well as on the City's website, on September 17, 2026.

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Mark Numainville, City Clerk