



BERKELEY WASH ASSESSMENT

HYPHAE DESIGN LABORATORY, 2020



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CITYWIDE RESTROOM STUDY – EXECUTIVE SUMMARY

BACKGROUND

In recent years, the City has identified the need for improving access to public sanitation facilities in Berkeley. Over the past decade, the City deployed 24 portable toilets (aka porta-potties) and 9 handwashing stations at 12 parks and 4 sidewalk locations in Berkeley. In 2020 at the onset of Covid, the City deployed an additional 14 portable toilets and 22 handwashing stations. Despite these efforts, there has been a strong desire from throughout the Berkeley community for better ways to meet the City's public sanitation needs for the long term.

FUNDING SOURCE

In 2016, Berkeley voters approved Measure T1, which authorized the City to sell \$100 million of general obligation bonds to repair, renovate, replace, or reconstruct the City's aging infrastructure and facilities, including important City facilities and buildings. In 2017, the City allocated Measure T1 Phase 1 funds to conduct a Citywide Restroom Study to assess the existing infrastructure and provide potential solutions (e.g., new restrooms).

PROJECT TEAM

In 2018, the City conducted a competitive RFP process and contracted with Hyphae Design Laboratory, a local expert in public sanitation and ecological design, to conduct the study in 2019-20 using a Measure T1 allocation of \$120,000.

DATA COLLECTION, MAPPING AND COMMUNITY ENGAGEMENT

Hyphae's overall vision was to develop a plan to fully meet the basic sanitation needs for every person who lives, works, studies, or visits Berkeley. The goal of the study was to provide a range of options to address these needs given current and future budget constraints. From the spring of 2019 through the Summer of 2020, the consultant conducted a comprehensive needs assessment with three phases: 1) data collection and mapping; 2) community engagement process; and 3) the drafting of a strategic master plan with recommendations for improved public sanitation throughout Berkeley for planning purposes.

Data Collection and Mapping

From May 2019 through March 2020, the consultant performed site assessments at 24 existing City restroom facilities.¹ In addition, the consultant assembled the City's geo-spatial data on all City infrastructure data layers² and performed several spatial analyses to identify the need for improved or new restroom facilities throughout the City. The consultant also completed a comprehensive stakeholder and community engagement process that provided additional data on existing facilities, locations of need, scale of need, and design of facilities.

The central analysis of the Citywide Restroom Study involved an evaluation of this data across all areas in the City with the need for public sanitation and compared it with the locations of existing restroom facilities. This data was organized spatially on maps (both day-time and night-time need, temporary or permanent need) and compared to the location of existing public sanitation facilities. The resulting maps identify locations in the City

¹ Restroom Site visits: Aquatic Park; Berkeley Marina K Dock; Berkeley Public Library Main Branch; Berkeley Rose Garden; Cedar Rose Park; Center St Garage; Channing St Garage; Codornices Park; San Pablo Park and Frances Albrier Community Center; Glendale La Loma Park; Grove Park and the ML King Community Center; Harrison Park; James Kenney Community Center; King Swim Center; Live Oak Park and Community Center; Shorebird Park; South Cove Parking Lot; Strawberry Creek Park; Virginia McGee Totland; West Campus Swim Center; Willard Park and Admin Building.

² City's geographic data on existing restrooms; streets; utility lines; parks; sidewalks; pedestrian counts; transit hubs; zoning layers; 311 Calls For Service data; data on homeless issues (service centers, hotspots, PIT counts); and worker locations (farmers markets, taxi hubs, bus layovers).

where the need for public sanitation is not currently being met by the location, hours, cleanliness, or current design of existing nearby facilities.³ (See Exhibit A Visual Heatmap of this spatial analysis).

Community Engagement Process

From April 2019 to April 2020, the consultant conducted focus group meetings to assess the issues with the following stakeholders: 16 homeless support organizations and stakeholders; 5 unhoused groups; 14 user organizations (taxi and bus drivers, Berkeley Parents Network, 510 Families, and Friends of parks and libraries groups, BART, AC Transit, Lyft and Uber, UC Berkeley, and the Ecology Center Farmers Market); 6 business improvement district groups; and a range of people from the City government (councilmembers, Parks and Waterfront Commissioners, and City operations staff from several departments (Economic Development, Homeless Outreach, Library, Parks/Rec/Waterfront, and Public Works) (See Exhibit B for a full list of stakeholder groups). The data collected from these focus group meetings was organized into four spatial types of restroom users: unhoused; workers on the job without access to sanitation facilities; users of public transit; and users of public spaces (parks and commercial zones). The data analysis also considered users with specific access needs across locations: families with young children, youth, seniors, and persons with disabilities.

The consultant additionally conducted 4 public Community Outreach Meetings in October and November of 2019 at 4 separate geographic locations to present initial findings and obtain feedback on potential solutions (43 people in attendance):

- Adeline Corridor at the South Berkeley Senior Center (October 10, 2019);
- Downtown Area at the Main Library (October 22, 2019);
- Telegraph Avenue Area at Cafè Mezzo (November 5, 2019); and
- West Berkeley Area at the James Kenney Community Center (November 6, 2019).

In March-April of 2020, the consultant conducted an on-line survey regarding the need for improved or new restroom facilities and received 140 responses.

KEY FINDINGS

The Citywide Restroom Study has the following key findings:

- a. Key findings from the community engagement and data analysis process:
 1. Existing locations: there are numerous reasons why people do not use existing facilities: hours of operation, safety, cleanliness and maintenance as well as the location itself.
 2. In terms of new restroom locations, the spatial analysis identifies four key locations with the greatest need (BART Station sidewalks at Ashby and Downtown; the Telegraph-Channing garage sidewalk area; and the San Pablo Ave @ University Ave sidewalk area), followed by three additional locations (Ohlone Park, Ohlone Greenway, and 63rd St @ Adeline sidewalk area). The installation of these new restrooms would require the following: a) a pilot study using mobile trailer restrooms to determine final locations; and b) an identified budget for annual cleaning and maintenance.
- b. Key findings from the on-line survey (140 responses):
 - Respondents rated the existing public restroom facilities on average 3 out of 5 (1 is poor and 5 is excellent); Parks restroom facilities received an average score of 1.9 and Libraries a score of 4.2.
 - Respondents would use public restrooms more often if:
 - 82% if they were better cleaned and maintained.
 - 63% if they have a sink and soap

³ Note: “nearby” is defined as within 1/8 mile for homeless, and ¼ mile for all other types of users.

- 57% if there were more restrooms
 - 55% if they felt safer
 - 46% if they were in more convenient locations
 - 30% currently use porta-potties now as they are, and
 - 70% would use upgraded mobile facilities.
- c. Key findings from the research on case studies of successful public restrooms in other cities:
- A public restroom with staffing can provide higher levels of cleanliness, security, aesthetics, and helps reduce the problem of public waste on nearby sidewalks, storefronts, and parks.
 - A system of public restrooms with a data monitoring system produces information about how many people use which restrooms when, and what was their experience. This data can help the City better meet the needs of the public with optimized hours of operation and frequency of cleaning.
 - A communications strategy with new signage, wayfinding, and digital information can improve the user experience and increase the use of existing facilities.

RECOMMENDATIONS

The final stage of the Citywide Restroom Study involves the drafting of a strategic master plan with recommendations for improved public sanitation throughout Berkeley for planning purposes.

The consultant is proposing a holistic, data-informed strategy to maximize the use and impact of existing facilities and to strategically expand access with new facilities. The goal is to increase access for all users, not just facilities. This strategy requires communication, consistent maintenance, data monitoring, and accessibility in addition to new infrastructure.

A summary of the recommendations for new and existing public restroom facilities is provided below.

- **New Restrooms plus Staff** (e.g., staff could rotate among several restrooms). Shown in order of need. (Note: pilot programs should be done prior to permanent installations that involve temporary, mobile facilities and data monitoring).
 - BART – DOWNTOWN (4-stall custom restroom) w/ overnight staff
 - BART – ASBHY (4-stall custom restroom) w/ overnight staff
 - San Pablo Ave @ University Ave (3-stall pre-fab restroom) w/ overnight staff
 - Telegraph-Channing Garage Exterior (1-stall pre-fab restroom) w/ overnight staff
 - 63rd St @ Adeline (2-stall pre-fab restroom) 2/ overnight staff
 - Ohlone Park (1-stall pre-fab restroom) (daytime hours)
 - Ohlone Greenway (1-stall pre-fab restroom) (daytime hours)
 - Civic Center Building Exterior (4-stall restroom) (could be part of Master Visioning Project)
 - Cesar Chavez Park @ Spinnaker (2-stall pre-fab restroom) (part of Spinnaker Way Renovation)
- **Existing Restrooms.**
 - **Hours.** Extend the operating hours at 6 existing restrooms to 10pm (Aquatic Park Dreamland; Grove Park; Harrison Park; San Pablo Park; South Cove; and Willard Park).
 - **Cleaning.** Add a 2nd cleaning per day at fifteen (15) existing restroom facilities:
 - **Portables:** 2nd & Cedar; Aquatic Park South; Cesar Chavez; James Kenney; King School; Ohlone Park; and Tom Bates Fields.
 - **Restroom Buildings:** Cedar Rose Park; Codornices Park; Harrison Park; Live Oak Park; Marina K Dock; Telegraph-Channing Garage; and Willard Park.

- **Staffing.** Contract with an organization to staff restroom facilities for added cleaning and safety at 7 high-use sites on a rotating basis: Aquatic Park Dreamland; Harrison Park; Marina K Dock; Shorebird Park; South Cove Parking Lot; Telegraph-Channing Garage; and Willard Park.
 - **Upgrade existing restrooms.** Provide basic physical upgrades at 7 existing restrooms to improve aesthetics: Aquatic Park Dreamland; Cedar Rose Park; Codornices Park; Harrison Park; Live Oak Park; Marina K Dock; and San Pablo Park.
 - **Upgrade existing portables.** Rent or purchase semi-permanent restroom trailers at six existing portable locations: 2nd & Cedar Streets; Aquatic Park South; Here-There Encampment; James Kenney Park; King School Park; and Ohlone Park.
 - **Data usage monitoring program.** Install data monitors at all restroom facilities to provide information on the volume of usage and user requests for maintenance/cleaning; Install a central data software system to manage the data and adjust service levels based on usage patterns.
 - **Signage.** Install new directional, wayfinding, and restroom signage to increase public awareness of existing restroom facilities; create a City public restroom website; and produce a City public outreach plan.
- **Shower Program.**
 - **Existing buildings.** Extend hours at Willard Shower Program; Provide a shower program at two City pools (Willard and King) and two Community Centers (YAP and James Kenney).
 - **Mobile Trailers.** Continue with the non-profit Dignity-on-Wheels mobile program; Purchase new shower trailer plus staff costs.
 - **YMCA.** Subsidize YMCA memberships with homeless service organizations.
- **Laundry.**
 - **Existing Buildings.** Install laundry machines at two existing homeless services centers.
 - **Laundromats.** Work with existing homeless service centers to provide subsidies to use commercial laundromats.
 - **Mobile Laundry.** Contract or purchase mobile laundry trailer(s), with staffing.
- For more details on these Recommendations, please see the **Initial Draft of the Berkeley WASH Study, 2020** in Exhibit C below.

Visual Heatmap of the Spatial Analysis

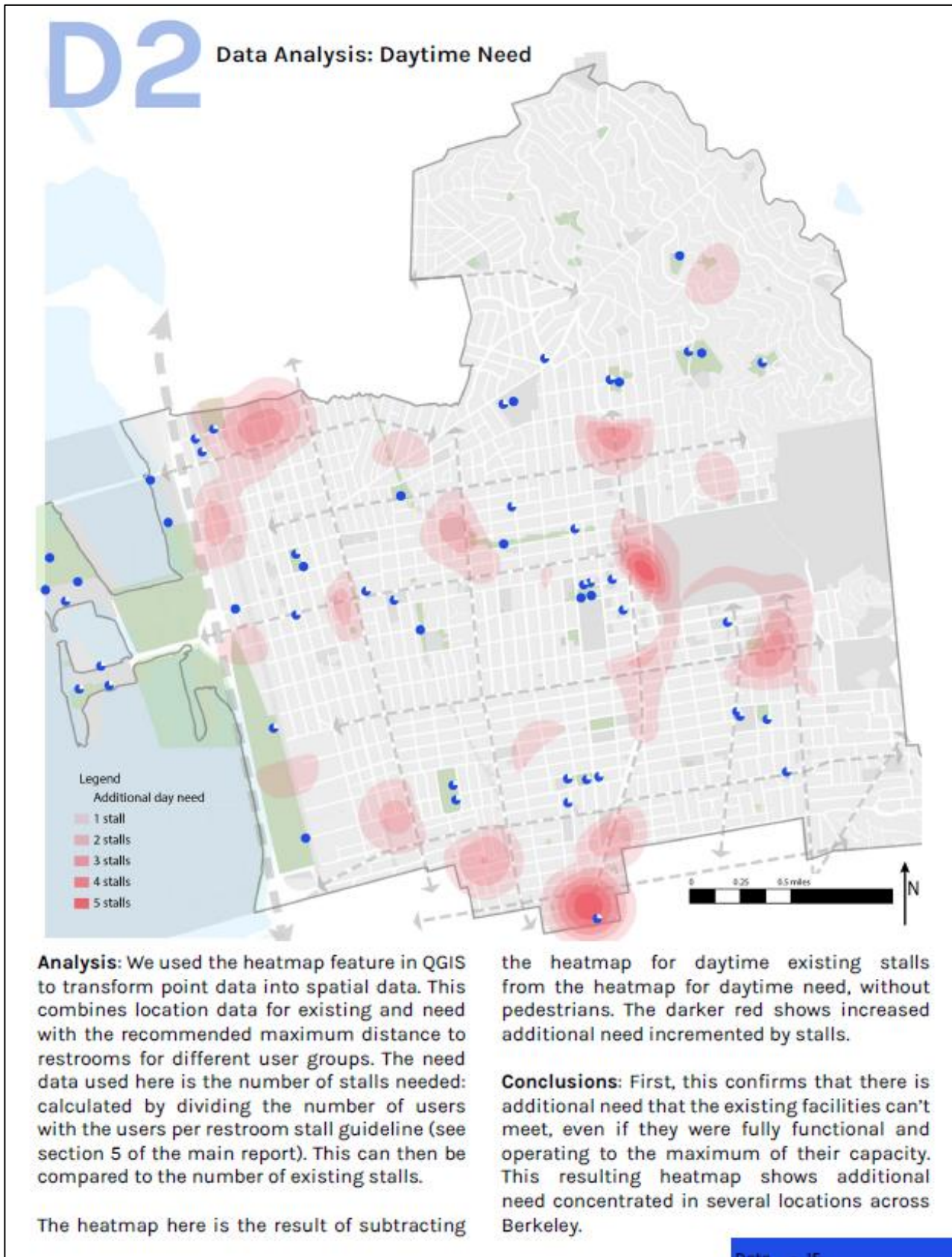


Exhibit B

Stakeholders

We engaged a diversity of stakeholders to fully understand user needs across all populations, location options and feasibility, and maintenance constraints and concerns, as follows:

Homeless Support Organizations

- Bay Area Landless People’s Alliance
- Berkeley Drop-In Center
- Berkeley Friends on Wheels
- BOSS
- Consider the Homeless
- Dorothy Day House
- Downtown Streets
- Friends of Adeline
- Here/There Encampment
- Lava Mae
- People’s Park Committee
- RV Dwellers
- Suitcase Clinic
- UC Berkeley Basic Needs Committee
- UC Berkeley Homeless Outreach
- Women’s Daytime Drop-In Center

Focus Groups with Unhoused People

- Berkeley Drop-In Center
- Downtown Streets
- Here/There Encampment
- Suitcase Clinic LGBTQ Clinic
- Women’s Daytime Drop-In Center

Outreach efforts were made to the following

- Berkeley Free Clinic
- Bonita House
- Covenant House California (Yeah!)
- First They Came for The Homeless
- Youth Spirit Artworks

Business Stakeholders

- Berkeley Business District Network
- Downtown Business Association
- Lorin Business
- Peet’s
- Solano Avenue Telegraph Business Improvement District

Other organizations and target populations

- 510 Families
- ATU Local 192: Alameda County Transit bus driver union
- Berkeley Parents Network
- Ecology Center: Farmers Markets
- Friends of the Libraries
- Friends of the Parks
- Rideshare and taxi drivers
- Rideshare Drivers United
- SF Taxi Workers Alliance
- UC Berkeley Student Government

City of Berkeley legislative and staff

- City Councilmembers
- City Homeless Commission
- Economic Development
- Homeless Encampment Task Force
- Homeless Outreach Treatment Team (HOTT)
- Libraries
- Parks and Waterfront Commission
- Parks, Recreation & Waterfront
- Planning Department
- Public Works

Other Institutions

- AC Transit
- BART
- Lyft and Uber
- UC Berkeley

1 Project Introduction

Based on feedback from Berkeley residents and City staff as of 2019 regarding the access and conditions of restroom facilities in Berkeley, the City decided to conduct a study -- the Citywide Restroom Study -- to assess the existing infrastructure and provide options for meeting current and future restroom sanitation needs. In 2019, the City contracted with Hyphae Design Laboratory, a local expert in public sanitation and ecological design, to conduct the study. Hyphae's vision is to fully meet the basic sanitation needs for every person who lives, works, studies, or visits Berkeley. The goal of this study is to provide a range of options to address these needs given current and future budget constraints.

Project Process and Methodology

This study collected data, conducted interviews, and performed spatial analyses to develop a holistic plan for improving access to sanitation. The following data were collected: inventory and assessment of existing facilities, collecting existing geospatial data for several types of users, evaluating existing building and planning codes, collecting public input, analyzing the scale and location of need as compared to the locations of existing facilities, and developing a comprehensive set of solutions uniquely tailored to Berkeley. Hyphae also conducted one-on-one and group stakeholder meetings, focus groups with high-need users, four public community meetings, and an online survey. Other stakeholder engagement included meetings with 16 homeless support organizations, five focus groups with homeless individuals, meetings with the Berkeley Business District Network, and individual meetings with four business districts, meetings with City Councilmembers, the Homeless Commission, four City departments, and three City interdepartmental teams. Additional outreach and engagement was also done with the Ecology Center and farmer market vendors, UC Berkeley staff and students, taxi drivers, AC Transit and their bus drivers, BART, rideshare drivers, parents and families, disabled individuals, neighborhood groups, park user groups, and library groups. 43 people attended the four public community meetings and over 140 responses were received to the online survey.

Background and global context for public sanitation

The United Nations recognizes safe drinking water and sanitation as basic human rights. California recognizes the universal right to sanitation through AB685 passed in 2012: "it is established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes".

To take a comprehensive systems-based approach, the study uses the international framework W.A.S.H. (Water Access, Sanitation and Hygiene), based on the United Nations and the World Health Organization efforts. Within this framework, this study focuses on safe drinking and handwashing, toilets, showers, and laundry.

Sufficient access to sanitation can improve health, prevent disease outbreaks, and protect public water from contamination. The 2016-18 Southern California Hepatitis A Outbreak, the 2019 E. coli contamination of the American River, and the current coronavirus pandemic of 2020 are all California examples of the public health impacts of impediments to sanitation. Addressing sanitation proactively with sufficient and accessible facilities can be more affordable than reacting to water supply contamination or disease outbreaks. In addition, this honors people's basic dignity and survival and aims to meet everyone's basic needs, instead of punitive approaches to open urination and defecation.

Access to sanitation is an issue of equity. Certain populations have less access to sanitation, more frequent need for facilities, or specific access needs. These include people who are homeless, differently abled, young children, pregnant, have medical conditions, and elderly. Homeless, disabled, and transgender individuals in particular can experience discrimination when trying to access restrooms.

2 Proposal Overview: Public Restrooms

This study proposes a holistic, data-informed strategy to maximize the use of existing facilities and to strategically expand access with potential new facilities. This goal is to increase access for all users, not just more facilities. This will require improvements to communication, maintenance, and accessibility, in addition to the infrastructure. It requires that operations and new infrastructure become more responsive to need, particularly temporary or transient need.

Data-Informed Strategies

A data-based approach indicates placing monitors on facilities to understand how many people use which restrooms when and assessing their experience. This would need a coordinator to analyze data and coordinate among City departments that operate restrooms. The operations (hours, frequency of cleaning, service response, and staffing) could then become more responsive to actual needs.

Improving Existing Restrooms

The City would see an immediate positive benefit to upgrading existing facilities, improved cleaning and maintenance operations, and extended hours of operation. A second immediate benefit involves a strategic citywide communications and branding strategy with physical signage and wayfinding at all facilities to provide improved public education about existing facilities.

	Infrastructure	Operations	Upfront Cost	Annual Cost
1. Data Driven Operations				
Collect, Analyze, and Response to Data				
Install data monitors at all existing locations	X		\$53,625	-
Install central software and database	X	X	\$75,000	\$5,000
Project coordinator to manage data and operations		X	-	\$50,000
Implement Citywide Communications & Branding				
Improved physical signage on each existing facility	X		\$21,750	-
Street wayfinding for each existing facility	X		\$19,500	-
Web and phone platform		X	\$35,000	\$5,000
Social media and communications plan		X	\$20,000	\$5,000
Pilot Staffing				
Pilot at 7 priority facilities and refine with data		X	-	\$125,000 - \$325,000
Increase Hours & Cleaning				
Extend hours at 6 sites		X	-	\$54,000
Increase cleaning at 8 permanent sites		X	-	\$22,976
Adjust future hours and cleaning based on data		X	-	TBD
		Sub-Total	\$224,875	\$142,607
2. Improve Existing Restrooms				
Upgrade existing permanent restrooms				
Basic upgrades at 8 sites	X		\$40,000	-
Upgrade portapotties				
Replace 3 existing portapotty sites with permanent	X	X	\$153,204	\$233,529
Upgrade 6 portapotties with semi-permanent trailers	X	X	\$3,675	\$84,000
Optimize locations, cleaning, added staffing based on data		X	-	TBD
		Sub-Total	\$196,879	\$317,529
3. Install New Restrooms				
Pilot Restroom Locations				
Circulate 3 semi-permanent to 18 locations (2 years)	X		\$124,200	N/A Pilot
Pilot an incentive program for 17 non-city institutions	X		\$119,425	N/A Pilot
Future: Formalize incentives and new locations	X	X	TBD	TBD
Operate 24 Hour Restrooms at Homeless Service Centers				
Subsidize upgrades and offer stipends to 4 organizations	X	X	\$124,100	\$96,000
Install new restrooms				
Coordinate restrooms in 6 current development projects	-	X	-	\$12,911
Install new restrooms at 4 priority sites	X	X	\$1,689,560	\$194,470
Install new restrooms at 3 additional sites	X	X	\$554,780	\$66,023
Use pilot and ongoing data to inform future facilities	X	X	TBD	TBD
		Sub-Total	\$2,612,065	\$369,404

Table 1: Proposal Summary (see detailed budget in the Appendix A-4)

2 Proposal Overview: Public Restrooms

New Facilities

For locations where the data suggests high need for new restrooms, we recommend a pilot program that involves partner facilities (non-City institutions) with monthly stipends; and semi-permanent restrooms that can be circulated among the proposed locations. The data from this should inform future restroom projects. The data also indicates that the locations of several current development projects are also high-need locations for potential new restrooms.

Maintenance is critical. Hyphae discourages any new facilities from being built without first identifying funding for maintenance. Without a maintenance strategy, a new facility will fail to actually increase access. See the appendix for upfront costs with annual recurring costs for each recommendation. Image 1 summarizes locations for upgrades, new permanent locations, and pilot locations.

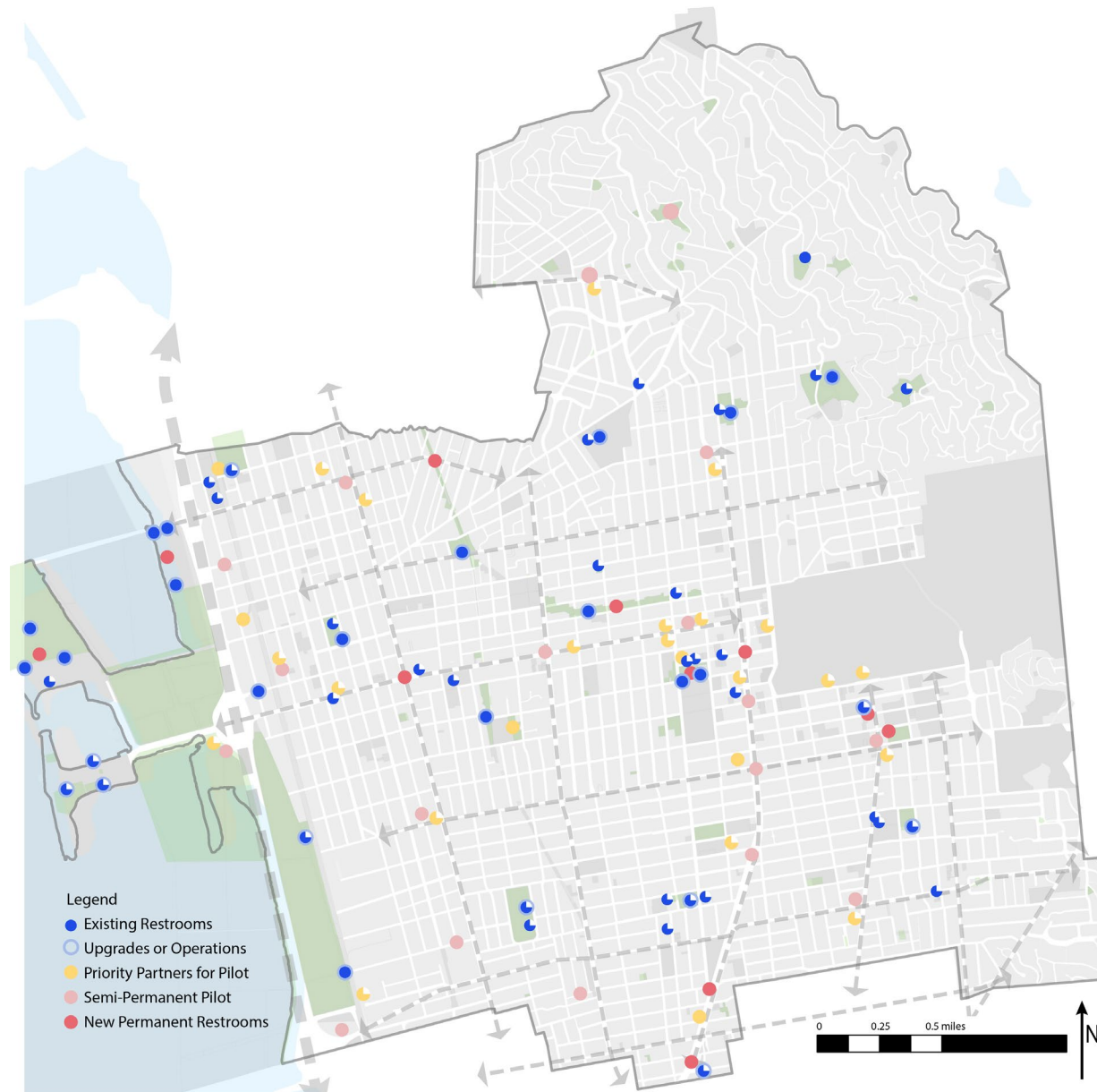


Image 1: Proposal Summary (see detailed budget in the Appendix A-4)

2 Proposal Overview: Public Showers & Laundry

While public restrooms are needed by everyone, public showers and laundry are primarily needed by unhoused community members. People who are housed have access to showers in their homes, in gyms for recreation use, and at their workplace if needed. People who are housed either have access to laundry machines at home or have the necessary resources to pay for a laundromat or laundry service. The primary solution for meeting shower and laundry needs is long-term, accessible, affordable, and dignified housing. In addition, the following recommendations offer a holistic proposal to meet the immediate basic needs of homeless people now. These aim to improve, expand, and supplement existing public and nonprofit operations that can only accommodate a small percentage of actual need. As with restrooms, operations and maintenance is critical for successful access to showers and laundry. These services will have a net improvement in hygiene and sanitation if they are well maintained and operated. Sufficient staffing is also essential for showers in particular. See the associated budget for these recommendations in the Appendix. We strongly recommend that annual operating costs be allocated and secured in conjunction with upfront, infrastructure costs.

Also note that we recommend a data-driven implementation with showers and laundry as well. See Image 2 for a range of potential recommendations that should be refined and scaled in response to real-time data and feedback.

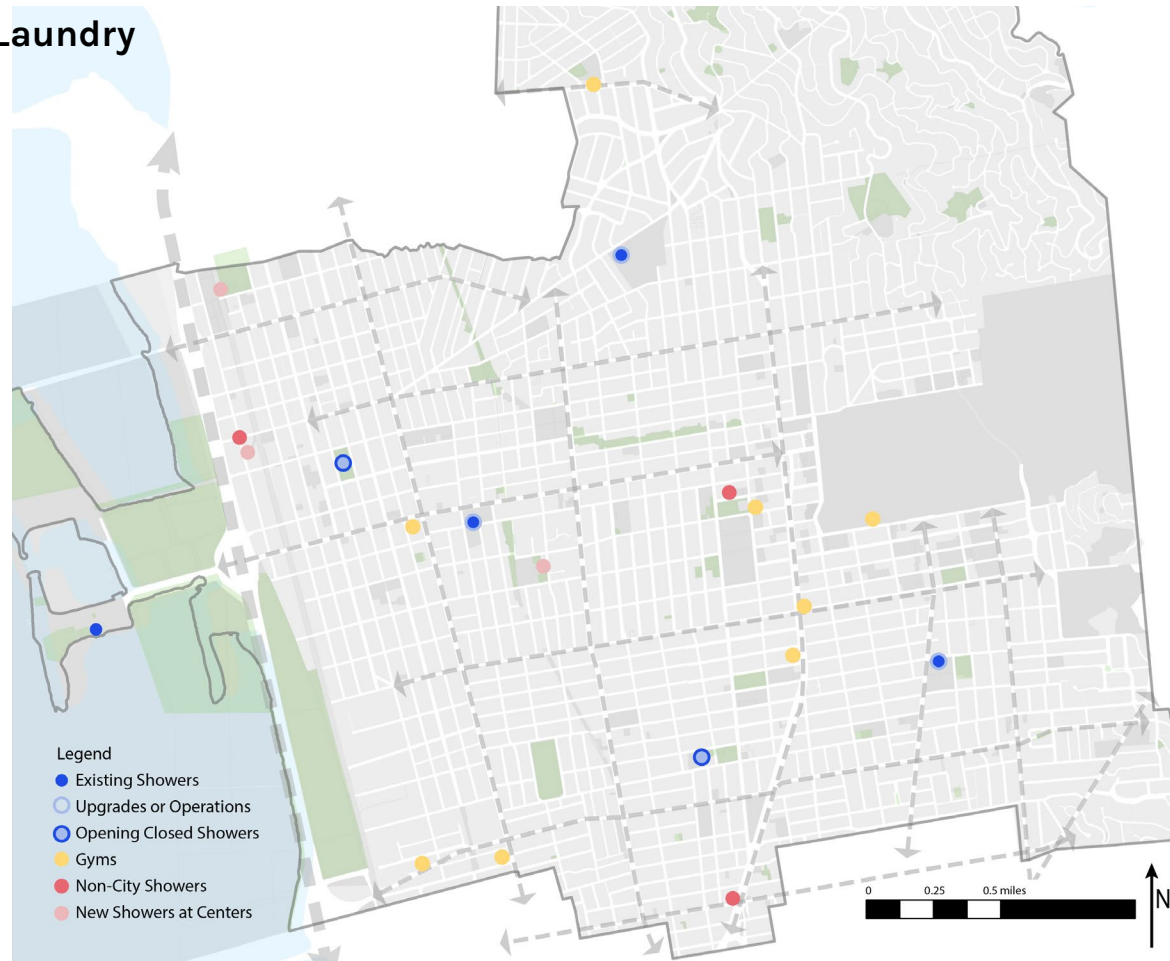


Image 2: Shower Proposal Summary (see detailed budget in the Appendix A-4)

Shower Strategies	Details	Upfront Cost	Annual Cost
1. Support, upgrade, and add showers at service centers	Upgrade showers at Berkeley Community Resource Center	\$100,000	\$0
	Install or expand showers at other centers or shelters	\$200,000	\$20,000
2. Improve Existing Facilities	Improve Communications	-	\$0
	Continue to collect data on shower usage	-	-
	Extend hours at public shower program sites	-	\$270,100
	Expand shower program to remaining public pools	-	\$270,100
	Retrofit existing facilities with single stall showers	\$300,000	
3. Staff and Open Closed Showers	MLK Junior Youth Services and James Kenney Community Center	\$200,000	\$270,100
4. Subsidize gym membership	Subsidize YMCA or gym membership	-	\$8,400
	Continue Dignity on Wheels contract after Shelter in Place	-	??
5. Mobile Shower Trailers	Purchase and staff mobile trailers located by need	\$109,000	\$161,368
	Sub-total	\$909,000	\$1,000,068

2 Proposal Overview: Public Showers & Laundry

Shower Recommendations

- Expand support for homeless service center shower programs and upgrade or add showers at centers.
- Improve existing facilities
 - Improve communications:** Integrate showers in the restroom communications & branding, with a focus on homeless outreach
 - Collect data:** Continue to collect shower use data
 - Extend hours:** Keep COVID-19 extended hours past 2020 Shelter in Place and expand beyond
 - Expand shower program** to all public pools
 - Retrofit facilities** with single stall showers
- Staff and open closed specific public facilities.
- Subsidize gym membership in partnership with homeless service organizations.
- Purchase and operate or contract for mobile showers: note that mobile showers are effective, but require significant resources to operate. Continue with **Dignity on Wheels** contract after COVID-19 2020 Shelter in Place.

Laundry Recommendations

- Subsidize the upgrading of homeless service centers to include laundry machines.
- Partner with laundromats to hold open, free hours and/or subsidize laundromat use in partnership with homeless service organizations.
- Purchase and staff or contract mobile laundry operations that rotate locations based on need.

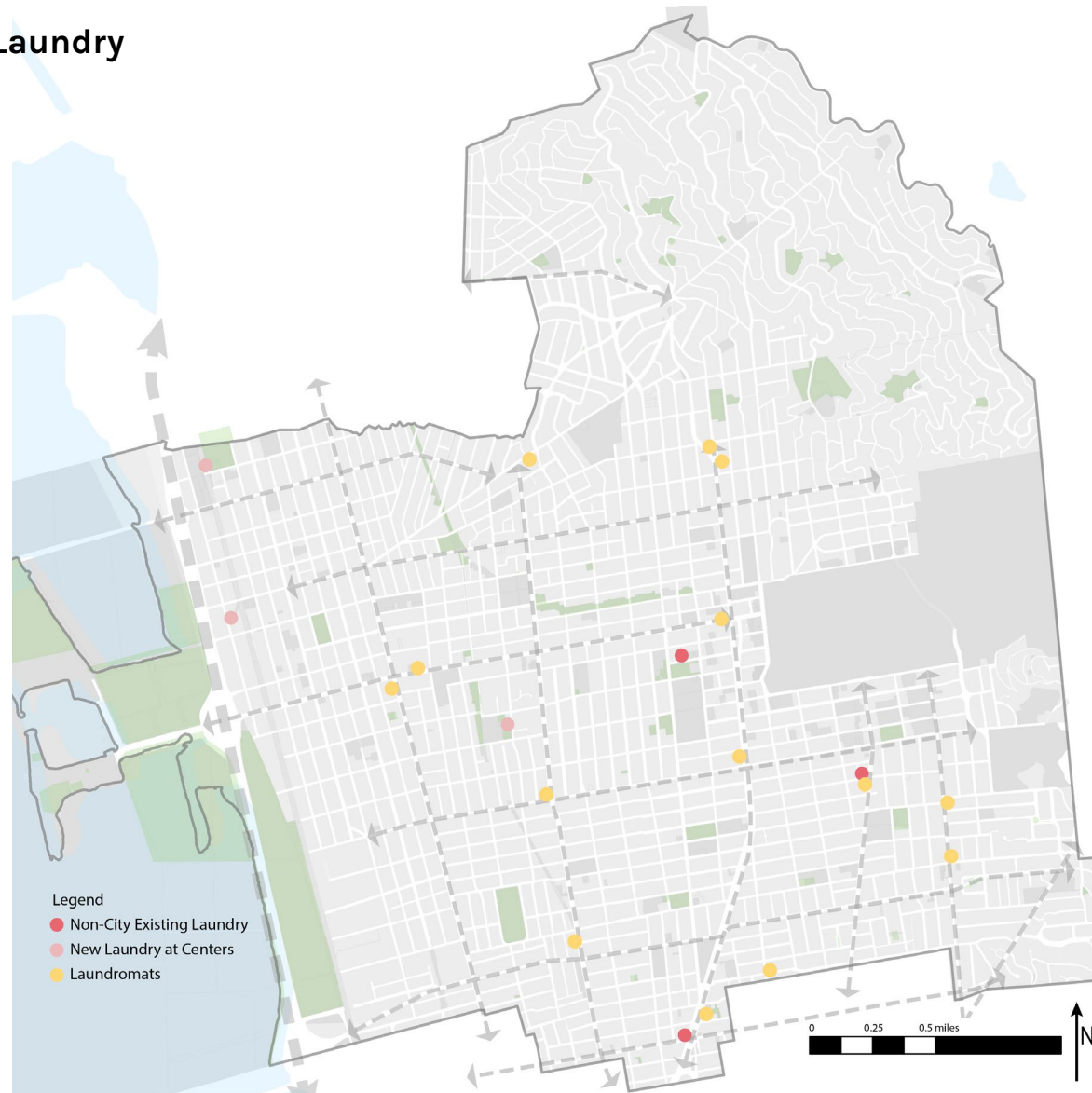


Image 3: Laundry Proposal Summary (see detailed budget in the Appendix A-4)

Laundry Strategies	Details	Upfront Cost	Annual Cost
1. Upgrade service centers	Subsidize installation of laundry in homeless service centers	\$200,000	\$10,000
2. Partner with laundromats	Free open hours or subsidizing laundromat use	-	\$133,000
3. Mobile Laundry	Continue Dignity on Wheels contract after Shelter in Place	-	??
	Purchase and staff mobile trailers located by need	\$218,000	\$161,368
Sub-total		\$418,000	\$304,368

3 Understanding the Need

Berkeley has 121,643 residents (2019) and its population is expected to grow by 24 percent to 140,100 by 2040. From 2015 data, Berkeley has 46,000 students, about 67,000 workers, and 1.65 million annual visitors. All of these people need public sanitation facilities in Berkeley. And the City can proactively plan for future city growth.

Most people access sanitation at their home, work, school, while in transit, and in public facilities, while the following have reduced access: unconventionally housed, some workers (drivers, bus drivers, market vendors, delivery drivers, repair people, etc.), public transit riders, and everyone while in public. Each of these groups have unique needs at specific hours of the day and locations. Most people need public handwashing and toilet access, while unhoused people need all forms of sanitation.

To better understand the need, we collected the following spatial data organized by user groups. This data gives us information on the location of need compared to existing facilities. This data is organized by high-need users whose need is location specific.

General: 311 service calls and business district identified hotspots for defecation and urination

Unhoused: Encampment hotspots and individual locations based on the 2019 Point in Time Count

Workers: Bus Driver Layovers, taxi waiting areas, farmers markets

Transit: pedestrian counts and bus stop riders (over 250 people per day), BART average daily weekday riders

Public: parks and commercial zones

Overall this data shows zones where there is overlapping need of different types: Northwest Berkeley, Downtown, Telegraph, and South Adeline. Day and night-time data show time variation of need and comparison of need locations to existing daytime and 24 hour facilities. The maps to the left summarize this data analysis. See the appendix report for more detailed maps and data.



Image 2: Quantified need locations sized based on quantity of need

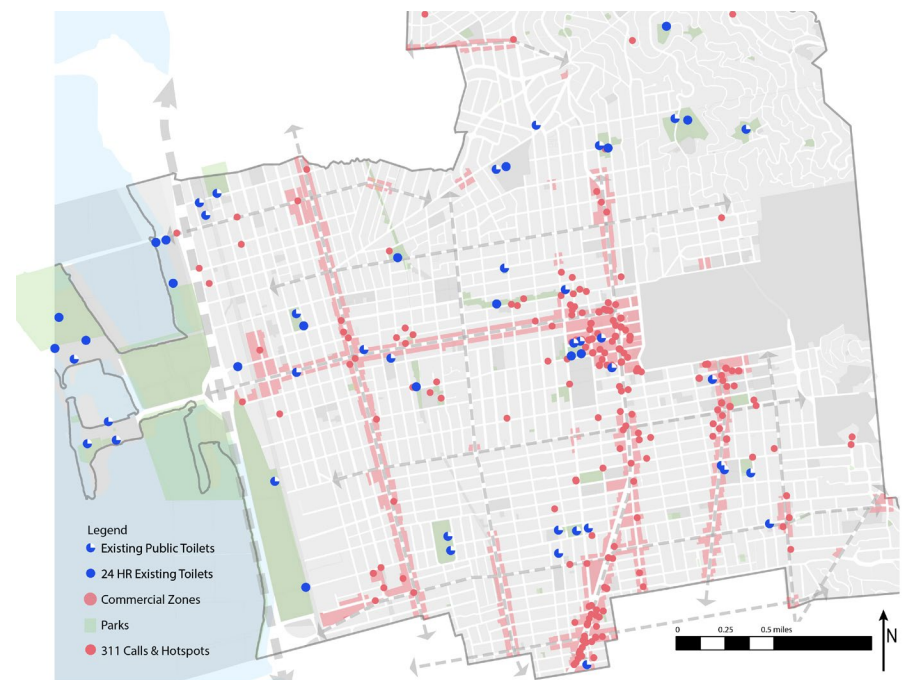


Image 3: Not quantified need: parks, commercial zones, and 311 calls

4

Existing Public Facilities

The City of Berkeley currently owns and manages public restrooms at 46 locations and four showers. See hours and more information in Appendix 1.

- **21 Public Centers:** recreation and senior centers, libraries, customer service, and recycling and transfer centers. These are open daytime hours and are cleaned by contracted janitors, with center staff responding to urgent issues.
- **Four 24-hour Restrooms:** single stall unisex restrooms in parks with a similar physical structure. Only some have handwashing and some only have a chain instead of a full door.
- **13 Lockable Restrooms:** parking garages, parks, and at the marina. Maintained by city janitorial staff, these are all locked at night.
- **21 Portapotties at 9 locations:** at street corners, parks, sports fields, and schools. Maintained through United Site Services and deployed to meet immediate need. Most have handwashing stations and operate 24 hours.
- **Four Showers:** one location for a city operated public shower program; three public showers at pools and one outdoor shower at the marina. Showers are open shower rooms and have limited hours.

There are five locations (two portapotties and three 24-hour) that do not have handwashing, plumbed sink or temporary station. There is one closed restroom and closed showers at two recreation centers. Also, two non-city-owned homeless organizations operate shower operations (Lava Mae and Berkeley Community Resource Center) and laundry (BCRC and Laundry Love).



Image 7: Map of existing restrooms by type; see A-1 for hours and details on existing facilities

4

Evaluating Existing Facilities

We completed 25 site visits of representative public restrooms and shower facilities in Berkeley. In order to standardize observations across site visits, we developed a site visit survey that covers: maintenance and servicing, safety, amenities, building conditions, and neighborhood proximity. For each of these five categories, we assigned a numeric score from 1 (good) to 3 (poor) in addition to qualitative assessments and photos. Where possible, we had discussions with maintenance staff and toilet users.

Existing facilities are maintained, cleaned and serviced, through different contracts depending on the responsible department. Berkeley does not have attendants at any of their existing restrooms. Parks, Recreation, and Waterfront (PRW) have janitorial staff that clean restrooms in parks. Janitorial companies are contracted for garages and centers. And United Site Services manages the pump-outs, cleaning, and servicing of porta-potties and handwashing stations.

We also analyzed data on service calls from Public Works and PRW from January 2016 to July 2019: 355 PW calls and 167 PRW calls. The call data was used to create a cumulative analysis of facilities with higher calls: doors and hardware, fixtures, plumbing, vandalism, irrigation, HVAC, and other.

Issues identified through high service log requests correspond well with our observations from site visits of sites that experience heavy usage and infrastructure wear as a result. These analyses of existing facilities inform our recommendations for upgrades at existing facilities and changes to maintenance protocol.

Data analysis is summarized in the graphs to the right. See our site visit report for more in depth reviews of each existing restroom facility.

Annual Maintenance/Cleaning Costs for Existing Facilities*

StallType	Maintenance	Cleaning	Materials	Total
Internal	\$598	\$8,988	\$94	\$9,585
External	\$3,924	\$8,988	\$612	\$12,911
High Service**	\$4,939	\$8,988	\$763	\$13,926
Porta-potty		\$1,000		\$3,000

*based on PRW existing cost estimates

** Harrison Park, Aquatic Park, Willard Clubhouse, and Grove Park restrooms are included in this category

Table 3: Estimated maintenance costs from a PRW existing cost estimates

Analysis of Existing Facilities

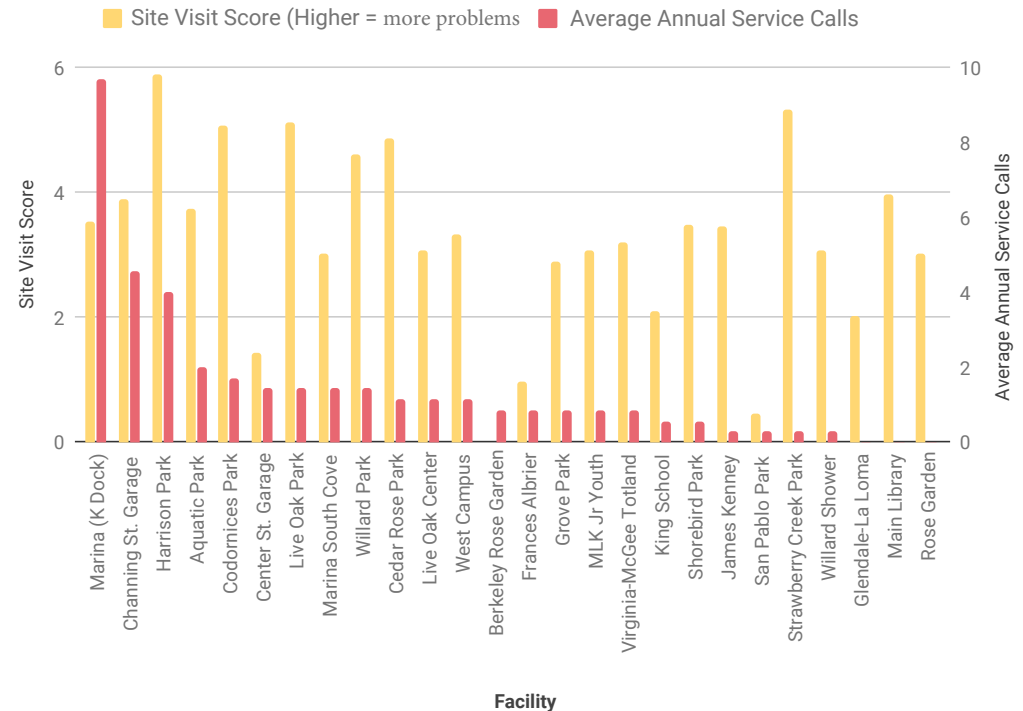


Image 8: Analysis of existing facilities based on our site visits and service logs

5 Analyzing Unmet Need

Quantity of Need

To evaluate the adequacy of the number and locations of toilets throughout the City, we researched existing codes and guidelines. While there are no existing codes for public restrooms in California, there are certain codes, including the California Plumbing Code and International Plumbing Code, that have recommendations for restrooms for different types of users. The table at the right shows these guidelines.

Data Analysis

Using these guidelines, we calculated the restroom stalls needed at each of our high-need locations based on the type of need and number of users. With this and the recommended maximum travel distance to a restroom, we used the heatmap analysis tool in GIS to convert single data points into a spatial pattern. This was calculated for existing facilities and need locations. We then overlaid the two heatmaps and subtracted the existing facilities from the need to find the unmet need. This analysis was completed for daytime and nighttime need. The map at the right shows the daytime analysis. The darker red shows higher levels of need. Look at our data report for detailed maps and analysis.

This indicates locations that need additional restroom access and the scale of that need. Nighttime needs can be met with extending hours of existing facilities, partner facilities, new mobile facilities, or new permanent facilities. Daytime needs can be met with partner facilities or new mobile or permanent facilities. We performed several iterations of the heatmap analysis to identify various scales and locations that could meet these needs, i.e., that could effectively reduce the combined heatmap to near zero.

After this analysis, we evaluated 311 service call data and park and commercial locations to identify any spatial gaps of additional need not captured through the heatmap analysis. Then we evaluated stakeholder recommendations and filled in any remaining gaps. Together, these analyses inform our proposal in the following section of this report.

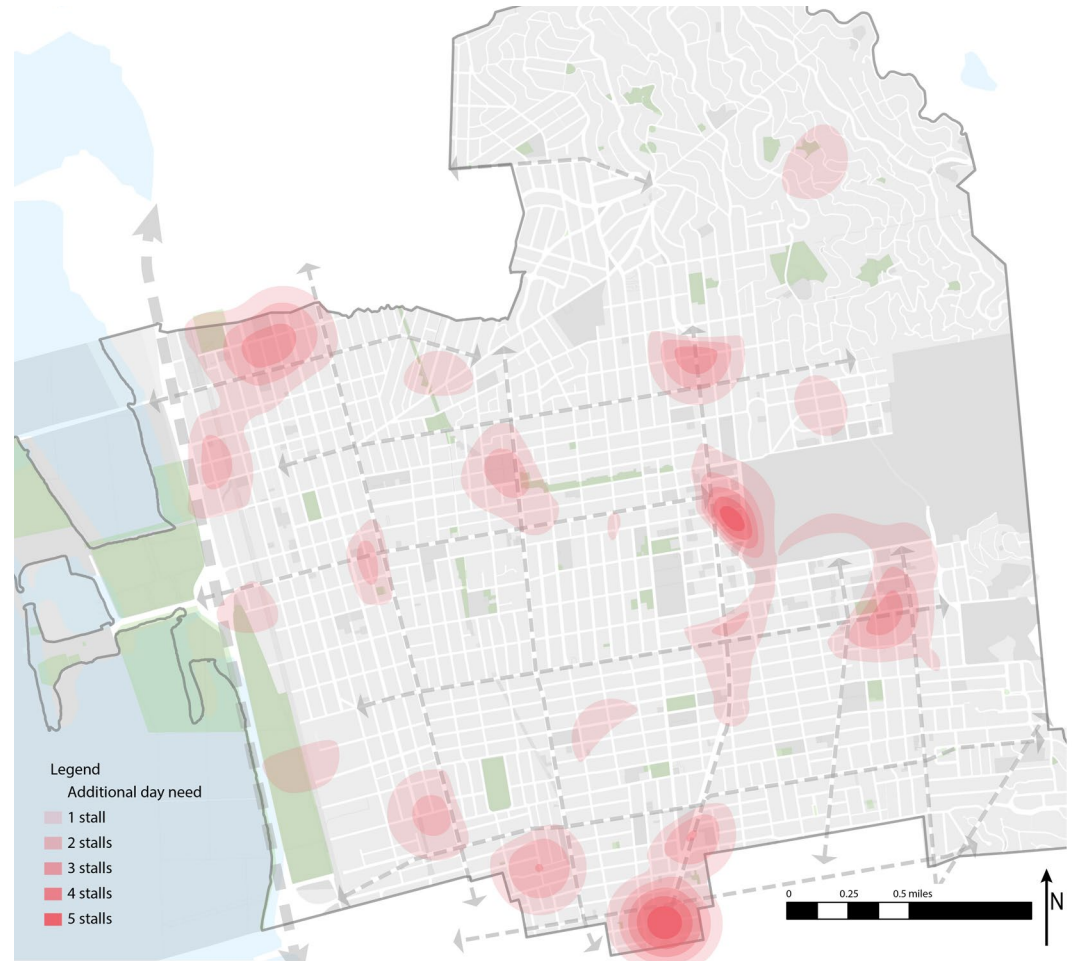


Image 4: Daytime heatmap showing remaining need not met by existing facilities

User Type	People per Toilet	Distance to Toilet	Building Code Source
Unhoused	15-25	50 m to 1/8 mile	CA and International Plumbing Codes for campgrounds, RV parks, group home; UN Guidelines for refugee camps
Outdoor Workers	15	10 min walk or 1/4 mile	CA Plumbing Code for farm & mobile workers
Transit	500	Max 1/4 mile	International Plumbing Code
Public Areas	500	Max 1/4 mile	CA Plumbing Code for picnic areas, beaches, sports facilities, assembly

Table 2: Restroom distance and quantity recommendations based on similar building code guidelines

5 Stakeholder Recommendations

Over the course of our engagement process we reached out to our four geographic focus populations and people with specific needs across all geographic areas: families with young children, youth, seniors, and people with disabilities. We collected data on people's experiences with existing facilities, input on design recommendations to upgrade existing and inform the design of new facilities, and input on recommended locations for new facilities.

The top map on the right visualizes recommended locations by stakeholder groups. These come from all of our engagements. During meetings and focus groups we broadly collected location information. At our community meetings and in our online survey we asked for recommendations on 22 specific potential locations in order to understand priority locations. These potential locations were informed by our first phase of stakeholder engagement. The bottom map on the right shows visually how people ranked locations in the survey: larger circles indicates more support.

Input on restroom upgrades and designs, analyzed by different populations, are incorporated into our proposed design guidelines contained in this report. Together this feedback is a critical data set and informs our proposed locations, design, and over strategies for improving access to sanitation in Berkeley.

Some additional insights from the online survey include:

- People rated existing facilities on average 3 out of 5 (where 1 is poor and 5 is excellent); Parks 1.9 and Libraries 4.2
- Respondents would use public restrooms more often if:
 - 82% if they were better cleaned and maintained.
 - 63% if they have a sink and soap
 - 57% if there were more restrooms
 - 55% if they felt safer.
 - 46% if they were in more convenient locations
- Only 30% of respondents use portapotties now as they are
- 70% of respondents would use upgraded mobile facilities.

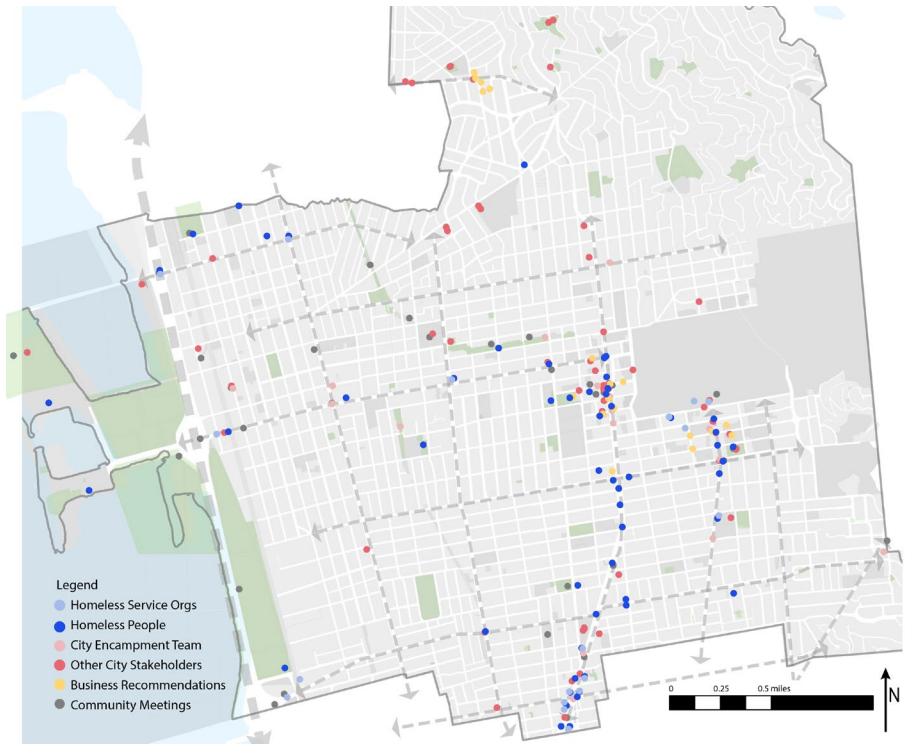


Image 5: Location recommendations by stakeholder type



Image 6: Location Recommendations based on Survey feedback (larger shows higher priority)

A1

Existing Public Facilities

Facility Name	Facility Type Detail	Hours	Number of Stalls	City Department	Hand washing	Showers
2nd & Cedar Streets	Porta-potty	24 Hours	2	PRW	Yes - handwashing station	No
Ann Chandler Public Health Center	Center: Other	9am-5pm	4	Center	Yes	No
Aquatic Park (Dreamland)	Non-24 Hour Park	7 am - 5 pm	2	PRW	Yes	No
Aquatic Park South	Porta-potty	24 Hours	1	PRW	Yes - handwashing station	No
Berkeley Recycling Center	Center: Other	9AM-4PM	2	Center	Yes	No
Berkeley Rose Garden	Non-24 Hour Park	7 am - 5 pm	2	PRW	Yes	No
Berkeley Transfer Center	Center: Other	9AM-4PM	2	Center	Yes	No
Cedar Rose Park	Park 24-Hr	24 Hours	1	PRW	No	No
Center Street Garage	Non 24-Hr: Garage		2	PW	Yes	No
Cesar Chavez Park PP	Porta-potty	24 Hours	5	PRW	Yes - handwashing station	No
City Recreation Administrative Office	Center: Other	8.30am-4.30pm	2	Center	Yes	No
Civic Center Park PP	Porta-potty	24 Hours	2	PRW	Yes - handwashing station	No
Claremont Library	Center: Library	Mon: 10-6 Tue: 10-8 Wed: 10-8 Thu: 12-8 Fri-Sat: 10-6	3	Libraries	Yes	No
Codornices Park	Park 24-Hr	24 Hours	1	PRW	No	No
Customer Service Center	Center: Other	8.30am-4pm	6	Center	Yes	No
Frances Albrier Community Center	Center: Recreation	Sch Yr M-F 1pm-9pm Summer 9am-6pm	2	PRW	Yes	No
Glendale-La Loma Park	Non-24 Hour Park	7 am - 5 pm	2	PRW	Yes	No
Grove Park	Non-24 Hour Park		2	PRW	Yes	No
Harrison Park	Non-24 Hour Park	9 am - 9 pm	2	PRW	Yes	No
Here There Encampment	Porta-potty	Padlocked, open upon request	1	PRW	Yes - handwashing station	No
James Kenney Community Center	Center: Recreation	Sch Yr M-F 1pm-9pm Summer 9am-6pm	8	PRW	Yes	Closed
James Kenney Park	Porta-potty	24 Hours	1	PRW	No	No
King School	Porta-potty	24 Hours	1	PRW	No	No
King School Swim Center (No Shower Program)	Center: Recreation	MWF: 6am-1pm, 5:30-8:30pm T Th: 6-8:30am, 10:30am-1:30pm, 5:30-8:30pm Sa 7am-1:30pm Su 9:30am-1:30pm	2	PRW	Yes	Yes
Live Oak	Center: Recreation	Sch Yr M-F 1pm-9pm Summer 9am-6pm	8	PRW	Yes	No
Live Oak Park	Park 24-Hr	24 Hours	1	PRW	Yes - handwashing station	No

A1

Existing Public Facilities

Facility Name	Facility Type Detail	Hours	Number of Stalls	City Department	Hand washing	Showers
Main Branch	Center: Library	Mon: 12-8 Tue: 10-8 Wed-Sat: 10-6 Sun: 1-5	11	Libraries	Yes	No
Marina K Dock	Non-24 Hr: Marina	5 am - 8 pm daily	2	PRW	Yes	No
Marina Launch Ramp	Non-24 Hr: Marina	5am-8pm	4	PRW	Yes	No
MLK Junior Youth Services	Center: Recreation	Sch Yr M-F 1pm-9pm Summer 9am-6pm	6	PRW	Yes	Closed
North Berkeley Library	Center: Library	Mon: 10-6 Tue: 10-8 Wed: 10-8 Thu: 12-8 Fri-Sat: 10-6	4	Libraries	Yes	No
North Berkeley Senior Center	Center: Senior	Currently Closed for Construction	5	Aging Services	Yes	No
Ohlone Park PP	Porta-potty	24 Hours	1	PRW	Yes - handwashing station	No
San Pablo Park	Non-24 Hour Park	7 am - 5 pm	2	PRW	Yes	No
Shorebird Park	Non-24 Hr: Marina	6 am - 8 pm daily	2	PRW	Yes	No
South Berkeley Library	Center: Library	Mon: 10-6 Tue: 10-8 Wed: 10-8 Thu: 12-8 Fri-Sat: 10-6	3	Libraries	Yes	No
South Berkeley Senior Center	Center: Senior		4	Aging Services	Yes	No
South Cove	Non-24 Hr: Marina		5	PRW	Yes	No
Strawberry Creek Park	Park 24-Hr	24 Hours	1	PRW	No	No
Telegraph-Channing Garage	Non 24-Hr: Garage	M-Th: 7 am - 1 am Fr-Sa: 7 am - 2 am Sun: 8 am - 10 pm	4	PW	Yes	No
Tom Bates Field	Porta-potty	24 Hours	7	PRW	Yes - handwashing station	No
Veterans Center	Center: Other	10am-6pm	3	Center	Yes	No
Virginia-McGee Totland	Non-24 Hour Park	7 am - 5 pm	2	PRW	Yes	No
West Berkeley Library	Center: Library	Mon: 10-6 Tue: 10-8 Wed: 10-8 Thu: 12-8 Fri-Sat: 10-6	3	Libraries	Yes	No
West Campus Swim Center (Operating Public Shower Program During COVID-19 Shelter in Place)	Center: Recreation	Open May-Sept. only, schedule variable. COVID-19 Shower: Mon-Fri 9am-12pm; Sat & Sun 3-6pm	2	PRW	Yes	Yes
Willard Park	Non-24 Hour Park	8am-6pm	1	PRW	Yes - handwashing station	No
Willard Swim Center (Public Shower Program)	Center: Recreation	Public Shower hours: M-F 7:30pm-8:30pm SaSun 9am-10am	2	PRW	Yes	Yes

A2 Precedents From Other Cities

We looked at lessons from other cities experimenting and implementing public restrooms that have similarities to Berkeley: Portland, San Francisco, Denver, San Diego, and Santa Cruz. These cities have implemented restroom staffing, piloted different toilet designs, experimented with 24 hour facilities, and operate stipend programs for businesses to host restrooms for public use. Collectively, these programs suggest the following insights.

Locations

- Parks larger than one half block should have a public restroom
- Data collection can help in locating facilities and refining hours, staffing, and cleaning
- Issues at a single facility may be caused by high use and insufficient number of overall facilities throughout the City

Restroom Design

- Highly technical facilities, including self-cleaning toilets cause issues and high maintenance costs
- Signage, proximity, and visibility are all important for improved access
- Incorporating soap and handwashing stations is important for sanitation
- Exterior handwashing can be helpful to reduce vandalism (greater visibility)
- Aesthetics and design must be site and community specific: both more durable and more aesthetic facilities have been successful at reducing vandalism in different contexts
- Including needle boxes and trash cans can improve safety and waste collection
- Renovate existing facilities can to discourage vandalism and increase number of stalls

Operations

- Staffing has been successful in several places
- Success with staffing contracted through non-profits that employ formerly homeless or incarcerated individuals
- The success of opening facilities 24 hours depends on where and how it is staffed



Image A1: Denver public restroom

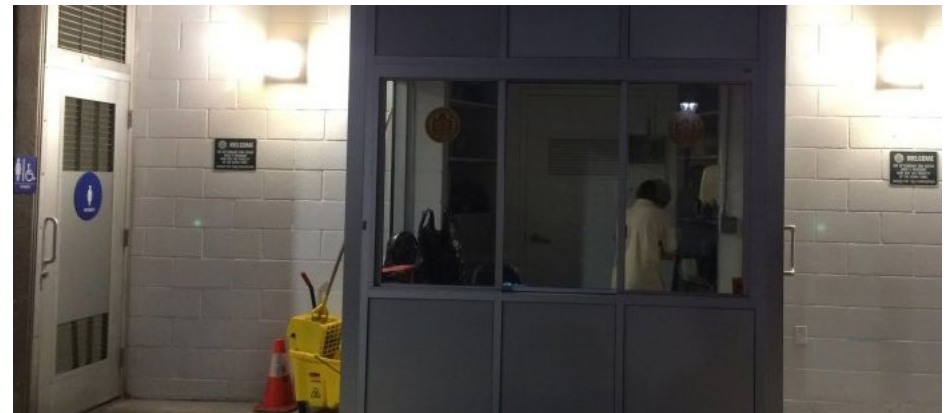


Image A2: Staffing at a San Diego restroom



Image A3: Denver semi-permanent restroom pilot

A3 Design Guidelines

Physical Accessibility

- Units that fully meet ADA requirements for physical space, bars, height of amenities, etc.
- Units must have ADA Accessible pathway

Accessibility for Young Children

- Unisex units for families and gender inclusivity
- Enough space for parents with strollers and young children
- Child protection seat
- Additional child-sized sink at facilities with young children or available step for children
- Baby changing station
- Grab bars and safety rails sized for children
- Close proximity to parks and playgrounds

Safety, Security and Visibility

- Sufficient lighting inside facility
- Sufficient lighting outside and pathways leading up to facility
- Functional, locking door
- Emergency Exit button
- Visible from the street or more populated areas (not hidden)
- Staffing, particularly for night and high-use restrooms
- Good, regular maintenance
- Fast response to infrastructure repair issues

Amenities

- Electric hand dryer
- Exterior drinking fountain
- Functional Full-Length Mirror
- "Needs Maintenance" button
- Menstrual hygiene product dispenser
- Needle disposal box
- Paper towel dispenser

- Exterior handwash sink
- Toilet seat cover dispenser
- Trash can

Other

- Durable but aesthetic design

Sustainability

- Solar panel where possible
- Skylight for natural daytime lighting
- Composting toilets where feasible

A3 Data Collection

Data Monitors

- Count the number of people who use restrooms
- Tracks time of use
- Monitor to track user feedback
- Service or cleaning request button

Central Database

- Tracks data real-time from all sensors
- Produces data summaries
- Has sufficient capacity to connect all existing restrooms and projected new facilities

Recommended Retailers

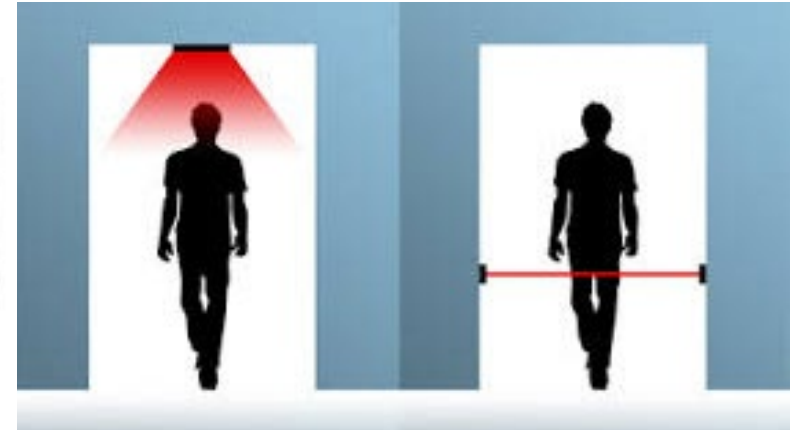


Image A4 & A5: Ceiling mounted people sensor and overhead versus horizontal sensors



Image A6 & A7: Restroom service buttons and feedback buttons

Cost	Upfront Cost	Annual Cost
Infrared people counter (per counter)	\$500	-
User feedback monitors (per monitor)		-
Service request button (per button)		-
Central database	\$75,000	\$5,000

Table A1: Data monitoring cost table

A3 Communications & Branding

Branding & Communications Strategy

- Coordinated website and social media launch
- Coordinated branding across all restrooms: signage and wayfinding (see signage and wayfinding sheets)
- Coordinated media and outreach strategy
- Regular updating of communications and signage
- Ongoing media, outreach, and social media

Website and Phone Platform

- Interactive map with toilet locations and hours
- Search function: find the closest open restroom
- Sync restrooms with google maps search engine
- Rate your experience at a restroom
- Feedback form for existing and new toilets
- Search engine optimization
- Accessibility: color, screen readers, etc.
- Responsive design
- Include Citywide Restroom Study and attachments on the website
- Include report data in an interactive data map

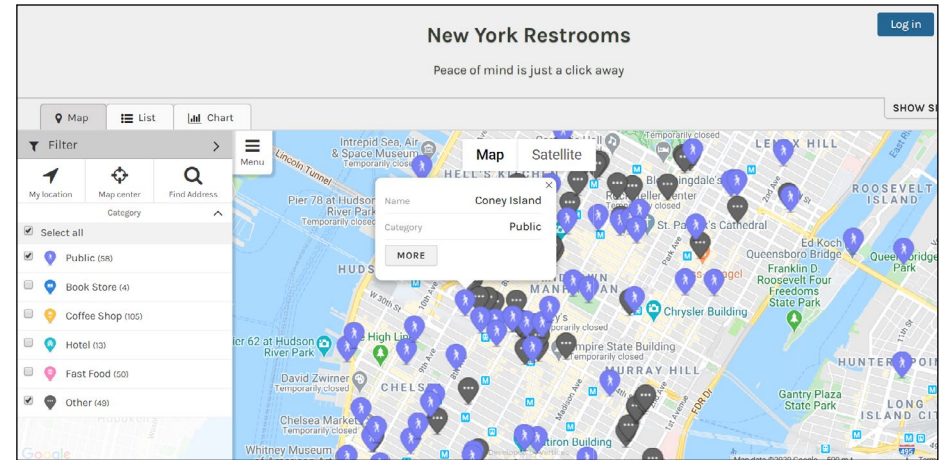


Image A8: Example of online interactive restroom map from New York City

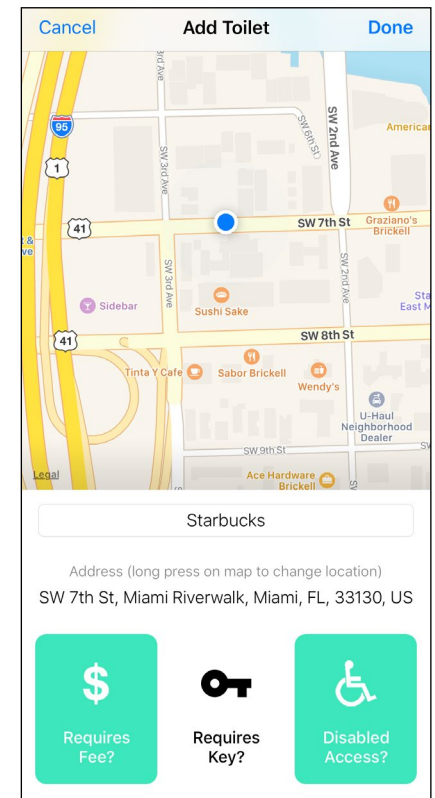
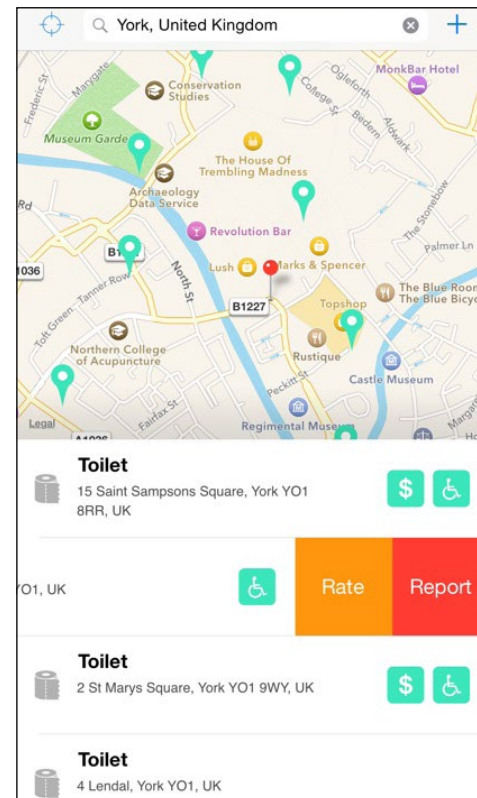


Image A9: Sample "find a restroom" search systems

Cost	Upfront Cost	Annual Cost
Communications Strategy	\$20,000	\$5,000
Website and Phone Platform	\$35,000	\$5,000

Table A2: Communications and branding cost table

A3 Signage

Restroom Signage

- Gender neutral as often as possible
- Multiple languages and braille
- Symbol indicating wheelchair ADA accessibility
- Symbol indicating baby-changing table
- Signage large enough to be easily seen from a distance
- Commonly recognized restroom symbol
- Consistent signage across facilities
- Shows restroom hours
- Ensure nighttime visibility and install lighting if needed

Approximate cost per sign: \$150

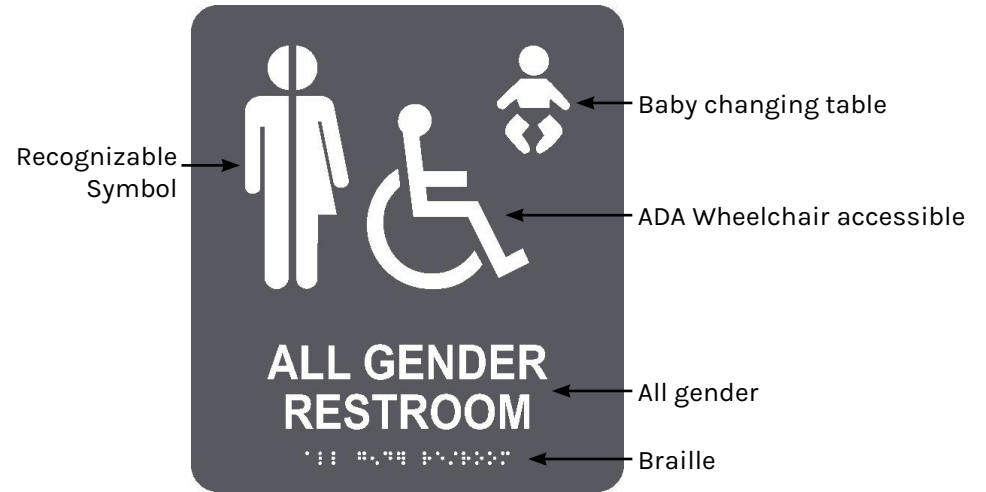


Image A10: Signage requirements



Image A11: Sample all-gender design in Spanish and English



Image A12: Civic Center restroom sign with restroom hours

A3 Wayfinding

Restroom Wayfinding

- Multiples languages and braille
- Symbol indicating wheelchair ADA accessibility
- Symbol indicating baby-changing table
- Signage large enough to be easily seen from a distance
- Commonly recognized restroom symbol
- Wayfinding follows all entry paths from streets or sidewalks
- Consistent branding across facilities
- Ensure nighttime visibility and install lighting if needed

Approximate Cost Per Facility: \$



Image A13 and A14: Sample wayfinding on a building wall (left) and sidewalk (right)



Image A15: Diagrams of universal wayfinding techniques applied across several facilities

A3 Staffing

Organization

- Employs homeless, formerly homeless, formerly incarcerated
- Pays employees Berkeley's living wage and benefits
- Adjusts staffing hours and number of facilities based on data in collaboration with the project coordinator

Staffing Types

- Full-time attendant at one facility
- Shared attendant between 2 to 5 nearby facilities: attendant rotates between facilities
- Integrated into another job (street cleaner, security guard, public transit assistant, etc.)
- On-call attendant to respond to issues

Staffing Responsibilities

- Cleaning
- Stocking restroom supplies
- Monitoring restroom maintenance and user feedback
- Hospitality
- Trained in de-escalation
- Safety
- Coordinates service repairs with city service staff
- Keeps cleaning and service logs

Cleaning Materials

- Fragrance free soap

Recommended Organizations

- Integrate into Downtown Business Association (DBA) and Telegraph Business Improvement District (TBID) Ambassador Program
- Berkeley Drop-In Center (pilot with their facility)
- Downtown Streets



Image A16: Pit Stop staffer in San Francisco

Staffing	Annual Cost
Full-time attendant hourly	\$16.05
Full-time attendant annual salary	\$33,384
Full-time attendant annual benefits (50%)	\$10,015
Staffing replaces per stall cleaning cost for external facilities	-\$8,988
Oversight and management costs	

Table A3: Staffing cost table

A3 Semi-Permanent Restrooms

Design Parameters

- Indoor lighting and plumbed sink
- Provide regular cleaning and maintenance service OR City purchases trailers and operate them
- Location: ideally co-locate with water, electric, and sewer hookups for easy utility access
- Data: Install monitors to monitor data

Pros

- Portable and adaptable to changing need
- Various options for aesthetics & durability
- Less upfront cost
- Upgrading trailers can improve durability and quality: indoor tiles, outdoor cladding materials, landscaping
- Purchasing reduces annual costs with time

Cons

- More maintenance costs
- Less permanent

Recommended Manufacturers

- Rental: United Site Services, Gotta Go, VIP Restrooms
- Purchase: Portable Restroom Trailer, Satellite Suites



Image A17: Sample semi-permanent restroom trailer with ramp



Image A18: Model of a custom semi-permanent restroom



Image A19 and A20: Custom semi-permanent restroom designed from containers

Cost	Min	Max
1A. Rental Trailer w/o Utility Hook-Up (annual per stall)	\$15,000	\$60,000
1B. Rental Trailer w/ Utility Hookup (annual per stall)	\$15,000	\$24,900
2. Purchase Trailer Standard with modest upgrades (single ADA unit)	\$40,000	\$50,000
3. Purchase Cost Custom (Trailer or Container)	\$50,000	\$75,000
Additional data monitor cost (per stall)	\$250	\$500
Estimated City Maintenance (annual per stall)	\$12,911	

Table A4: Semi-permanent restroom cost table

A3 Conventional Pre-Fabricated Restrooms

Manufacturer Modifications to the Base Structure

- Roof material, color, design
- Wall material, color, texture
- Tile floor
- Skylight
- Amenities (see design guidelines for which to include)
- Flush vault option for lower density sites

Additional On-Site Modifications

- Solar energy
- Landscaping
- Exterior facade: material, aesthetics, etc.

Pros

- Connect to City sanitary system, or flush vault (for low waste volume scenarios)
- Lower maintenance costs
- More permanent
- Durable
- Custom or catalogue options
- Various aesthetic options from manufacturer
- Faster procurement and installation

Cons

- Not mobile or flexible in location
- Higher upfront costs
- Limited aesthetic options or modifications
- Only appropriate where there is more space, ie. park or large parking area

Current Known Manufacturers - Examples

- Public Restroom Company
- RomTec
- Green Flush
- LB Foster (CXT)

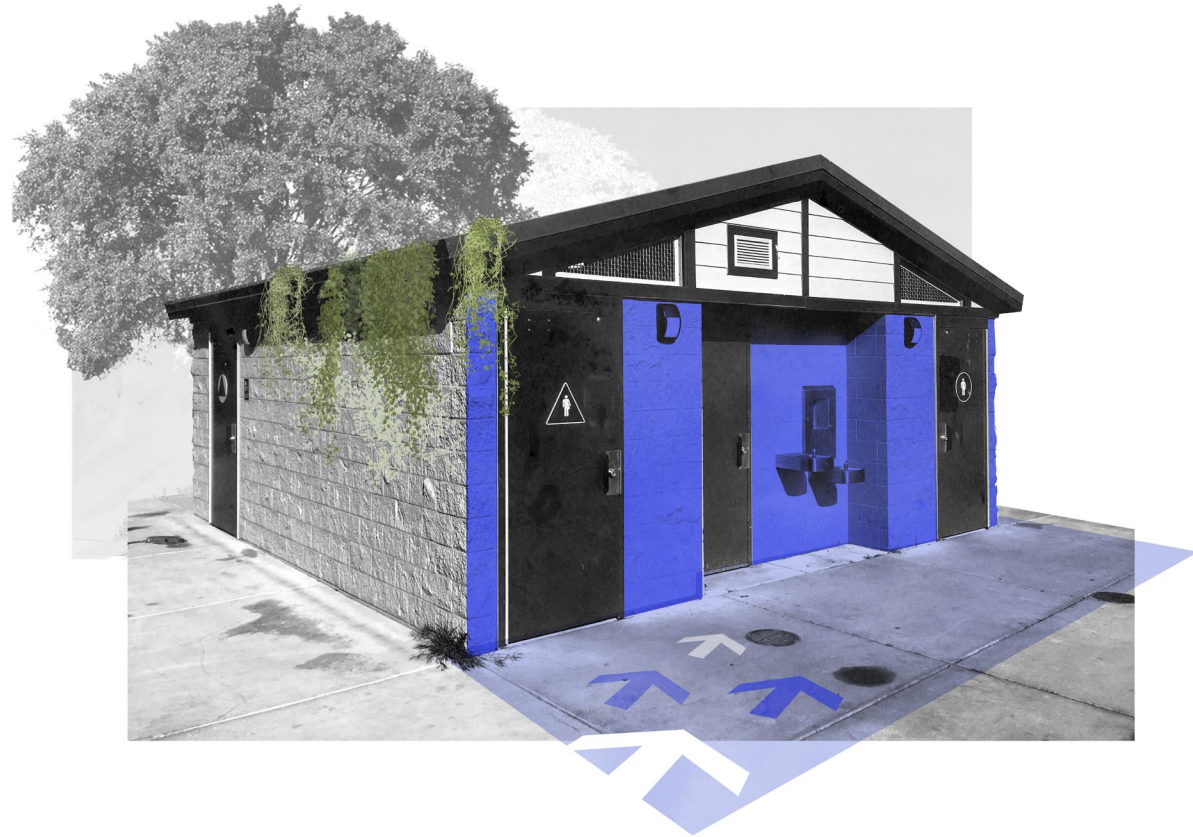


Image A21: Mock-Up of a pre-fab restroom with on-site modifications

Cost	Min (per stall)	Max (per stall)
Base Cost Range	\$11,648	\$90,000
Additional Manufacturer Modifications	\$37,266	\$120,000
Additional On-Site Modifications	\$5,000	\$15,000
City's estimate for restrooms per stall	\$70,000	
Site Work (existing utilities) per building	\$10,000	
Site Work (no existing utilities) per building	\$70,000	

Table A5: Pre-fabricated restroom cost table

A3 Pre-Fabricated Restrooms: the Portland Loo

Design Options

- Solar or hybrid energy system
- Hand wash basin
- Other amenities: baby changing table, sharps container, trash can

Pros

- Durable
- Easy to clean
- Better sight lines to reduce vandalism
- Graffiti repelling paint
- Blue light to discourage drug use inside
- Compact
- Proven to be successful in some cities but not all

Cons

- Not successful everywhere
- Not aesthetic or fitting with all surrounding contexts
- No hand-drying
- Awkward hand washing station
- Feels less safe or inviting to some users
- Only comes with one-stall option



Image A22 and A23: Portland Loo at a sidewalk (inside and outside)



Image A24: Portland Loo exterior on a sidewalk

Cost	Min (per stall)	Max (per stall)
Portland Loo (single unit)	\$102,390	\$104,990
City's estimate for restrooms per stall	\$70,000	
Site Work (existing utilities) per building	\$10,000	
Site Work (no existing utilities) per building	\$70,000	

Table A6: Portland Loo costs summary

A3 Pre-Fabricated Restrooms: the Exeloo

Design Options

- Remote web-based monitoring controls
- Self-cleaning as an option
- Exterior: wood, film overlay, stainless steel, or prepped for mural

Pros

- Compact
- Aesthetic
- Exterior can be modified to fit surroundings
- Flush fixtures increase durability and reduce potential for vandalism
- Various options from basic to fully automated and self-cleaning
- Local repair and installation support

Cons

- Less design modifications because pre-fabricated
- Shipping overseas reduces number of stalls (max three or multiple double stalls)



Image A25: Exeloo interior



Image A26: Exterior view of a Exeloo one-stall restroom with wall mural

Cost Exeloo Jupiter Model Series	Min	Max
Single Unit	\$131,366	\$150,266
Double Unit	\$195,660	\$214,560
Triple Unit	\$243,675	\$272,025
Site Work (existing utilities) per building	\$10,000	
Site Work (no existing utilities) per building	\$70,000	

Table A7: Exeloo costs summary (note add in costs for non-auto)

A3 Custom Restrooms

Design Recommendations

- See design guidelines above
- Fit into the aesthetics of the surrounding context

Pros

- Significant flexibility to site conditions
- More aesthetic and form options
- Ability to more flexibly adapt and match design to the surrounding environment

Cons

- Longer timeline
- Increased costs

Recommended Designers

- Romtec
- Others



Image A27: Custom designed restroom at Ocean Beach, San Diego



Image A28 and A29: Custom designed park restroom in Austin, Texas

Cost Exeloo Jupiter Model Series	Min	Max
Design Costs		
Construction Costs		
Additional Construction Costs if no existing utilities	\$60,000	

Table A8: Exeloo costs summary

A4

Full Proposal Budget: Restrooms

1. Data Driven Operations

Strategies	Details	Infrastructure	Operations	Upfront Cost	Additional Annual Cost
Collect data				\$128,625	\$55,000
Data Monitors	Install data monitors at all existing restroom facilities. See the data spec sheet for details on monitors and installation	X		\$53,625	N/A
Central software and database	Install a central software and database system that connects all the monitors in the field and has sufficient capacity for future growth.	X	X	\$75,000	\$5,000
Project Coordinator	Project coordinator manages and analyzes data and leads the adjustment and refinement of restroom operations in response to data; coordinates between relevant city departments and stakeholder relationships (integrated into T1 for T1 timeline; additional cost needed after); 50% FTE		X	N/A	\$50,000

Citywide Communications & Branding				\$96,250	\$10,000
Signage	Install improved physical signage on each existing facility. See the Communications & Branding spec sheet for details on type of signage and what it needs to include.	X		\$21,750	N/A
Wayfinding	Install wayfinding for all existing permanent facilities. See the Communications & Branding spec sheet for details on wayfinding.	X		\$19,500	N/A
Web platform	Develop a comprehensive Berkeley public restroom website with centralized and updated information.		X	\$35,000	\$5,000
Communications plan	Develop and implement a comprehensive social media and communications plan on public restrooms.		X	\$20,000	\$5,000

Hours & Cleaning				\$0	\$22,976
Extend hours	Hours extension for these priority sites: assumes no cost increase. Future hours to be refined based on data.		X	\$0	\$0
Aquatic Park (Dreamland)	to 10pm		X	-	-
Grove Park	to 10pm		X	-	-
Harrison Park	Overnight		X	-	-
San Pablo Park	to 10pm		X	-	-
South Cove	To 10pm		X	-	-
Willard Park	Overnight		X	-	-
Increased Cleaning	Increased cleaning at the following sites. Cost estimates assumed 25% increase. Future cleaning should be adjusted based on data. For portapotties where we recommend that they be replaced with permanent facilities, these cleaning recommendations are for the short term until construction of new facilities.		X	\$0	\$22,976
2nd & Cedar Streets	Portapotty: increase cleaning to twice/day and refine in response to data.		X	-	\$500
Aquatic Park South	Portapotty: increase cleaning to twice/day and refine in response to data.		X	-	\$250
Cedar Rose Park	Permanent facility: increase cleaning by 25% to start and refine with future data.		X	-	\$2,247
Cesar Chavez Park PP	Portapotty: increase cleaning to twice/day and refine in response to data.		X	-	\$1,250
Civic Center Park PP	Portapotty: increase cleaning to twice/day and refine in response to data.		X	-	\$500
Codornices Park	Permanent facility: increase cleaning by 25% to start and refine with future data.		X	-	\$2,247
Harrison Park	Permanent facility: increase cleaning by 25% to start and refine with future data.		X	-	\$2,247
James Kenney Park	Portapotty: increase cleaning to twice/day and refine in response to data.		X	-	\$250
King School	Portapotty: increase cleaning to twice/day and refine in response to data.		X	-	\$250
Live Oak Park	Permanent facility: increase cleaning by 25% to start and refine with future data.		X	-	\$2,247

A4

Full Proposal Budget: Restrooms

Marina K Dock	Permanent facility: increase cleaning by 25% to start and refine with future data.	X	-	\$2,247
Ohlone Park PP	Portapotty: increase cleaning to twice/day and refine in response to data.	X	-	\$250
Strawberry Creek Park	Permanent facility: increase cleaning by 25% to start and refine with future data.	X	-	\$2,247
Telegraph-Channing Garage	Permanent facility: increase cleaning by 25% to start and refine with future data.	X	-	\$2,247
Tom Bates Field North & South	Portapotty: increase cleaning to twice/day and refine in response to data.	X	-	\$1,750
Willard Park	Permanent facility: increase cleaning by 25% to start and refine with future data.	X	-	\$2,247

Pilot staffing at priority sites		X		\$125,000 - \$325,000
Pilot staffing	Contract an organization(s) to staff the following sites. Refer to the staffing spec sheet on what staffing includes and different staffing models. Staffing is particularly recommended for late night, early morning, and overnight hours. Estimated cost includes staffing costs in addition to coordination and training.	X	N/A	\$200,000 to \$400,000
Cost Savings	Reduction in cleaning and service costs	X		-\$74,824
Pilot staffing sites	Focus hours for staffing			
Telegraph-Channing Garage	7-8am, 5pm-10pm	X		
Willard Park	6pm-6am	X		
Aquatic Park (Dreamland)	5pm-10pm	X		
Marina K Dock	5am-8am, 5pm-8pm	X		
Shorebird Park	6am-8am, 5pm-8pm	X		
Harrison Park	6pm-6am	X		
South Cove	6am-8am, 5pm-8pm	X		

2. Improve Existing Restrooms

Strategies	Details	Infrastructure	Operations	Upfront Cost	Annual Cost
Upgrade existing permanent restrooms: basic upgrades at 8 sites				\$40,000	\$0
Aquatic Park (Dreamland)	Repaint or tile floor Replace door with a sturdier door and more secure lock Replace with an enclosed roof Improve internal and surrounding lighting	X		\$5,000	
Marina K Dock	Repaint or tile floor Replace with improved mirror that is effective and sturdy Replace door with sturdier door and new locks	X		\$5,000	
Cedar Rose Park	Replace with an enclosed roof Install lighting inside and on pathways leading to it Install a permanent sink with potable water and soap Install a hand dryer Install a seat cover dispenser Install a locking door	X		\$5,000	
Codornices Park	Replace with an enclosed roof Install lighting inside and on pathways leading to it Install a permanent sink with potable water and soap Install a hand dryer Install a seat cover dispenser Install a locking door	X		\$5,000	

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Full Proposal Budget: Restrooms

Live Oak Park	Replace with an enclosed roof Install lighting inside and on pathways leading to it Install a permanent sink with potable water and soap Install a hand dryer Install a seat cover dispenser Install a locking door	X	\$5,000
Willard Park	Replace with an enclosed roof Install lighting inside and on pathways leading to it Install a permanent sink with potable water and soap Install a hand dryer Install a seat cover dispenser Replace door with a sturdier door and more secure lock	X	\$5,000
Harrison Park	Replace with improved mirror that is effective and sturdy	X	\$5,000
San Pablo Park	Improve for safety	X	\$5,000
Strawberry Creek Park	Note that this facility has been replaced with T1 funds.	-	-

Upgrade Portapotties		(with rental)	\$147,089	\$227,414	
		(with purchase)	\$405,914	\$212,791	
Replace 3 existing portapotty locations with permanent restrooms					
Cesar Chavez Park	Permanent facility with at least four stalls located along Spinnaker Way with monitors and standard park cleaning. Adjust cleaning based on data and implement staffing if needed.	X	X	\$51,644	\$51,644
Civic Center Park	Open the Civic Center Restrooms (4 stalls) with staffing from 6am to 10pm. Upfront costs account for signage, wayfinding, and monitors. Refine and adjust staffing, cleaning, and hours based on data. Integrate an additional new restroom in the park into the Civic Center Park Upgrade Project (ongoing).	X	X	\$91,770	\$91,770
Tom Bates Field	New permanent restroom integrated into the new facility with at least 7 stalls (conceptual funded by T1 Phase 1)	X	X	In separate T1 Budget	in Parks budget?
Upgrade 6 portapotties with rented semi-permanent restroom trailers					
Option 1: Rental	Upgrading 6 locations with rentals (cost includes door monitors)	X	X	\$3,675	\$84,000
Option 2: Purchase	Purchasing six trailers and maintaining with city staff (with door monitors)	X	X	\$262,500	\$69,377
Details	*Annual costs show the net cost increase from current United Site Services portapotty contract				
	Locations: 2nd & Cedar Streets, Aquatic Park South, Here There Encampment, James Kenney Park, King School, Ohlone Park				
	Process: upgrade existing portapotties with monitors; analyze the data and work with the HOTT team to optimize location. Monitor for at least four months in each location. Consider upgrading to permanent facilities if the use overlaps with long-term permanent users				

3. Install New Restrooms

Strategies	Details	Infrastructure	Operations	Upfront Cost	Annual Cost
Pilot Potential High Need Locations w/ Partner and Semi-Permanent Facilities				\$243,625	
Semi-Permanent Pilot	Rent 3 restroom trailers (2 1-unit and 1 2-unit) with monitors and circulate to 18 locations to assess need (4 months in each location, 2 years total)	X	N/A	\$124,200	N/A Pilot
	OR Purchase 3 new upgraded mobile facilities with data monitors	X	N/A	\$253,288	N/A Pilot
	Locations: 2nd & Jones, 4th Street, John Hinkel Park, Prince & Sacramento, Sacramento & University, San Pablo & Dwight, San Pablo & Heinz, San Pablo & Gilman, Seabreeze, Shattuck & Rose, Shattuck & Adeline, Shattuck & Bancroft, Shattuck & Dwight, Solano Avenue, South Aquatic Park, Telegraph & Ashby, University & Bonita, University & 80				
Partner Facility Pilot	Pilot an incentive program for non-city institutions to open their restrooms publicly: offer 4 months stipends for 17 priority locations and install data monitors and signage	X	N/A	\$119,425	N/A Pilot
	Locations: Alta Bates Downtown, Andronico's Solano, Berkeley Community Resource Center, Berkeley Drop-In Center, Gas Station MLK & University, Gas Station San Pablo, Gas Station West University, MLK Student Union, Pathways, Pete's Coffee, Pete's Coffee 4th St., Safeway N Shattuck, Sports Basement, Starbucks, Trader Joe's, UC Berkeley RSF, UC Berkeley University Hall, UC Extension, Ursula Sherman Village, Whole Foods Gilman, Youth Musical Theater Company				

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Full Proposal Budget: Restrooms

Post-Pilot Implementation	Future: Formalize long-term non-city partnerships with annual stipends and semi-permanent locations based on results from the pilot	X	X	TBD	TBD
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Work with Homeless Service Organizations to Operate 24 Hour Restrooms			\$124,100	\$96,000	
Subsidize upgrades and offer annual stipends to 4 organizations to operate 24 Hour public restrooms	Berkeley Community Resource Center	X	X	\$31,025	\$24,000
	Berkeley Drop-In Center	X	X	\$31,025	\$24,000
	Pathways	X	X	\$31,025	\$24,000
	Ursula Sherman Village	X	X	\$31,025	\$24,000

Install new restrooms

Coordinate restrooms in 6 current or upcoming development projects

			\$0	\$12,911	
Cesar Chavez Park	??	X	X	-	-
Civic Center Park Upgrade	??	X	X	-	-
Tom Bates Field Fieldhouse with Restrooms	T1 Bond Project	X	X	-	-
		X	X	-	-
Telegraph & Channing	TBID paying for upfront costs to install a toilet here. Coordinate with TBID to install data monitors and City signage and wayfinding. The City will need to coordinate with TBID and cover maintenance costs for cleaning and service. Add staffing as needed and consider coordinating with TBID for staffing needs. Open 24-hours to start and refine hours with data.	X	X	\$300,000-	\$12,911
New Housing at People's Park	Work with the project architect to design in a public toilet and collaborate with the nonprofit housing organization that will manage the building's supportive housing to operate a 24-Hour public toilet	X	X	-	-

Install New Restrooms at Four Priority Locations: all restrooms should be installed with monitors and operations (cleaning, staffing, hours) should be adjusted according to use data. The recommendations below are for starting hours and staffing for each site. Notes that staffing is approximated per site, but may be shared over several sites

			\$1,689,560	\$183,768	
Ashby BART	Custom four unit 24-hour restroom with overnight staffing (partial staffing costs assumes staffing is combined with other restrooms in the area)	X	X	\$570,000	\$43,056
Center & Shattuck (Downtown BART Plaza)	Custom four unit 24-hour restroom with overnight staffing (partial staffing costs assumes staffing is combined with other restrooms in the area)	X	X	\$570,000	\$43,056
San Pablo & University	Sidewalk pre-fab 3 unit 24-hour restroom with overnight staffing	X	X	\$377,170	\$62,322
Telegraph & Haste	1 ADA unit sidewalk restroom with overnight staffing (partial staffing costs assumes staffing is combined with other restrooms in the area)	X	X	\$172,390	\$35,334
Install new restrooms at 3 additional sites			\$554,780	\$63,730	
Ohlone Greenway	Pre-fab park single ADA unit restroom open during daylight hours	X	X	\$140,000	\$12,911
Ohlone Park	Pre-fab park 24 hour single ADA unit restroom	X	X	\$140,000	\$12,911
63rd & Adeline	Pre-fab sidewalk 2 unit restroom open 24 hours with overnight staffing (partial staffing costs assumes staffing is combined with the Ashby restroom)	X	X	\$274,780	\$37,908
Use data from the pilot and ongoing data collection to inform future permanent facilities		X	X	TBD	TBD

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Full Proposal Budget: Showers

SHOWER BUDGET TABLE

Strategies	Details	Upfront Cost	Annual Cost
1. Support, upgrade, and add showers at homeless service centers	Berkeley Community Resource Center: use City funds to subsidize upgrading existing shower facilities to address maintenance issues, increase durability, and size of shower facilities. Note that these upgrades will likely reduce long-term maintenance and service costs.	\$100,000	\$0
	Offer upgrades subsidizes to other service centers and/or shelters similar to the upgrade allocated to the Berkeley Drop-In Center in November, 2019 (funds assume two additional centers; operational funds for service needs, materials, and staffing)	\$200,000	\$20,000
Sub-total		\$300,000	\$20,000
2. Improve Existing Facilities	Improve Communications	-	\$0
	Integrate showers into the restroom communications & branding strategy	-	N/A included in Restroom Costs
	Continue to collect data on shower usage	-	-
	Extend hours at public shower program sites	-	\$270,100
	Willard Administration Center: double hours to include early morning weekday times for increased accessibility	-	\$135,050
	West Campus Swim Center: double hours to include weekday evening times for increased accessibility	-	\$135,050
	Expand shower program to remaining public pools	-	\$270,100
	Continue West Campus Swim Center as a shower program site after COVID-19 Shelter in Place ends	-	\$135,050
	Add King Pool	-	\$135,050
	Retrofit existing facilities with single stall showers	\$300,000	
Adapt shower rooms to include several single stall showers	\$300,000	-	
Sub-total		\$300,000	\$540,200
3. Staff and Open Closed Facilities	Staff and open closed facilities	\$200,000	\$270,100
	MLK Junior Youth Services	\$100,000	\$135,050
	James Kenney Community Center	\$100,000	\$135,050
Sub-total		\$100,000	\$1,080,400
*note that \$135,050 annual operating costs for a shower program comes from current annual operating costs for the Willard Shower Program			
4. Subsidize gym membership	Subsidize YMCA membership in partnership with homeless service organizations: cost assumes subsidies for 300 people, assumes \$28/person (financial assistance rate)	-	\$8,400
Sub-total		\$0	\$8,400
5. Mobile Shower Trailers	Continue the City's contract with Dignity on Wheels past COVID-19 related Shelter in Place	-	??
	Purchase and operate (or contract a non-profit to operate) mobile shower trailers that circulate location based on need in collaboration with Homeless Services. Equipment and maintenance costs based off of LavaMae's model (assume 2 full-time employees in annual costs); costs per trailer.	\$109,000	\$161,368
Sub-total		\$0	\$161,368
Total		\$700,000	\$1,810,368

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Full Proposal Budget: Laundry

LAUNDRY BUDGET TABLE

Strategies	Details	Upfront Cost	Annual Cost
1. Upgrade homeless service centers	Subsidize construction and installation of laundry machines in existing homeless service centers. Costs include upfront construction at two centers with estimated increase in associated annual costs: utilities, repairs, and supplies (assumes existing staffing at centers can include this added operation; 70 loads per week)	\$200,000	\$10,000
2. Partner with laundromats	Free open hours or subsidizing laundromat use in partnership with homeless service organizations (to support with outreach and distribution). (cost assumes \$5/wash and dry per person per week for 500 unhoused individuals plus detergent cost)	-	\$133,000
3. Mobile Laundry	Continue Dignity on Wheels contract after Shelter in Place (costs reflect current contract) Purchase and operate (or contract a non-profit to operate) mobile laundry trailers that circulate location based on need in collaboration with Homeless Services. Equipment and maintenance costs based off of LavaMae's model (assume 2 full-time employees in annual costs); costs per trailer.	- \$218,000	?? \$161,368
Total		\$418,000	\$304,368

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Measure T1 Recommendations

The following budget outlines our recommendations for restroom upgrades with the T1 Bond process. For most pressing sanitation needs, these five recommendations will comprehensively launch our restroom proposal. One of these recommendations is for construction of new facilities and the other four recommendations are to improve the infrastructure and access to existing facilities and to strategically inform priority locations for new facilities. Together these recommendations can have a greater impact than simply constructing new facilities.

We strongly recommend that associated annual operations and maintenance costs be secured and allocated, within the General Fund or other ongoing funding sources, in conjunction with the T1 decisions to fund the one-time infrastructure costs. Without sufficient and secured maintenance funding, new infrastructure will fail to make any significant difference on the access to public sanitation in Berkeley and will risk future costs and public health crises.

T1 Bond Recommendations Summary Budget

Recommendations Summary	Details	T1 Cost (Infrastructure)	Associated Annual Cost (\$/YR)
(Project Coordinator)	Coordinates all project parts, analyzes data, maintains communications	Included	\$50,000
1. Data Monitors	Install door counters on 20 priority pilot sites connected to a central database	\$91,500	\$5,000
2. Physical Signage & Wayfinding	Improve signage and wayfinding for 11 priority sites	\$10,150	-
3. Physical Upgrades	Complete basic upgrades at 8 sites	\$40,000	-
4. Pilot and Assess Restroom Locations	Use partner facilities and semi-permanent restroom trailers with data monitors to assess demand at potential restroom locations	\$124,200	-
5. Install New Facilities	Install 4 new facilities at priority locations	\$1,689,560	\$268,025
Total		\$1,955,410	\$323,025

T1 Bond Recommendations Detailed Budget

Recommendations Detail	Details	T1 Cost (Infrastructure)	Associated Annual Cost (\$/YR)
Project Coordinator	Coordinates all project parts, analyzes data, coordinates a data-responsive operations strategy, maintains communications	Included	\$50,000

1. Data monitors		\$91,500	\$5,000
Data monitors	Install data monitors at the following sites: Strawberry Creek Park, Cedar Rose Park, Codornices Park, Live Oak Park, Telegraph-Channing Garage, Marina K Dock, Civic Center Building, Ohlone Park PP, Marina Launch Ramp, Shorebird Park, South Cove, Aquatic Park (Dreamland), Willard Park, Harrison Park, 2nd & Cedar Streets, Civic Center Park portapotty, Aquatic Park South, James Kenney Park, King School, Cesar Chavez Park portapotty	\$16,500	-
	See the data monitor spec sheet for details on which monitors to install		
Central Database	Purchase and set-up a central database for restroom monitors that has the capacity to add the remaining restrooms in the future	\$75,000	\$5,000

2. Physical Signage & Wayfinding		\$10,150	\$0
Site 1	Center Street Garage	\$800	-
Site 2	Marina K Dock	\$800	-
Site 3	Shorebird Park	\$800	-
Site 4	South Cove	\$1,250	-
Site 5	Marina Launch Ramp	\$1,100	-

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T1 Recommendations

Site 6	Grove Park	\$800	-
Site 7	Customer Service Center	\$1,400	-
Site 8	King School Swim Center	\$800	-
Site 9	Harrison Park	\$800	-
Site 10	Berkeley Transfer Center	\$800	-
Site 11	Berkeley Recycling Center	\$800	-

3. Physical Upgrades		Complete the following upgrades at these 8 sites	\$40,000	\$0
Cedar Rose Park	Replace existing roof with an enclosed roof Install: a hand dryer, seat cover dispense, locking door, lighting inside and on pathways, permanent sink with potable water and soap		\$5,000	-
Codornices Park	Replace existing roof with an enclosed roof Install: a hand dryer, seat cover dispense, locking door, lighting inside and on pathways, permanent sink with potable water and soap		\$5,000	-
Live Oak Park	Replace existing roof with an enclosed roof Install: a hand dryer, seat cover dispense, locking door, lighting inside and on pathways, permanent sink with potable water and soap		\$5,000	-
Marina K Dock	Repaint or tile floor Replace with improved mirror that is effective and sturdy Replace door with sturdier door and new locks		\$5,000	-
Aquatic Park (Dreamland)	Repaint or tile floor Replace door with a sturdier door and more secure lock Replace with an enclosed roof Improve internal and surrounding lighting		\$5,000	-
Harrison Park	Replace with improved mirror that is effective and sturdy		\$5,000	-
Willard Park	Replace existing roof with an enclosed roof Install: a hand dryer, seat cover dispense, lighting inside and on pathways, permanent sink with potable water and soap Replace door with a sturdier door and more secure lock		\$5,000	-
San Pablo Park	Improve lighting for safety		\$5,000	-

4. Pilot and Assess Restroom Locations			\$243,625	N/A Pilot
Semi-Permanent Trailer Locations	Rent 2 single ADA and 1 double unit ADDA semi-permanent facilities and circulate to 18 locations (2 years total); 4 months per location. Install data monitors and analyze the resulting data to determine which locations to prioritize. Throughout the pilot use data to optimize cleaning and hours and add staffing to any sites where necessary.		\$124,200	N/A Pilot
	Locations: 2nd & Jones, 4th Street, John Hinkel Park, Prince & Sacramento, Sacramento & University, San Pablo & Dwight, San Pablo & Heinz, San Pablo & Gilman, Seabreeze, Shattuck & Rose, Shattuck & Adeline, Shattuck & Bancroft, Shattuck & Dwight, Solano Avenue, South Aquatic Park, Telegraph & Ashby, University & Bonita, University & 80			
Partner Locations	Pilot an incentive program for non-city institutions to open their restrooms publicly: offer 4 months stipends for 20 priority locations and install data monitors and signage		\$119,425	N/A Pilot
	Locations: Alta Bates Downtown, Andronico's Solano, Gas Station MLK & University, Gas Station San Pablo & Camelia, Gas Station San Pablo & Dwight, Gas Station University & 6th, MLK Student Union, Pete's Coffee Downtown, Pete's Coffee 4th Street, Safeway Shattuck & Rose, Seabreeze Cafe and Deli, Sports Basement, Starbucks Downtown, Trader Joe's, UC Berkeley RSF, UC Berkeley University Hall, UC Extension, Whole Foods Ashby, Whole Foods Gilman, Youth Musical Theater Company			

5. Install New Facilities (note: list to be re-sorted based on quantified volume of need)			\$1,689,560	\$268,025
T1 Project coordinator to use this report to inform and coordinate with restroom under design or construction in the following projects			\$0	\$73,555
Cesar Chavez Park	Permanent facility with at least four stalls located along Spinnaker Way with monitors and standard park cleaning. Adjust cleaning based on data and implement staffing if needed.	N/A project in process?		\$51,644

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T1 Recommendations

Civic Center Park	Integrate an additional new restroom (at least one stall) in the park into the Civic Center Park Upgrade Project (ongoing).	Integrate in current park update	\$9,000
Tom Bates Field	New permanent restroom integrated into the new facility with at least 7 stalls (upfront funded through a separate T1 Bond Project)	In separate T1 Budget	in Parks budget?
		-	-
Telegraph & Channing	TBID paying for upfront costs to install a toilet here. Coordinate with TBID to install data monitors and City signage and wayfinding. The City will need to coordinate with TBID and cover maintenance costs for cleaning and service. Add staffing as needed and consider coordinating with TBID for staffing needs. Open 24-hours to start and refine hours with data.	\$172,000	\$12,911
Future of People's Park <i>(Note: not City Property)</i>	If the park is developed work with the architect to design in a public toilet and collaborate with the nonprofit housing organization assigned to manage the building's supportive housing to operate a 24-Hour public toilet. If the park remains, work with UC Berkeley to effectively manage a 24-hour restroom	-	-
Construct New Restrooms Facilities*		\$1,689,560	\$194,470
Ashby BART	Custom four unit 24-hour restroom with overnight staffing (partial staffing costs assumes staffing is combined with other restrooms in the area)	\$570,000	\$45,349
Center & Shattuck (Downtown BART Plaza)	Custom four unit 24-hour restroom with overnight staffing (partial staffing costs assumes staffing is combined with other restrooms in the area)	\$570,000	\$45,349
San Pablo & University	Sidewalk pre-fab 3 unit 24-hour restroom with overnight staffing	\$377,170	\$66,144
Telegraph & Haste Garage?	1 ADA unit sidewalk restroom with overnight staffing (partial staffing costs assumes staffing is combined with other restrooms in the area)	\$172,390	\$37,627

*Secure annual operations funding before installing new facilities

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Non-T1 Budget Recommendations

The following budget outlines remaining costs and projects not included in the T1 Recommendations. This includes one-time infrastructure improvement costs and ongoing annual recurring maintenance and operations costs.

We strongly recommend that maintenance and operations costs associated with any new restrooms be secured and allocated before infrastructure funds are allocated and infrastructure constructed.

Potential funding sources for these remaining costs include:

- City General Fund
- State funding for homeless services and support (ie. HEAP)
- Parks Tax
- Integrate new City restrooms into future parks development, streetscape, sidewalk improvement, and other City led infrastructure projects
- Integrate new Partner restroom construction into future new private developments

Other revenue strategies include a **pay-per-use** model and advertising. We strongly discourage a pay-per-use model because sanitation is a basic right and not a commodity. Some of the highest need users of public sanitation are homeless folks without the financial ability to pay for restroom use. Implementing a pay per use model would exclude this community and fail to improve public health and safety.

Also note that Public Works is currently spending XX dollars per year on powerwashing and responding to 311 calls for public urination and defecation. The Downtown Business Association and Telegraph Business Improvement District are also spending significant funds annually on powerwashing store fronts and sidewalks in their districts. If implemented successfully, this proposal will reduce those existing costs incurred by the City; and will also significantly reduce the risk of future public health outbreaks related to insufficient access to handwashing, toilets, and clean drinking water. This is not only a proactive financial choice, but also a protective public health choice.

Additional Non-T1 Proposed Budget

Recommendations Summary	Details	Upfront Infrastructure Cost	Annual Cost (\$/YR)
1. Data Monitoring	Install monitors at all remaining facilities and cover ongoing operation costs of data systems	\$37,125	-
2. Communications & Branding	Signage and wayfinding for remaining restrooms, communications strategy, and web-platform	\$86,100	\$10,000
3. Data Driven Operations	Adjust hours, cleaning frequency, and pilot staffing at existing facilities	\$0	\$150,000 - \$350,000
4. Upgrading Portapotties	Upgrade portapotties to permanent facilities and improved semi-permanent facilities	\$4,700	\$181,885
5. Work with Homeless Service Organizations to Operate 24 Hour Restrooms	Work with 5 homeless service centers to consider operating a public 24-hour restroom; provide upfront financial support for upgrades if needed	\$155,125	\$120,000
6. Install New Restrooms*	Install three new restrooms at identified locations of need	\$554,780	\$66,023
7. Install Additional New Restrooms	Install additional future restrooms based on data and the restroom pilot	TBD	TBD
Total		\$837,830	\$602,908

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Non-T1 Budget Recommendations

Detailed Budget

Recommendations Detail	Details	Upfront Infrastructure Cost	Annual Cost (\$/YR)
1. Data monitors		\$37,125	\$0
Data monitor installed at the remaining existing facilities and connected into the central database	Install data monitors at the following sites: Ann Chandler Public Health Center, Berkeley Recycling Center, Berkeley Rose Garden, Berkeley Transfer Center, City Recreation Administrative Office, Customer Service Center, Frances Albrier Community Center, Glendale-La Loma Park, Grove Park, James Kenney Community Center, King School Swim Center, Live Oak, MLK Junior Youth Services, North Berkeley Senior Center, San Pablo Park, South Berkeley Senior Center, Tom Bates Field North & South, Veterans Center, Virginia-McGee Totland, West Campus Swim Center, Willard Swim Center.	\$37,125	-
	See the data monitor guidelines for details on which monitors to install; connect into the central database; public restroom coordinator manages and responds to data collected	-	-

2. Communications & Branding		\$86,100	\$10,000
Install signage and wayfinding at the following remaining existing restroom facilities. See the signage and wayfinding guidelines for details on what to include.	Sites for door signage: 2nd & Cedar Streets, Ann Chandler Public Health Center, Aquatic Park (Dreamland), Aquatic Park South, Berkeley Rose Garden, Cedar Rose Park, Cesar Chavez Park PP, City Recreation Administrative Office, Civic Center Building, Civic Center Park PP, Claremont Library, Codornices Park, Frances Albrier Community Center, Glendale-La Loma Park, Here There Encampment, James Kenney Community Center, James Kenney Park, King School, Live Oak, Live Oak Park, Main Branch, MLK Junior Youth Services, North Berkeley Library, North Berkeley Senior Center, Ohlone Park PP, San Pablo Park, South Berkeley Library, South Berkeley Senior Center, Strawberry Creek Park, Telegraph-Channing Garage, Tom Bates Field North & South, Veterans Center, Virginia-McGee Totland, West Berkeley Library, West Campus Swim Center, Willard Park, Willard Swim Center.	\$17,100	-
	Sites for wayfinding: Ann Chandler Public Health Center, Aquatic Park (Dreamland), Berkeley Rose Garden, Cedar Rose Park, City Recreation Administrative Office, Civic Center Building, Claremont Library, Codornices Park, Frances Albrier Community Center, Glendale-La Loma Park, James Kenney Community Center, Live Oak, Live Oak Park, Main Branch, MLK Junior Youth Services, North Berkeley Library, North Berkeley Senior Center, San Pablo Park, South Berkeley Library, South Berkeley Senior Center, Strawberry Creek Park, Telegraph-Channing Garage, Veterans Center, Virginia-McGee Totland, West Berkeley Library, West Campus Swim Center, Willard Park, Willard Swim Center.	\$14,000	-
Web platform	Develop a comprehensive Berkeley public restroom website with centralized and updated information.	\$35,000	\$5,000
Communications plan	Develop and implement a comprehensive social media and communications plan on public restrooms.	\$20,000	\$5,000

3. Data Driven Operations		\$0	\$150,000 - \$350,000
Extend hours	Hours extension for these priority sites: assumes no cost increase. Future hours to be refined based on data.	\$0	\$0
Aquatic Park (Dreamland)	to 10pm	-	-
Grove Park	to 10pm	-	-
Harrison Park	Overnight	-	-
San Pablo Park	to 10pm	-	-
South Cove	To 10pm	-	-
Willard Park	Overnight	-	-

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Non-T1 Budget Recommendations

Increased Cleaning <i>(editor's note: re-sort this list by type of restroom)</i>	Increased cleaning at the following sites. Cost estimates assumed 25% increase. Future cleaning should be adjusted based on data. For portapotties where we recommend that they be replaced with permanent facilities, these cleaning recommendations are for the short term until construction of new facilities.	\$0	\$22,976
2nd & Cedar Streets	Portapotty: increase cleaning to twice/day and refine in response to data.	-	\$500
Aquatic Park South	Portapotty: increase cleaning to twice/day and refine in response to data.	-	\$250
Cedar Rose Park	Permanent facility: increase cleaning by 25% to start and refine with future data.	-	\$2,247
Cesar Chavez Park PP	Portapotty: increase cleaning to twice/day and refine in response to data.	-	\$1,250
Civic Center Park PP	Portapotty: increase cleaning to twice/day and refine in response to data.	-	\$500
Codornices Park	Permanent facility: increase cleaning by 25% to start and refine with future data.	-	\$2,247
Harrison Park	Permanent facility: increase cleaning by 25% to start and refine with future data.	-	\$2,247
James Kenney Park	Portapotty: increase cleaning to twice/day and refine in response to data.	-	\$250
King School	Portapotty: increase cleaning to twice/day and refine in response to data.	-	\$250
Live Oak Park	Permanent facility: increase cleaning by 25% to start and refine with future data.	-	\$2,247
Marina K Dock	Permanent facility: increase cleaning by 25% to start and refine with future data.	-	\$2,247
Ohlone Park PP	Portapotty: increase cleaning to twice/day and refine in response to data.	-	\$250
Strawberry Creek Park	Permanent facility: increase cleaning by 25% to start and refine with future data.	-	\$2,247
Telegraph-Channing Garage	Permanent facility: increase cleaning by 25% to start and refine with future data.	-	\$2,247
Tom Bates Field North & South	Portapotty: increase cleaning to twice/day and refine in response to data.	-	\$1,750
Willard Park	Permanent facility: increase cleaning by 25% to start and refine with future data.	-	\$2,247
Pilot staffing at priority sites			\$125,000 - \$325,000
Pilot staffing	Contract an organization(s) to establish and coordinate staffing at the following sites. Refer to the staffing spec sheet on what staffing includes and different staffing models. Staffing should be informed and optimized with data to determine best type(s) of staffing and hours that staffing is needed for each facility. Staffing is particularly recommended for late night, early morning, and overnight hours. Estimated cost includes staffing costs in addition to coordination and training.	N/A	\$200,000 to \$400,000
Cost Savings	Reduction in cleaning and service costs (staffing role includes cleaning and we assume that service costs will reduce by half with staffing)	N/A	-\$74,824
Pilot staffing sites	Focus hours for staffing		
Telegraph-Channing Garage	7-8am, 5pm-10pm		
Willard Park	6pm-6am		
Aquatic Park (Dreamland)	5pm-10pm		
Marina K Dock	5am-8am, 5pm-8pm		
Shorebird Park	6am-8am, 5pm-8pm		
Harrison Park	6pm-6am		
South Cove	6am-8am, 5pm-8pm		

A4

Non-T1 Budget Recommendations

4. Upgrading Portapotties		(with rental)	\$4,700	\$181,885
		(with purchase)	\$263,525	\$167,262
Replace portapotties by opening closed existing facilities				
Civic Center Park	Open the Civic Center Restrooms (4 stalls) with staffing from 6am to 10pm. Upfront costs account for signage, wayfinding, and monitors. Refine and adjust staffing, cleaning, and hours based on data. Integrate an additional new restroom in the park into the Civic Center Park Upgrade Project (ongoing).		\$1,025	\$97,885
Upgrade 6 portapotties with rented semi-permanent restroom trailers				
Option 1: Rental	Upgrading 6 locations with rentals (cost includes door monitors)		\$3,675	\$84,000
Option 2: Purchase	Purchasing six trailers and maintaining with city staff (with door monitors)		\$262,500	\$69,377
Details	*Annual costs show the cost increase from current United Site Services portapotty contract			
	Locations: 2nd & Cedar Streets, Aquatic Park South, Here There Encampment, James Kenney Park, King School, Ohlone Park			
	Process: upgrade existing portapotties with monitors; analyze the data and work with the HOTT team to optimize location. Monitor for at least four months in each location. Consider upgrading to permanent facilities if the use overlaps with long-term permanent users			

5. Work with Homeless Service Organizations to Operate 24 Hour Restrooms			\$155,125	\$120,000
Subsidize upgrades and offer annual stipends to 4 organizations to operate 24 Hour public restrooms	Berkeley Community Resource Center		\$31,025	\$24,000
	Berkeley Drop-In Center		\$31,025	\$24,000
	Pathways		\$31,025	\$24,000
	Berkeley Women's Drop-In Center		\$31,025	\$24,000
	Ursula Sherman Village		\$31,025	\$24,000

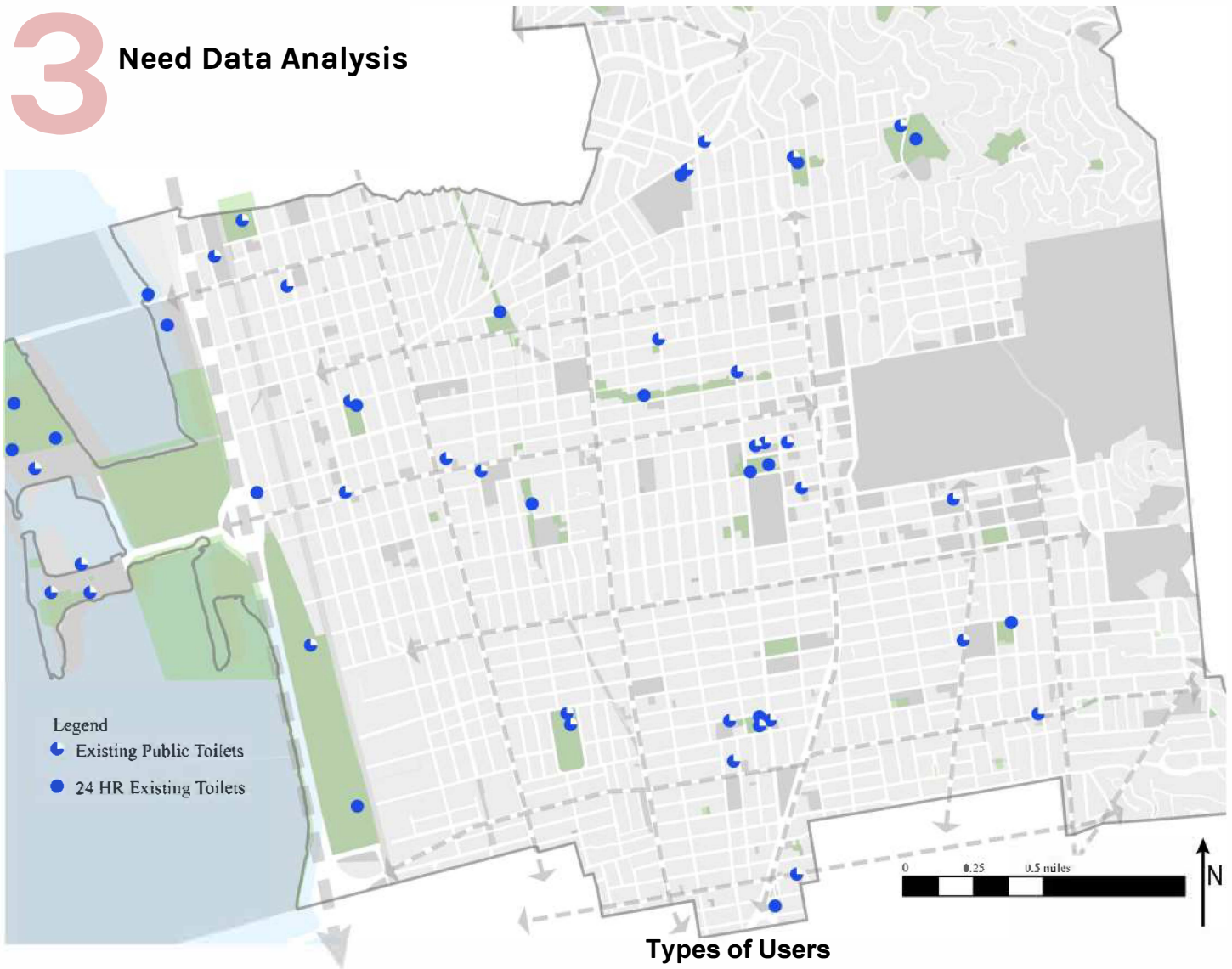
6. Install New Restrooms*			\$554,780	\$66,023
Ohlone Greenway	Pre-fab park single ADA unit restroom open during daylight hours		\$140,000	\$12,911
Ohlone Park	Pre-fab park 24 hour single ADA unit restroom		\$140,000	\$12,911
63rd & Adeline	Pre-fab sidewalk 2 unit restroom open 24 hours with overnight staffing (partial staffing costs assumes staffing is combined with the Ashby restroom)		\$274,780	\$40,201

*Secure annual operations funding before installing new facilities

7. Install Additional New Restrooms			TBD	TBD
Use data from the pilot and ongoing data collection to inform future permanent facilities			TBD	TBD

3

Need Data Analysis



We collected spatial datasets from various sources for each of our four focus populations. This data gives us information on the location of need throughout the City of Berkeley and the locations of existing restroom facilities. The following pages show maps of these datasets individually, followed by maps that overlay the needs on top of each in order to show the concentration of need throughout the City.

Each map includes existing toilets in dark blue. Full circles indicate existing toilets with 24-hour access and partial circles toilets with daytime access only. Each map compares access with the existing toilets and shows lighter pink halos for locations with need without nearby access. Nearby is defined as within 1/8 mile for homeless and 1/4 mile for all other need.

General:

- 311 calls for open defecation & urination
- Business district hotspots

Unhoused:

- Homeless Encampment Hotspots
- Homeless Service Locations

Workers:

- Bus Driver Layovers & Taxi Waiting
- Farmers Market

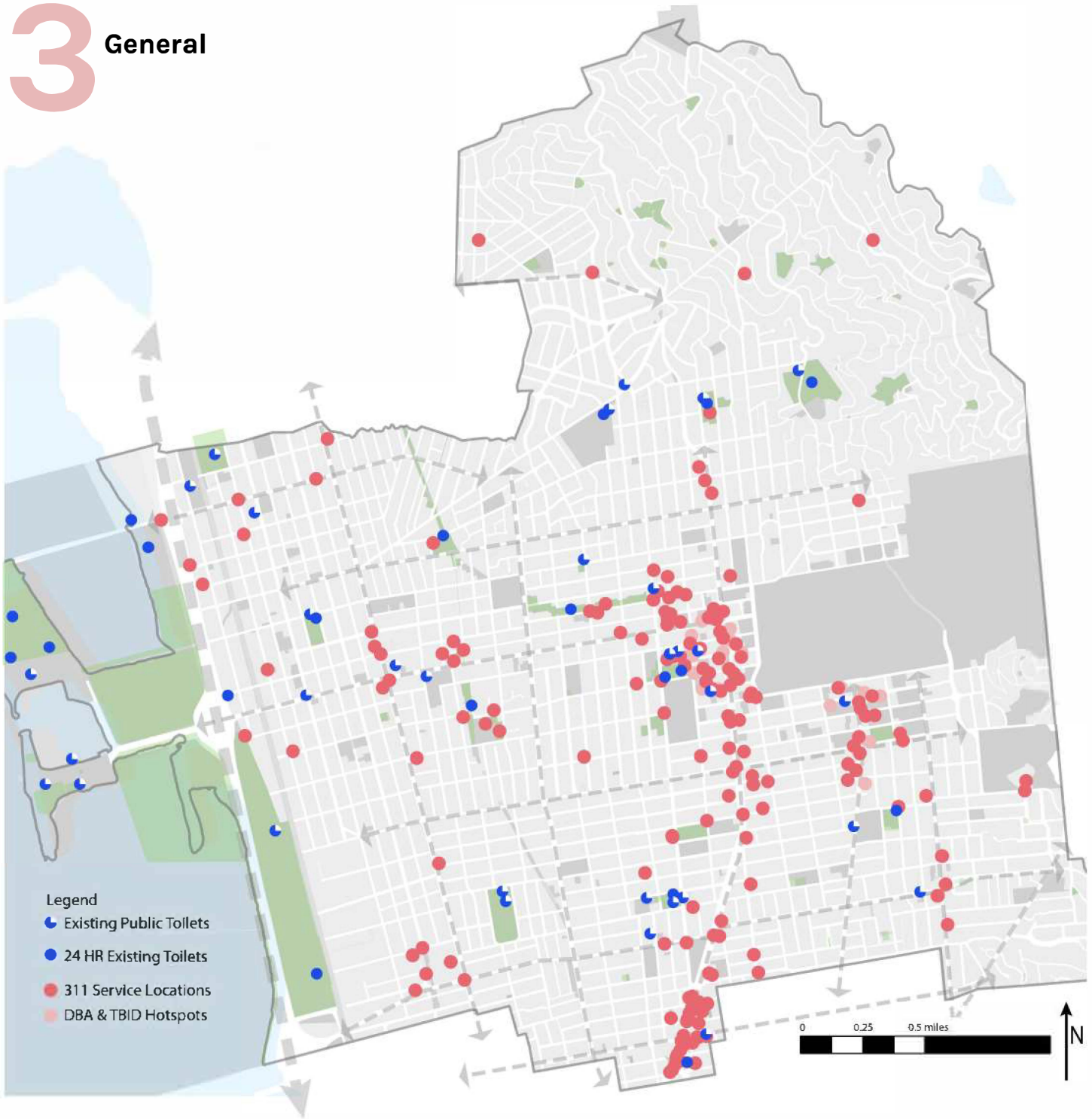
Transit:

- Pedestrian counts
- BART: Average daily weekday ridership
- Bus Stops: with over 500 people/day

Public:

- Park locations
- Commercial zones

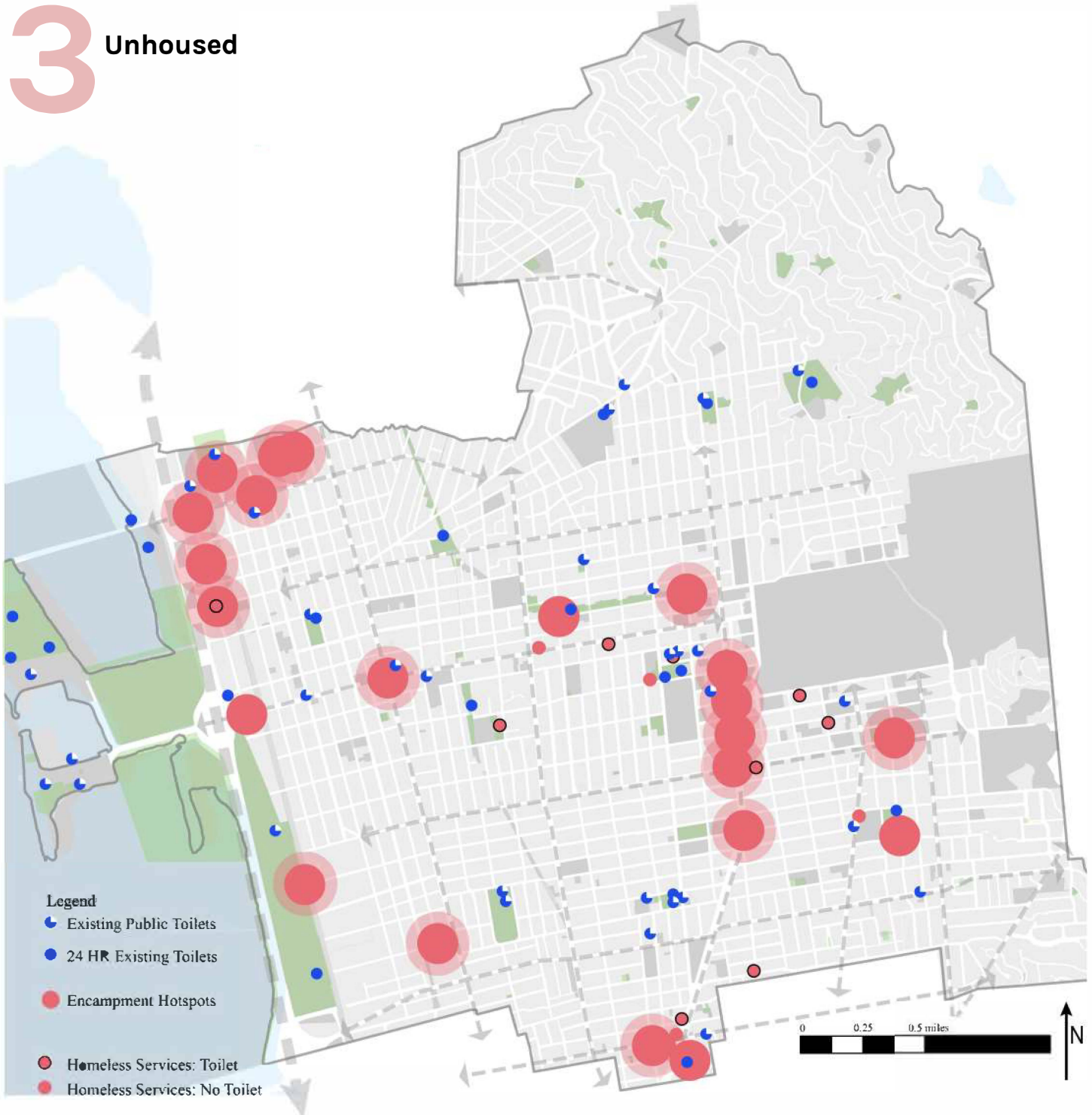
3 General



Data: This map shows locations where people called 311 for open defecation or urination from 2016 to 2019 in dark red. The light pink dots are open defecation and urination hotspots noted by business districts.

Conclusions: This map shows that existing toilets do not fully meet current needs. This may be due to lack of open hours, accessibility, cleanliness, visibility, security, etc.

3 Unhoused

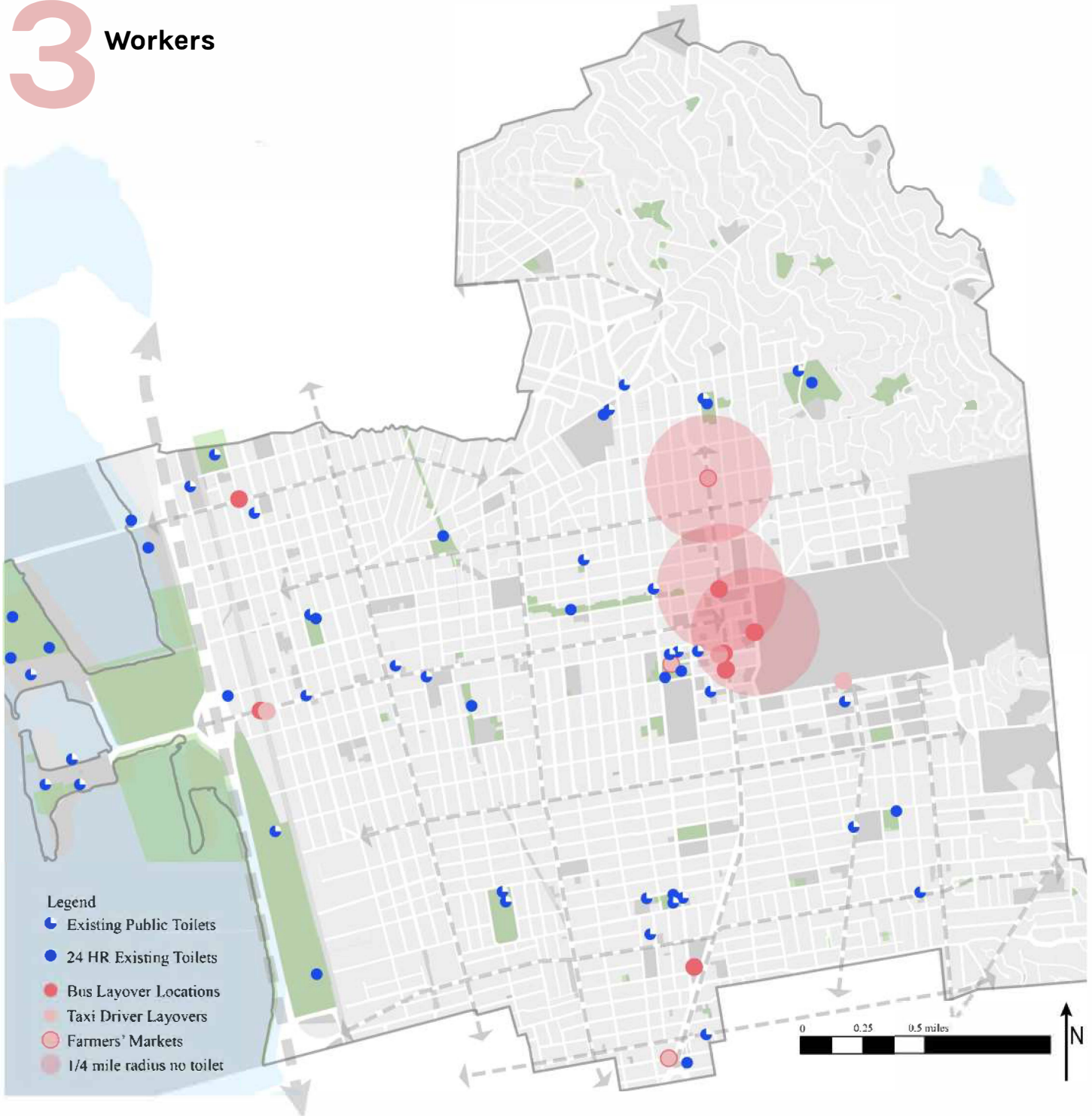


Data: Homeless encampment hotspots (large red circles): locations where there have been homeless encampments in the last three years (data is from the City's Homeless Team). The lighter halo is an 1/8 mile radius around hotspots that don't have a 24 hour toilet within an 1/8 mile. Homeless service centers are shown with black circles. Circles with a black border indicate centers that allow toilet access; circles without a border indicate

centers that do not allow access.

Conclusions: Very few hotspots are near an existing 24 hour public toilet. Some are near toilets with daytime access and some are not within close proximity to any toilets. Most service centers offer toilet access, but not all.

3 Workers

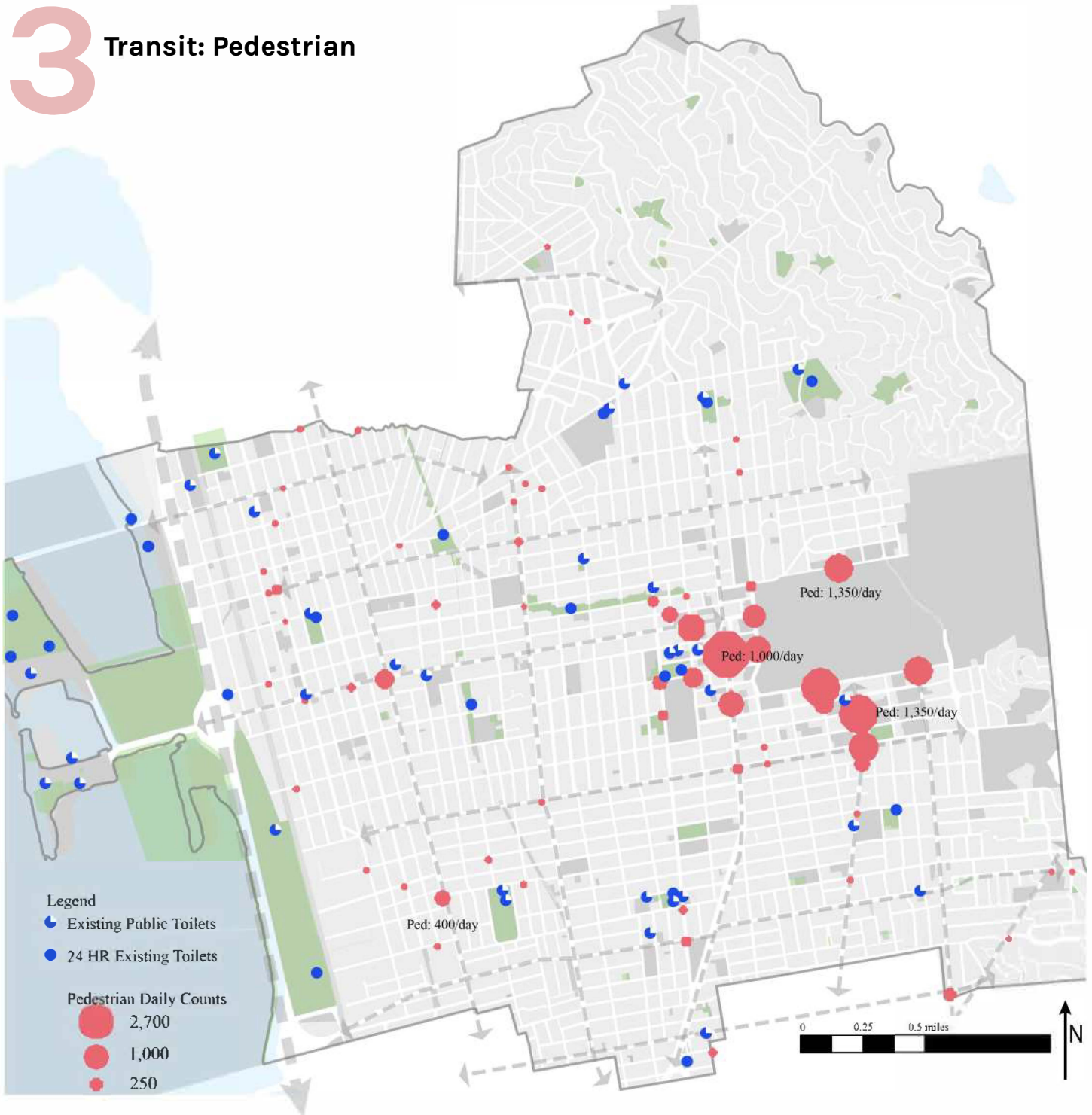


Data: This map shows location of need for workers who do not have access on the job and work or congregate in one location. This includes: taxi driver waiting areas, bus driver layovers (one driver switches to another), and farmers market locations. Other workers with need (delivery drivers, rideshare drivers, etc.) are considered but don't congregate in shared locations. Light pink halos show a 1/4 mile radius around need that do not have a

nearby public toilet.

Conclusions: Most worker locations are near public toilets with daytime access, except for a few locations in North Berkeley and the eastern part of downtown Berkeley.

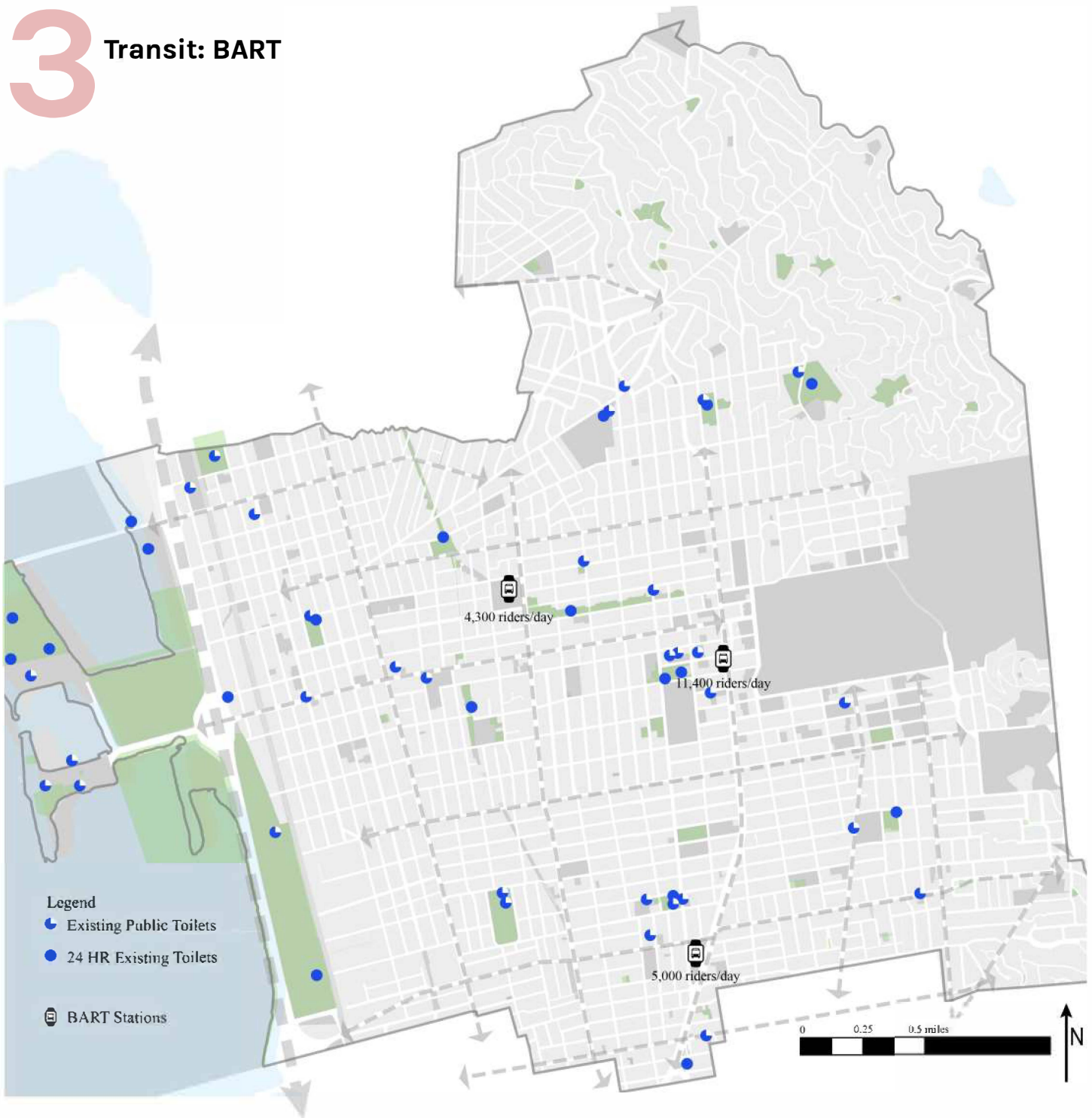
3 Transit: Pedestrian



Data: Pedestrian count data from the City of Berkeley Pedestrian Masterplan. This shows density of pedestrian movement in different parts of the City.

Conclusions: Pedestrian activity is large concentrated around UC Berkeley's campus, the northern Telegraph corridor, and downtown, with additional, smaller activity spread out along commercial and transit zones in other areas of Berkeley.

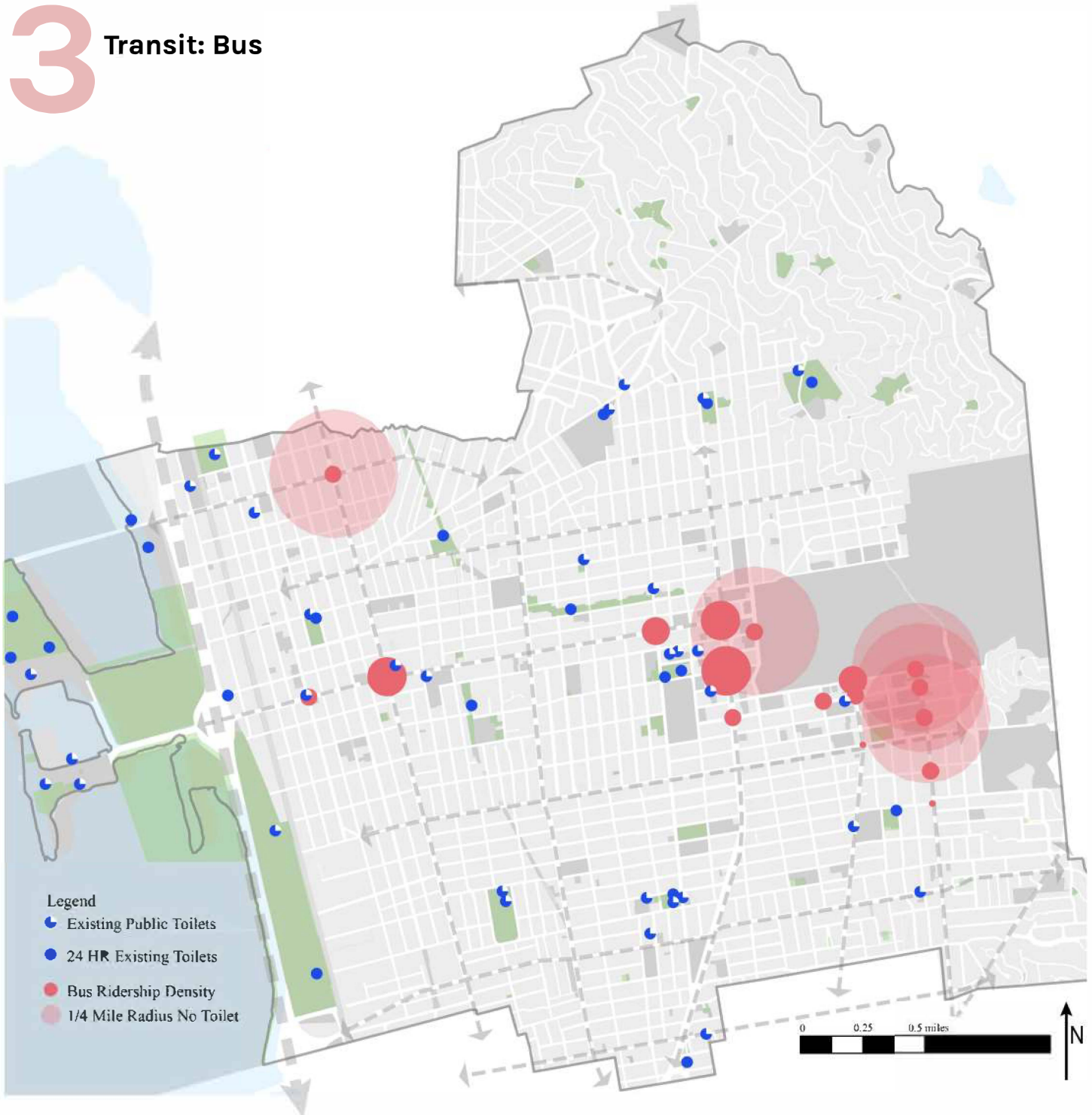
3 Transit: BART



Data: There are three BART stations within the City: Ashby, Downtown, and North Berkeley. Ridership shown is average daily weekday ridership data from BART. There is no toilet access in the Downtown Berkeley station and reduced access in the Ashby and North Berkeley stations.

Conclusions: The BART stations are locations of high-volume transit with variable toilet access. Public access outside of the stations is either not closeby despite BART running from early morning to late night.

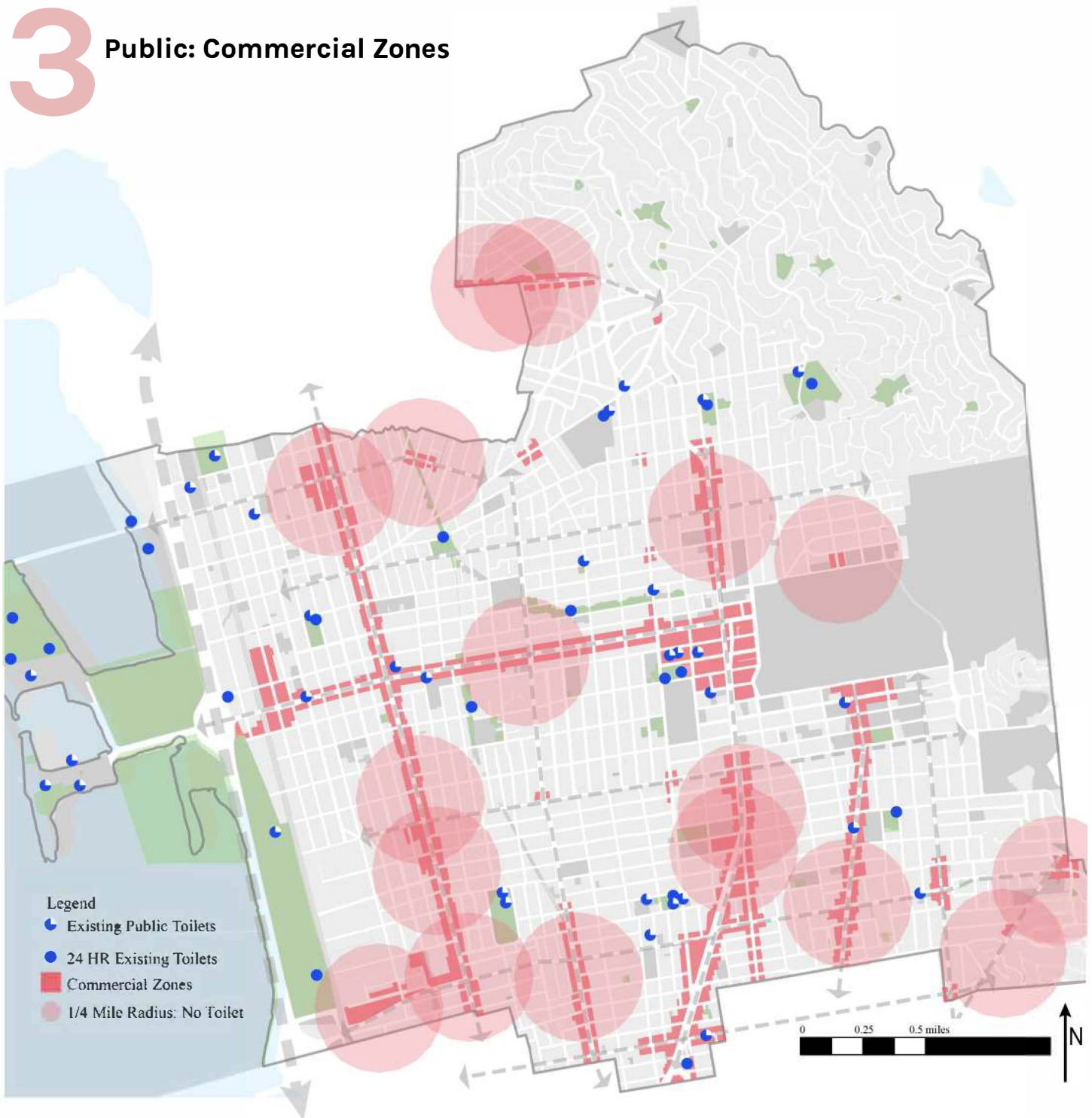
3 Transit: Bus



Data: There are 21 AC Transit bus lines that operate in Berkeley. This map shows bus ridership density (riders getting on and off at a given stop) in dark red for stops with more than 500 riders per average weekday. Circles are proportionate to ridership, with larger circles for high ridership. Ridership varies from 500 to 4,200/day. The 1/4 mile radius halos show high-density stops without public toilet access.

Conclusions: Bus transit is concentrated in downtown, south of UC Berkeley's campus, and at the University and San Pablo intersection. Many of these locations do not have nearby public toilet access. Bus transit south of UC Berkeley's campus is likely driven by student and the campus community.

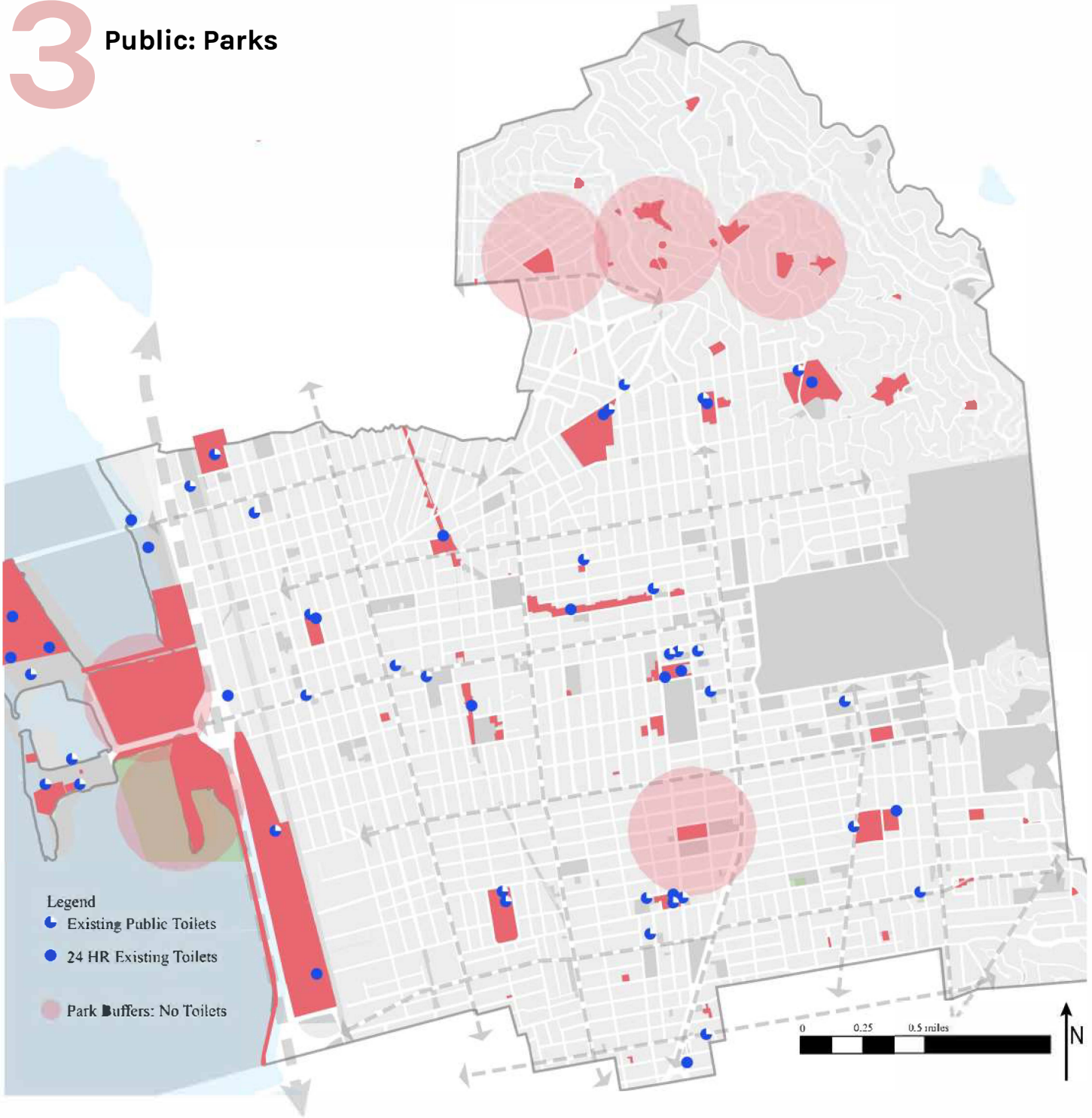
3 Public: Commercial Zones



Data: This map shows all areas of the city that are zoned commercial and 1/4 mile radius halos in zones without public toilet access. Note that these commercial zones include restaurants, cafes, shopping, and other commercial uses.

Conclusions: The commercial zones overlap with high transit corridors. Many of these zones do not have public access to toilets within a 1/4 mile zone. There are several commercial enterprises, including supermarkets and cafes that may be willing to operate public toilets within their buildings.

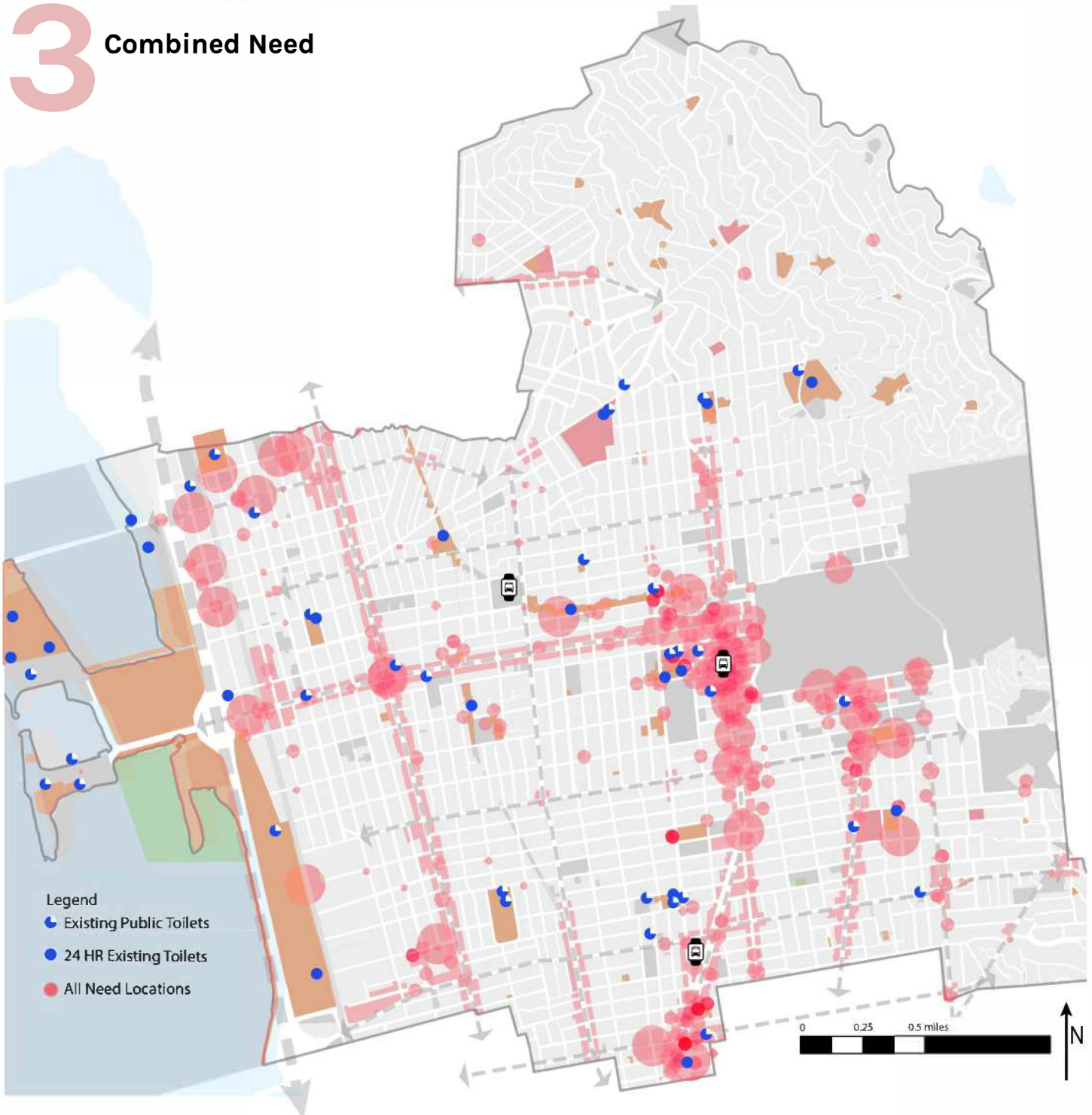
3 Public: Parks



Data: All parks within the City of Berkeley, including the McLaughlin Eastshore State Park, owned by East Bay Regional Parks and public parks operated by Berkeley Unified School District.

Conclusions: Most of the existing public toilets in Berkeley are operated by the Parks, Recreation, Waterfront Dept. There are few parks without public toilets and the ones identified here are either not owned by the City (McLaughlin and Moellering Field owned by BUSD) or smaller parks in the north part of Berkeley. Most of the park toilets are daytime access only.

3 Combined Need

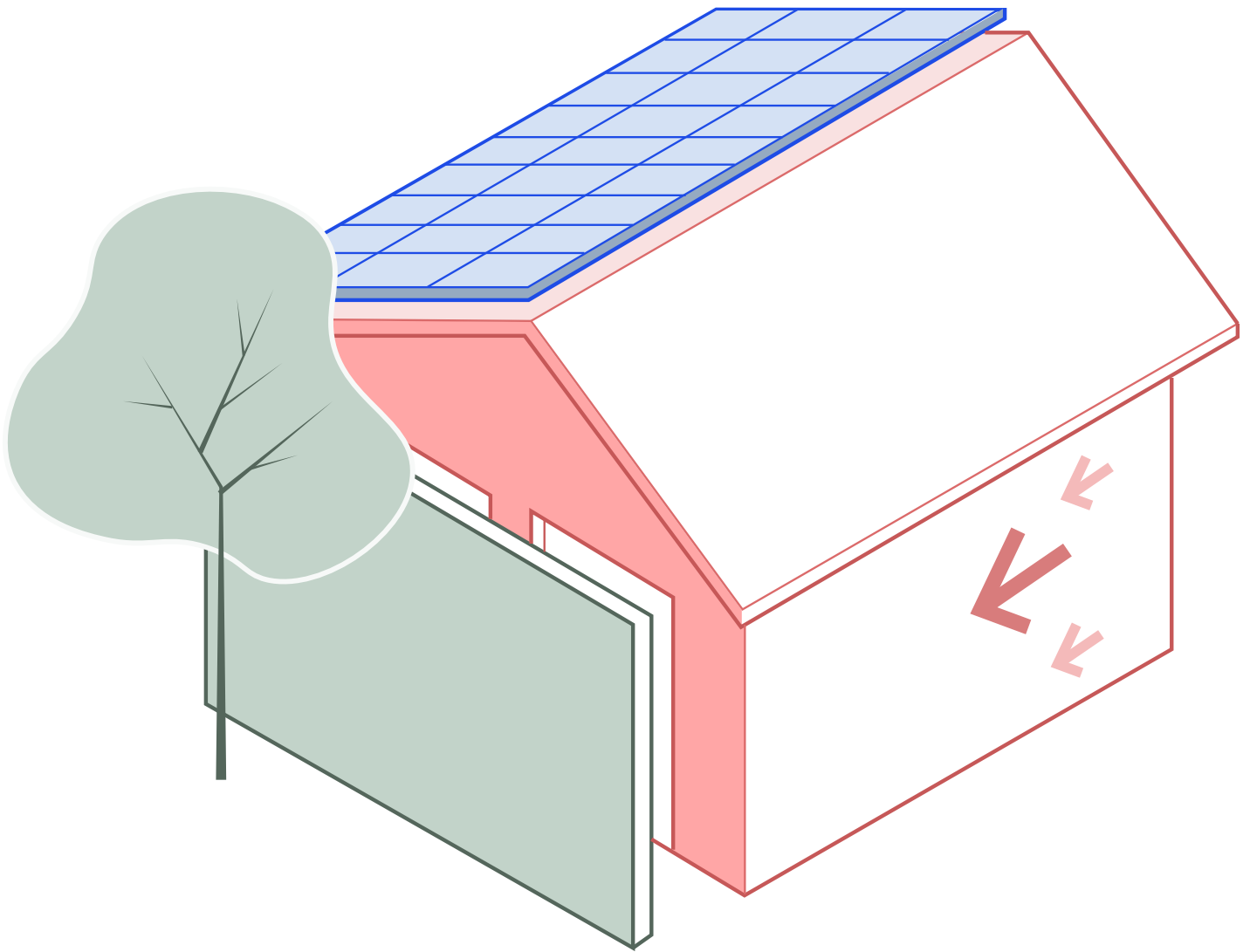


Data: This map displays all of the data on the previous pages on the same map. It therefore shows the overlap and density of need. The darker red, the more overlapping needs.

Conclusions: The analysis identifies four clear zones of higher concentration of need across several populations: South Berkeley along Adeline Street, Telegraph south of UC Berkeley's campus, Downtown, and Northwest Berkeley. The analysis on this page does not quantify the needs (e.g., number of toilets).

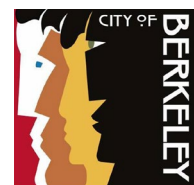
BERKELEY WASH ASSESSMENT

PROJECT DATA AND DATA ANALYSIS



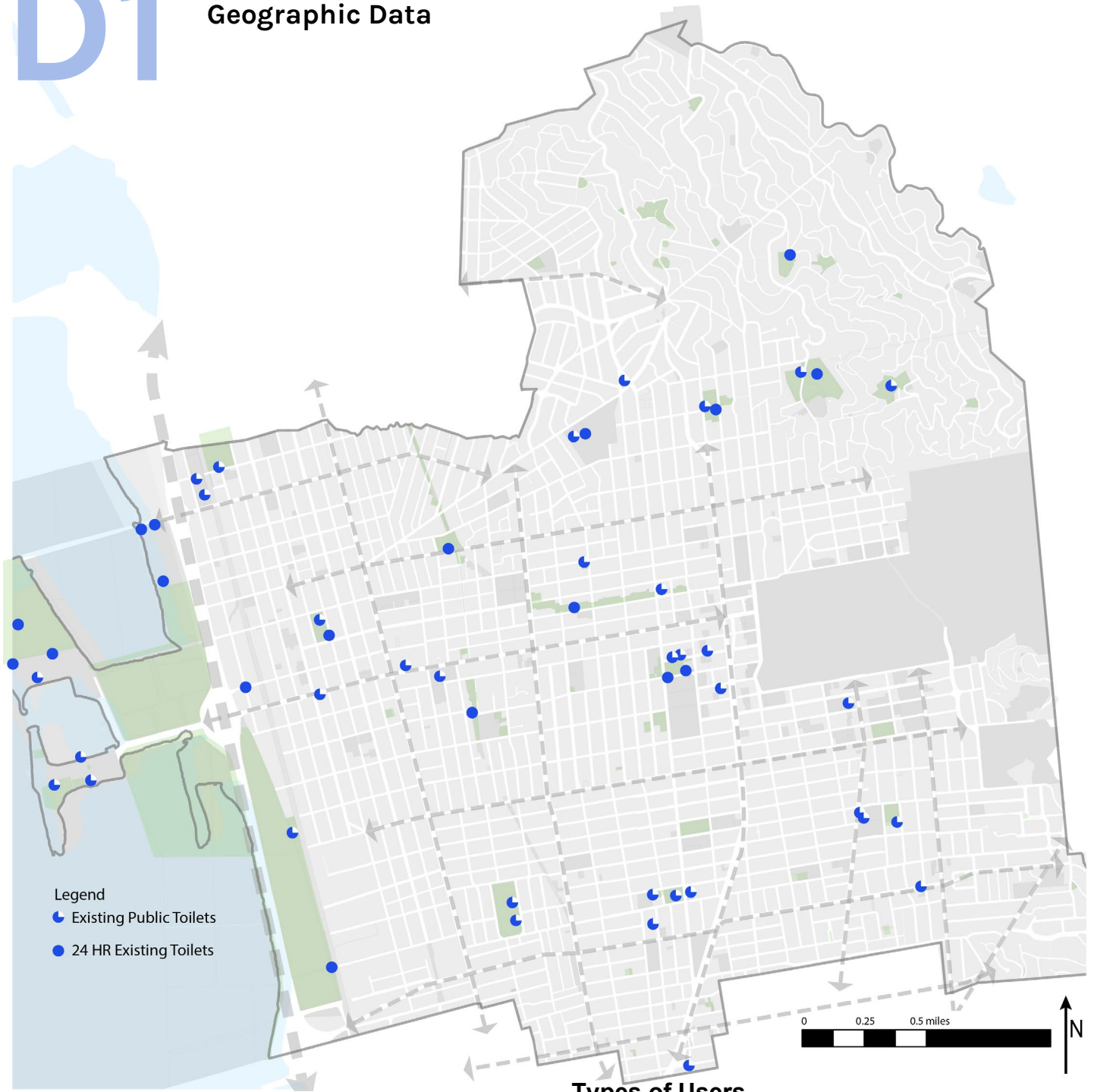
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D1

Geographic Data



The following pages provide spatial data used for the Berkeley WASH Assessment. Pages show data sets individually and combined to show the overlap and density of need across user groups.

Each map includes existing toilets in dark blue. Full circles indicate 24 hour access and partial circles daytime access only. Data is shown in pink and point data scaled to indicate quantity of need: larger dots indicate larger need at that location. Non-point, parks, commercial, and 311, are just shown by location.

Types of Users

Unhoused:

- Homeless encampment hotspots
- Homeless Point in Time 2019 counts

Workers:

- Bus driver layovers & taxi waiting zones
- Farmers markets

Transit:

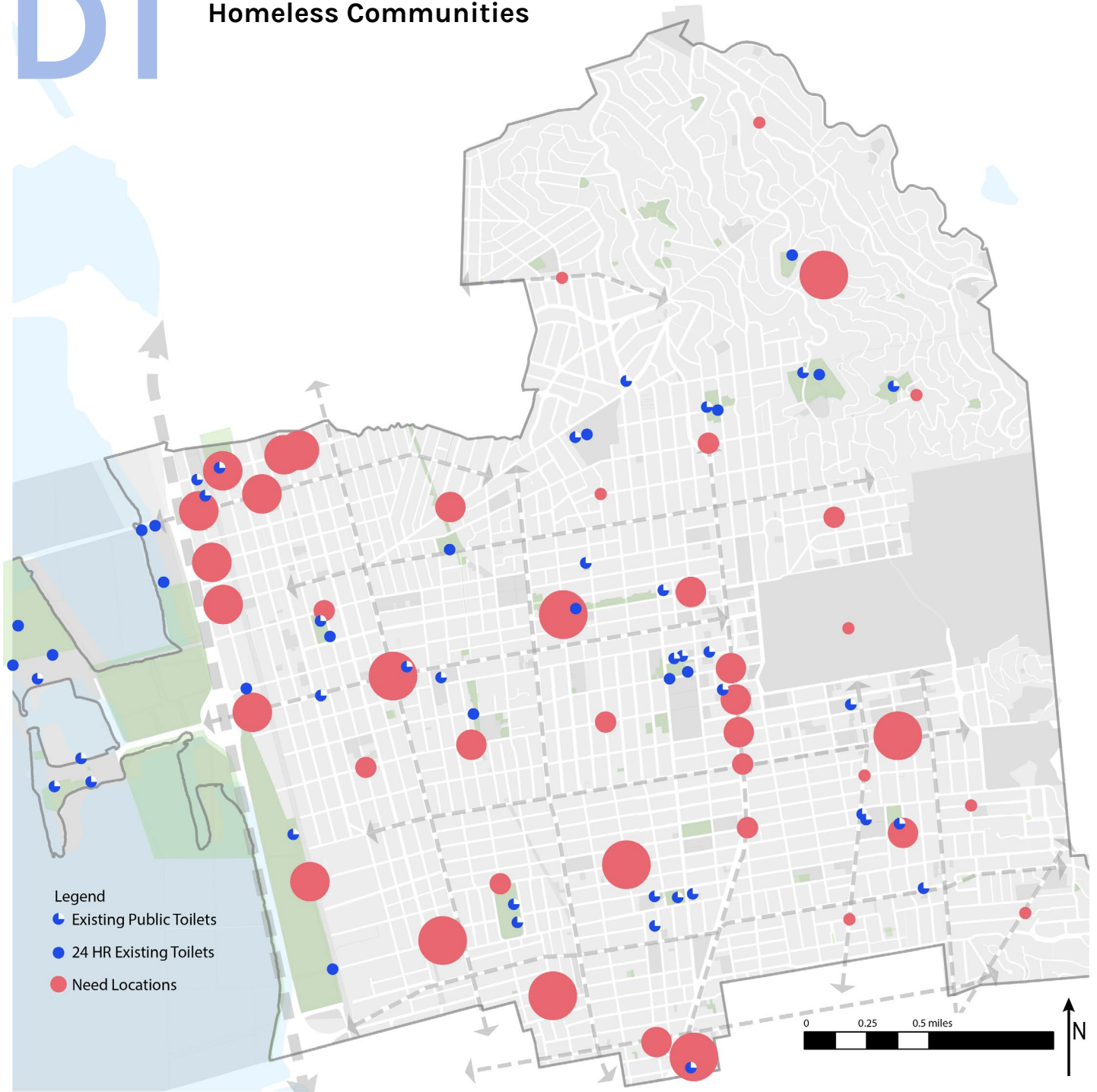
- Pedestrian counts per hour
- BART weekday ridership per hour
- Bus stop riders per hour

Public: Parks and Commercial Zones

General: 311 calls and hotspots

D1

Homeless Communities



Data:

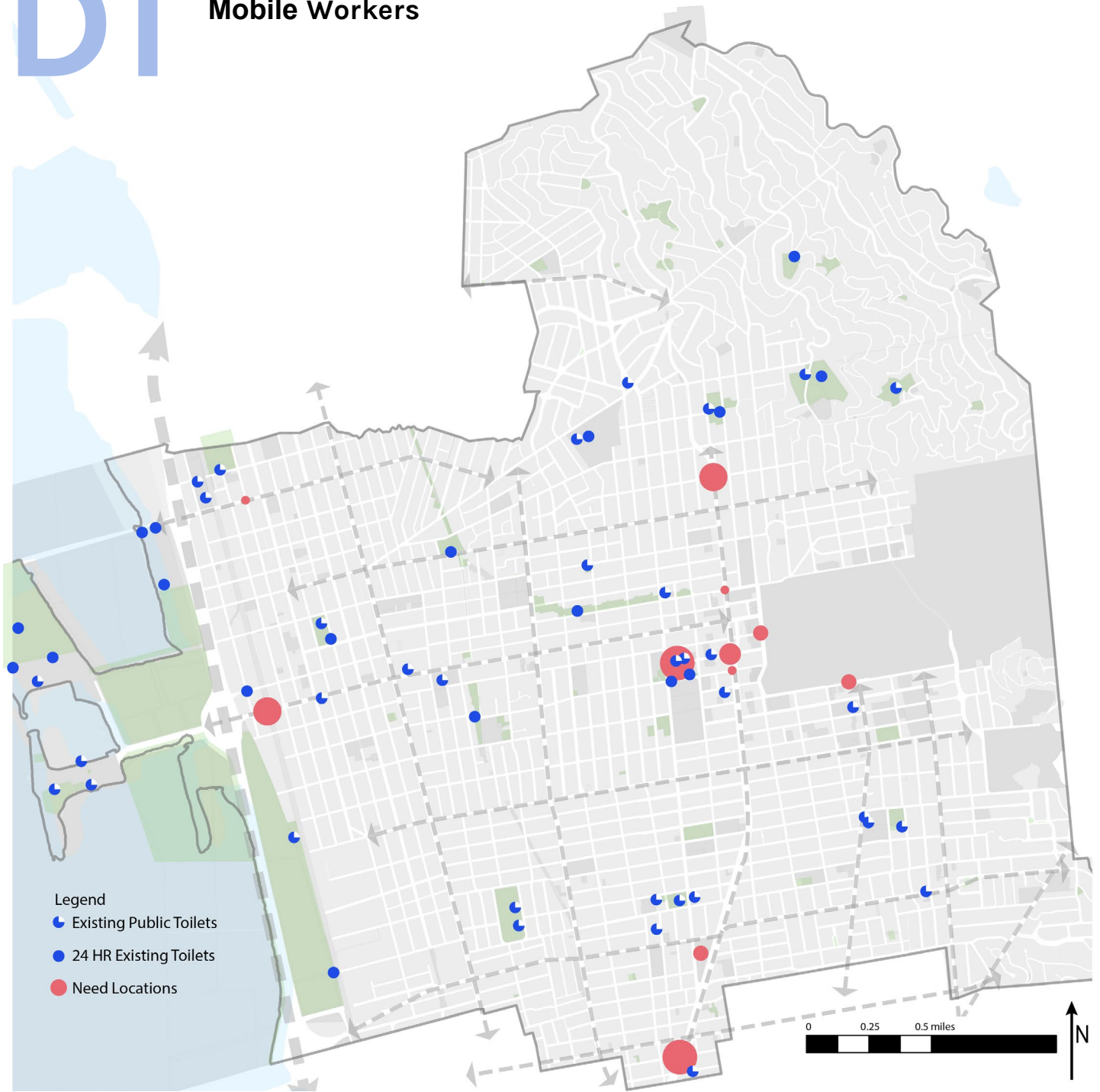
- Homeless encampment hotspots: locations where there have been homeless encampments in the last three years (data from the City's Homeless Team)
- Point in Time 2019 Count data: original data is number of homeless people by census tract, with a data correction adjustment. The map above is the result of this data adjustment scaled by number of people (red circles)

The map above is the result of this data adjustment scaled by number of people.

Conclusions: Many hotspots are not near an existing 24 hour public toilet. Some are near toilets with daytime access and some are not within close proximity to any toilets.

D1

Mobile Workers

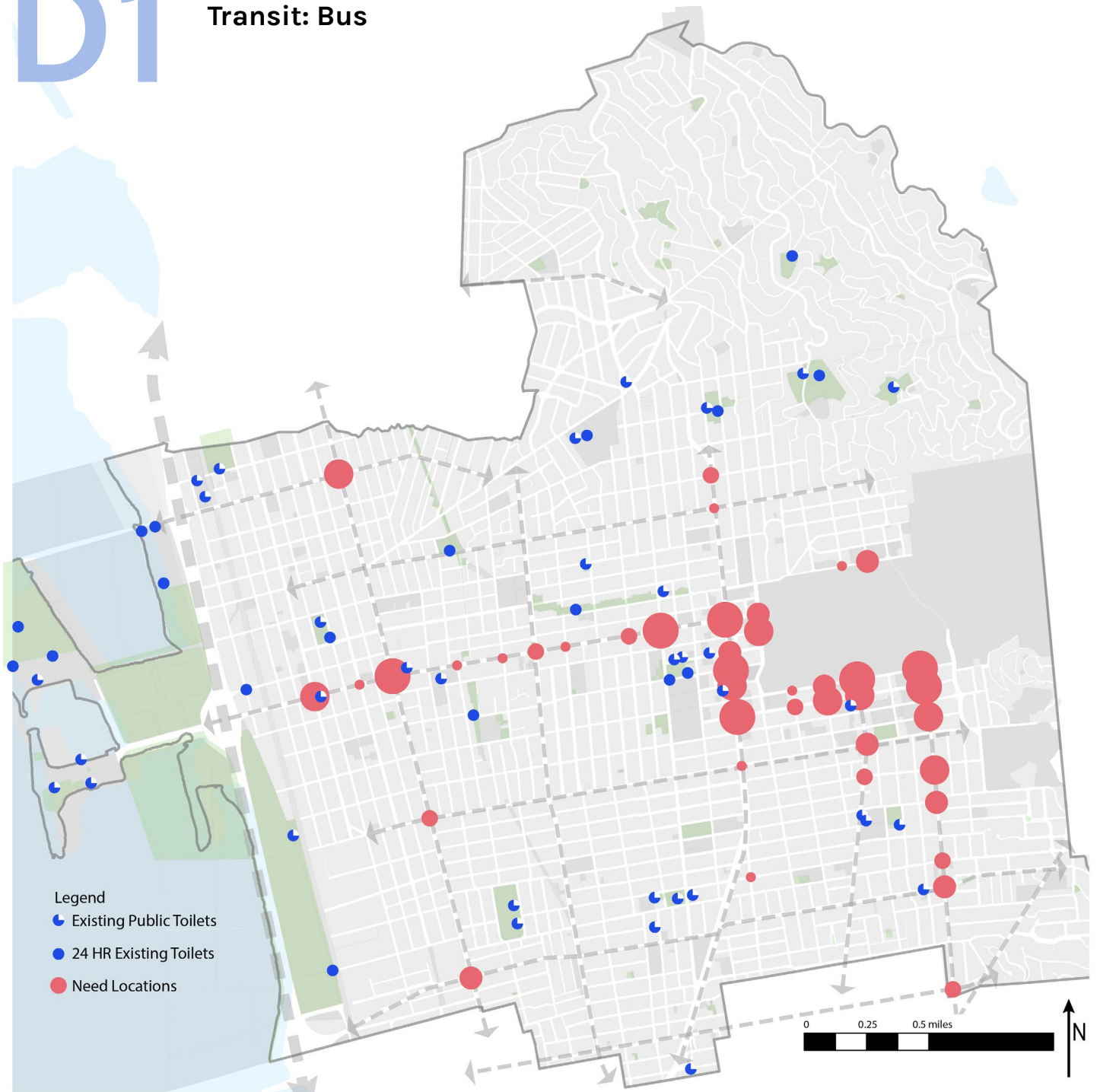


Data: This map shows locations of need for workers who do not have access on the job and work or congregate in one location. This includes: taxi driver waiting areas, bus driver layovers (from one driver switches to another), and farmer market locations. Other workers with need (delivery drivers, rideshare drivers, etc.) are considered but don't congregate in shared locations. Data and scale comes from farmer market vendor numbers (Ecology Center data), registered taxi driver numbers (City data), and number of bus driver layovers (AC Transit data).

Conclusions: Most worker locations are nearby public toilets with daytime access, except for a few locations in North Berkeley and South Berkeley. While some locations are within 1/4 mile, they are not immediately adjacent to worker locations which may make access more difficult for workers with limited break times or drivers who need to find parking to be able to access restrooms.

D1

Transit: Bus



Data: There are 21 AC Transit bus lines that operate in Berkeley. This map shows peak hourly bus ridership density (riders getting on and off at a given stop) in dark red for stops with more than 250 riders per average weekday. Circles are proportionate to ridership, with larger circles for high ridership.

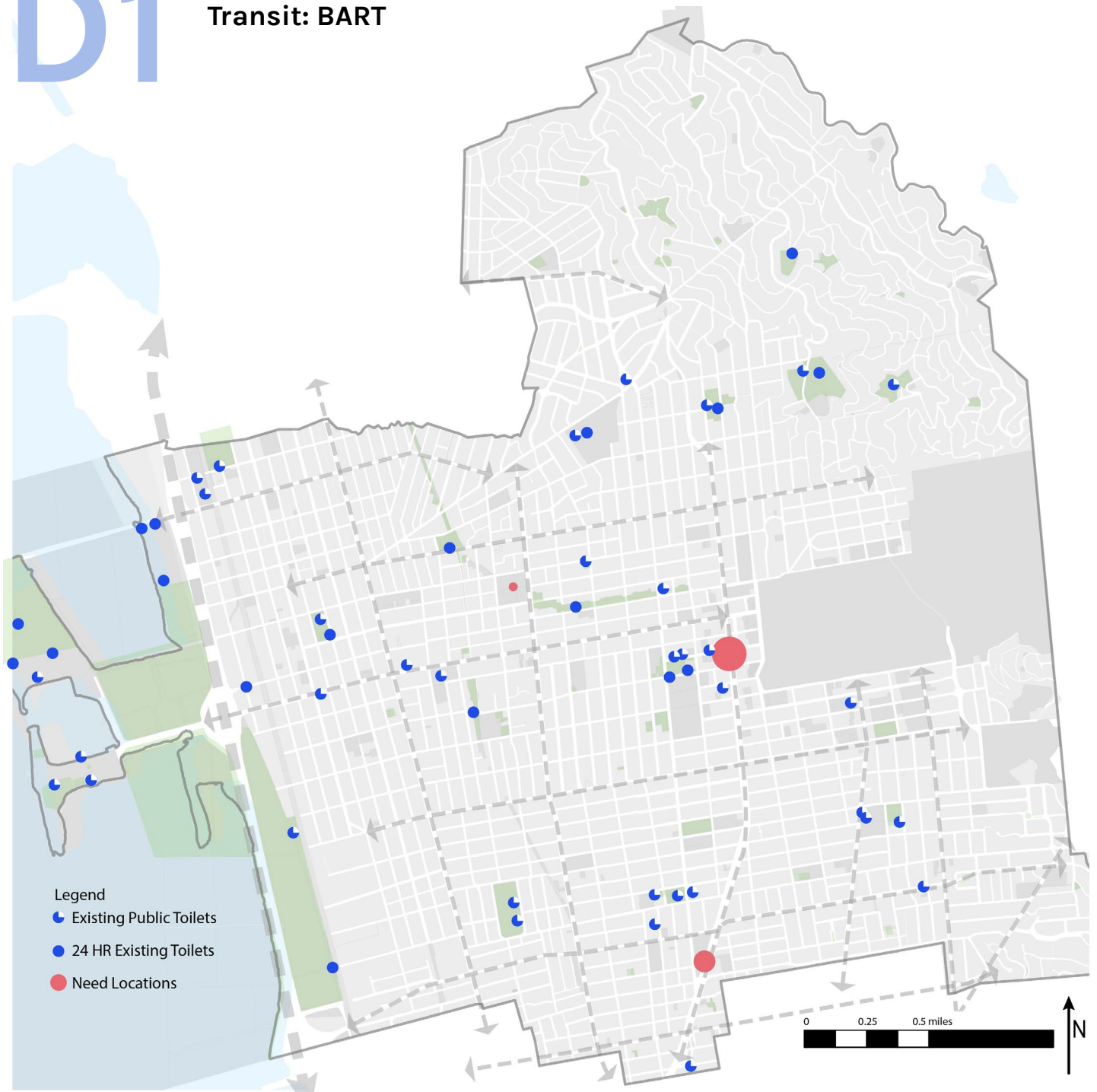
Original data from AC Transit was daily weekday ridership which varies from 250 to 4,200. We approximated based on the hourly BART ridership data that peak daytime hours are

about 20 percent of day totals and peak nighttime hours about 4 percent of daily totals. This map shows peak daytime ridership.

Conclusions: Bus transit is concentrated in downtown, south of UC Berkeley's campus, and at the University and San Pablo intersection. Many of these locations do not have nearby toilet access. Public Transit south of UC Berkeley's campus is likely driven by commuting students and campus community members.

D1

Transit: BART



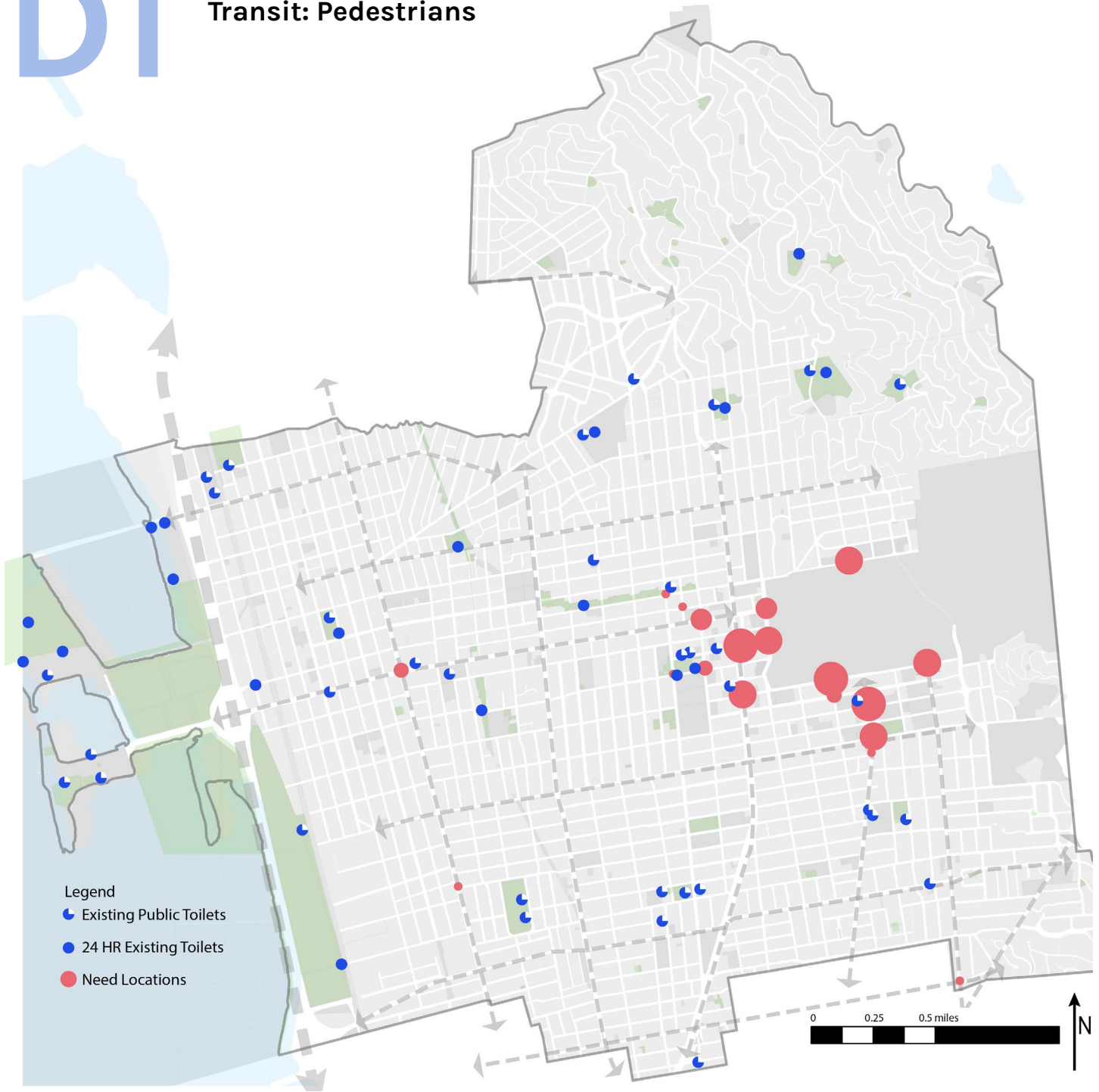
Data: There are three BART stations within the City: Ashby, Downtown, and North Berkeley. Ridership shown is peak hour weekday ridership based on hourly average data from BART. Ridership varies from 5,000 per hour at the Ashby station to more than 11,000 at the Downtown Berkeley with peak daytime hourly ridership ranging from 883 at North Berkeley to 1,445 at Downtown. Peak night-time hours were also considered which are as high as 414 for Downtown Berkeley.

There is no current restroom access in the downtown station and reduced access in the Ashby and North Berkeley stations for riders.

Conclusions: The BART stations are locations of high-volume transit with variable toilet access. Public access outside of the stations is either not closeby or only daytime, while the BART runs from early morning to late night.

D1

Transit: Pedestrians

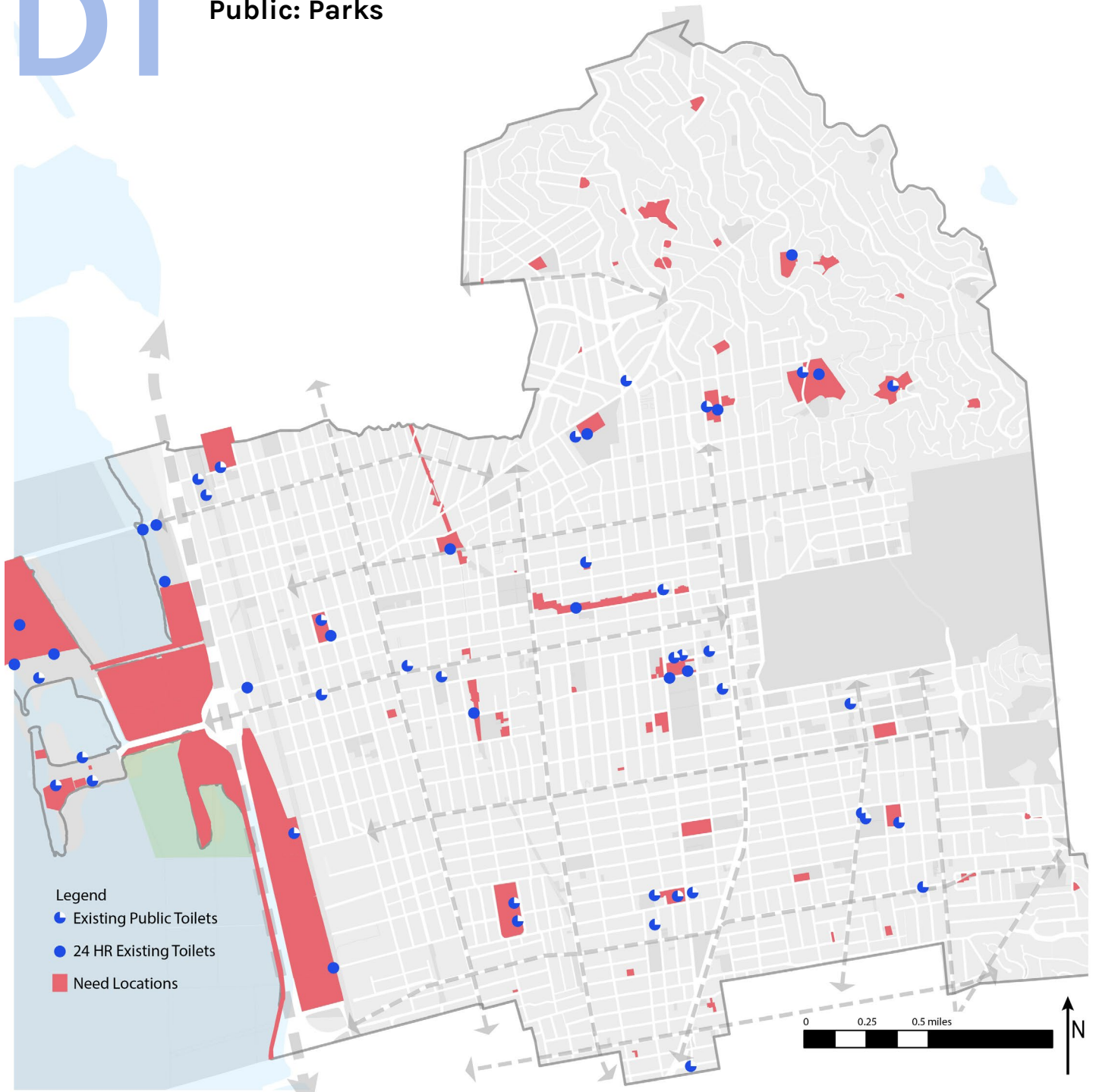


Data: Pedestrian count data from the City of Berkeley Pedestrian Masterplan. This shows the density of pedestrian movement in different parts of the City. Data shown on this map ranges from 250 to 2,700 for average pedestrians per hour observed passing by each location.

Conclusions: Pedestrian activity is largely concentrated around UC Berkeley's campus, the northern Telegraph corridor, and downtown. With additional, smaller activity spread out along commercial and transit zones in other areas of Berkeley.

D1

Public: Parks

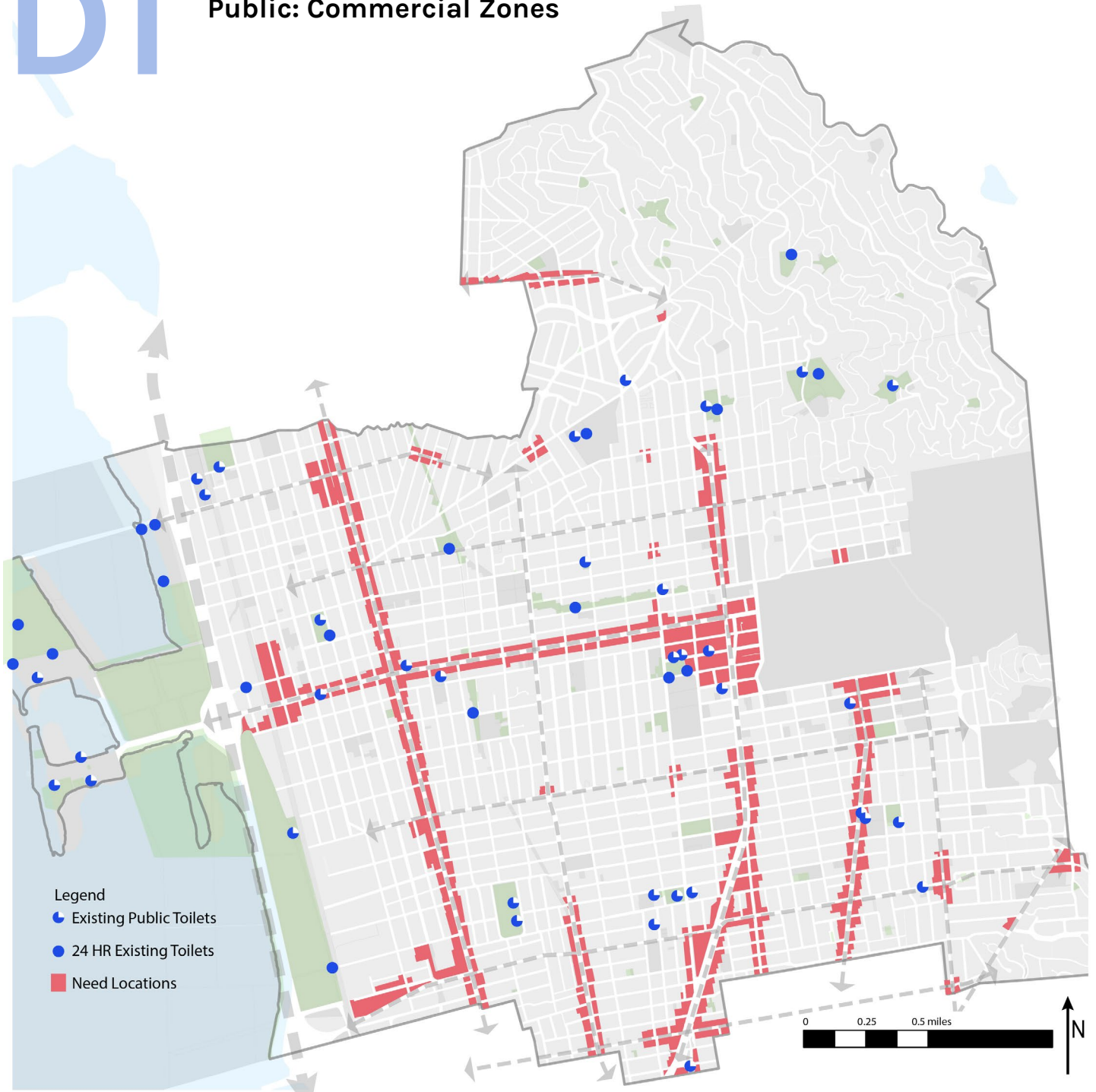


Data: All parks within the City of Berkeley, including the McLaughlin Eastshore State Park, owned by East Bay Regional Parks and public parks operated by Berkeley Unified School District.

Conclusions: Most of the existing public toilets in Berkeley are operated by Parks and Recreation. There are few parks without public toilets. Those without are either not owned by the City (McLaughlin and Moellering Field owned by BUSD), are smaller mini or neighborhood parks, or are in the North part of Berkeley. Most of the park toilets are daytime access only.

D1

Public: Commercial Zones

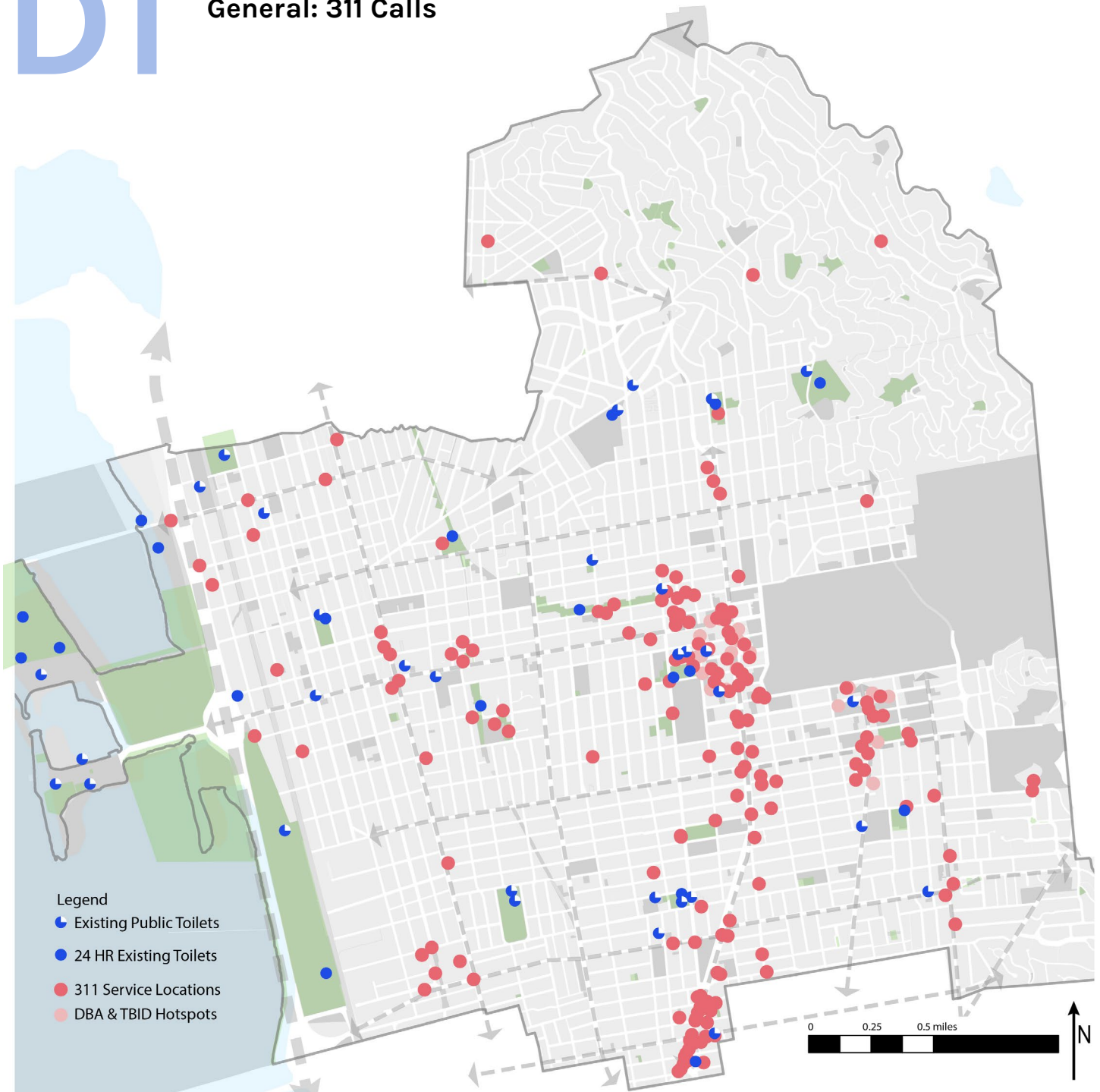


Data: This map shows all areas of the city that are zoned commercial. Note that these commercial zones vary from restaurants and cafes to shopping and other commercial uses.

Conclusions: The commercial zones overlap with high transit corridors. Many of these zones do not have public access to toilets within a 1/4 mile zone. There are several commercial enterprises, including supermarkets and cafes, in these zones that may be willing to operate public toilets within their buildings.

D1

General: 311 Calls

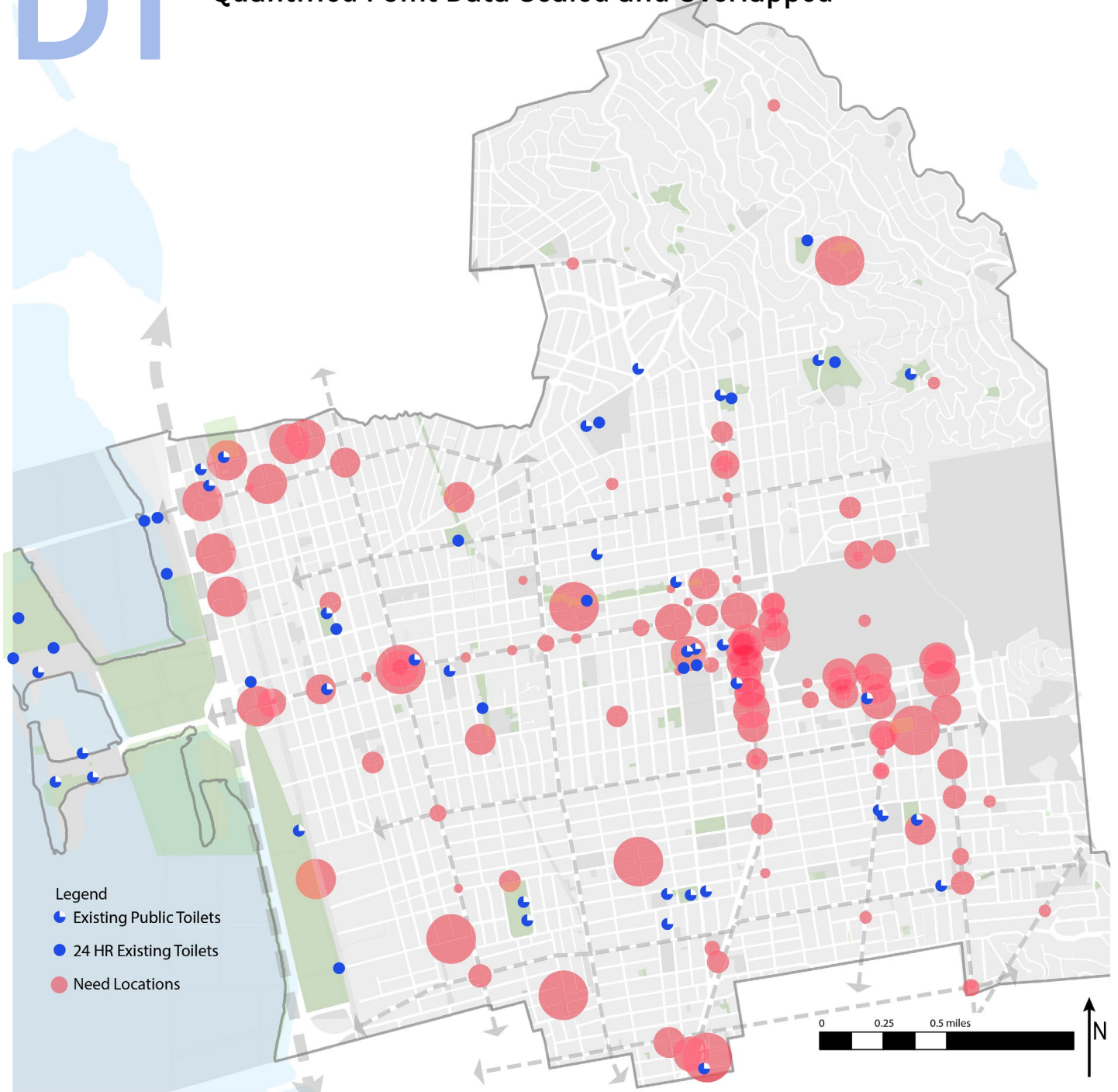


Data: This map shows locations where people called 311 for open defecation or urination from 2016 to 2019 in dark red (City of Berkeley data). The light pink dots are open defecation and urination hotspots noted by business districts (Downtown Business Association and Telegraph Business Improvement District).

Conclusions: This map shows that existing toilets are not meeting the need because of the overlap of 311 calls where there are existing toilets. This may be because of: hours, accessibility, cleanliness, visibility, or security, among other reasons. Our community and stakeholder engagement and our site visits provide additional insights and information into why these facilities are not sufficient.

D1

Quantified Point Data Scaled and Overlapped

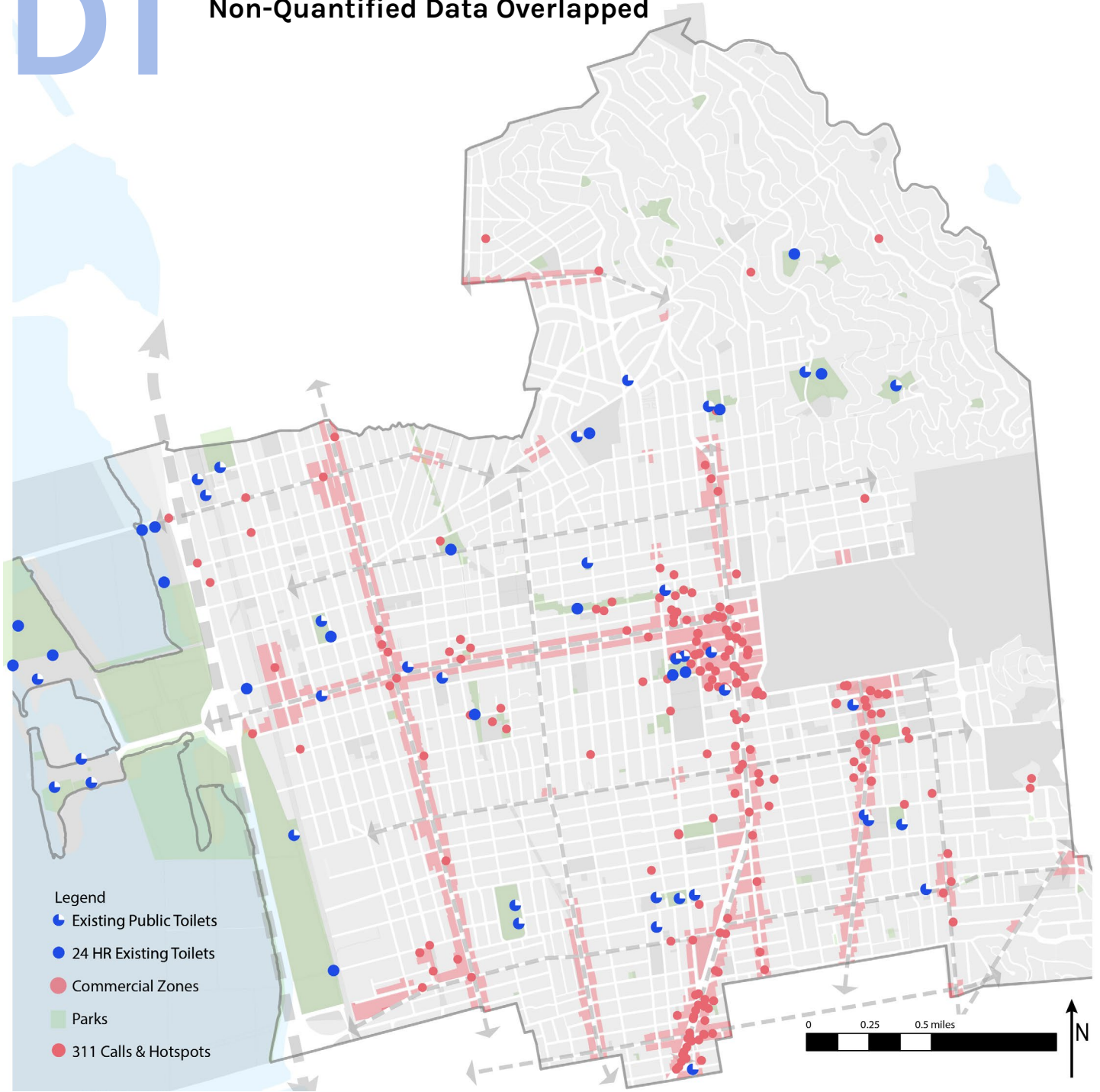


Data: This map overlays all the preceding maps with quantified point data. Darker red areas show overlay of data points. The following heatmap analysis will transform this point data into spatial data.

Conclusions: This overlay shows areas where multiple types of need overlap, particularly in Downtown Berkeley but also in Telegraph, South Adeline, and Northwest Berkeley.

D1

Non-Quantified Data Overlapped

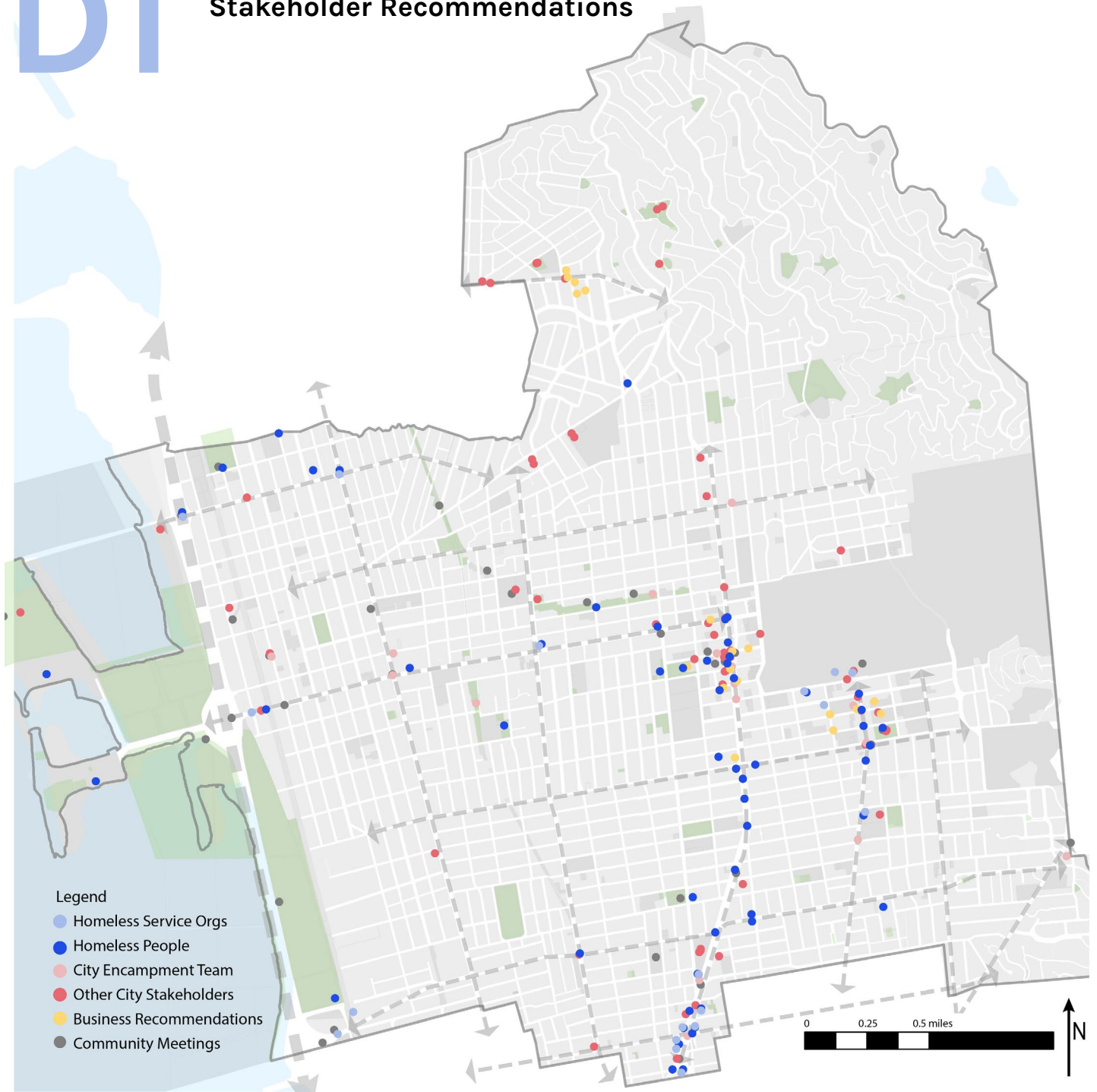


Data: This map overlays non-quantified data from the previous pages: parks, commercial zones, and 311 data.

Conclusions: This overlay suggests a similar congregation of need in Downtown, Telegraph, and South Adeline in particular in addition to less intense need spread through the city.

D1

Stakeholder Recommendations



Data: This map displays location recommendations for new toilets from our community engagement: one on one meetings, focus groups, community meetings, etc. The recommendations are organized and color-coded based on who recommended them.

Conclusions: Stakeholder recommendations correspond with the heat/spatial analysis contained in this study.

D1

Stakeholders

We engaged a diversity of stakeholders to fully understand user needs across all populations, location options and feasibility, and maintenance constraints and concerns, as follows:

Homeless Support Organizations:

- Women's Drop-In Center
- Berkeley Drop-In Center
- BOSS
- Downtown Streets
- People's Park Committee
- Here/There Encampment
- RV Dwellers
- Suitcase Clinic
- Friends of Adeline
- Lava Mae
- Dorothy Day House
- Consider the Homeless
- Bay Area Landless People's Alliance
- UC Berkeley Basic Needs Committee
- UC Berkeley Homeless Outreach
- Berkeley Friends on Wheels

Focus Groups with Unhoused People:

- Women's Drop-In Center
- Downtown Streets
- Here/There Encampment
- Suitcase Clinic LGBTQ Clinic
- Berkeley Drop-In Center

Outreach efforts were made to the following organization:

- First They Came for The Homeless
- Bonita House
- Covenant House California (Yeah!)
- Berkeley Free Clinic
- Youth Spirit Artworks

Other organizations and target populations:

- Rideshare and taxi drivers
- Rideshare Drivers United
- SF Taxi Workers Alliance
- Ecology Center: Farmers Markets
- ATU Local 192: Alameda County Transit bus driver union
- UC Berkeley Student Government
- Berkeley Parents Network
- 510 Families

- Friends of the Libraries
- Friends of the Parks

Business Stakeholders:

- Berkeley Business District Network
- Solano Avenue
- Downtown Business Association
- Telegraph Business Improvement District
- Lorin Business
- Peet's

City of Berkeley staff and electeds

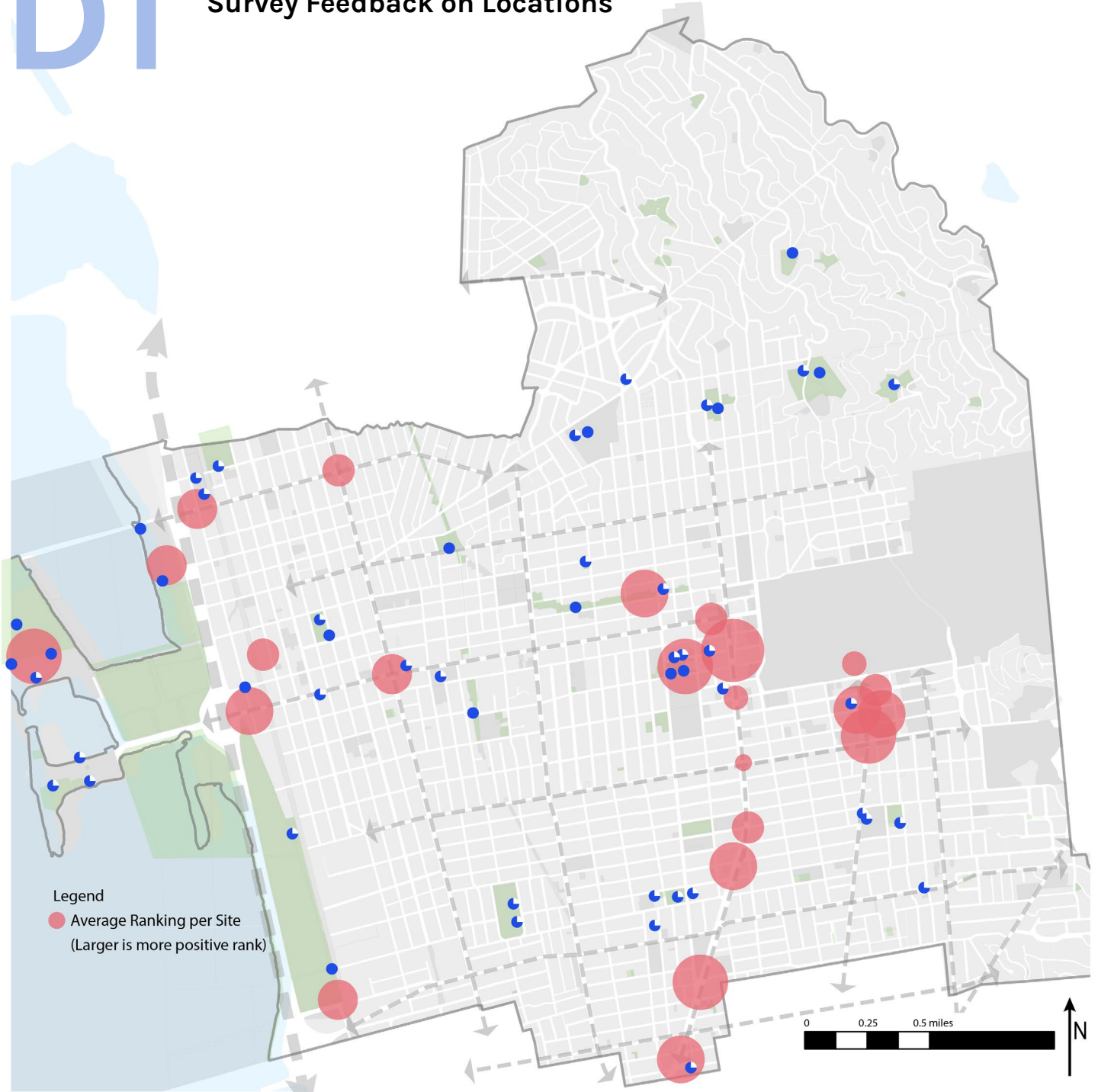
- City Councilmembers
- Public Works
- Parks, Recreation & Waterfront
- Maintenance team for Parks restrooms
- Economic Development Team
- Homeless Encampment Task Force
- Homeless Outreach Treatment Team
- City Homeless Commission
- Planning Department staff
- Libraries staff
- Parks and Waterfront Commission

Other Institutions:

- BART
- AC Transit
- Lyft and Uber
- UC Berkeley

D1

Survey Feedback on Locations

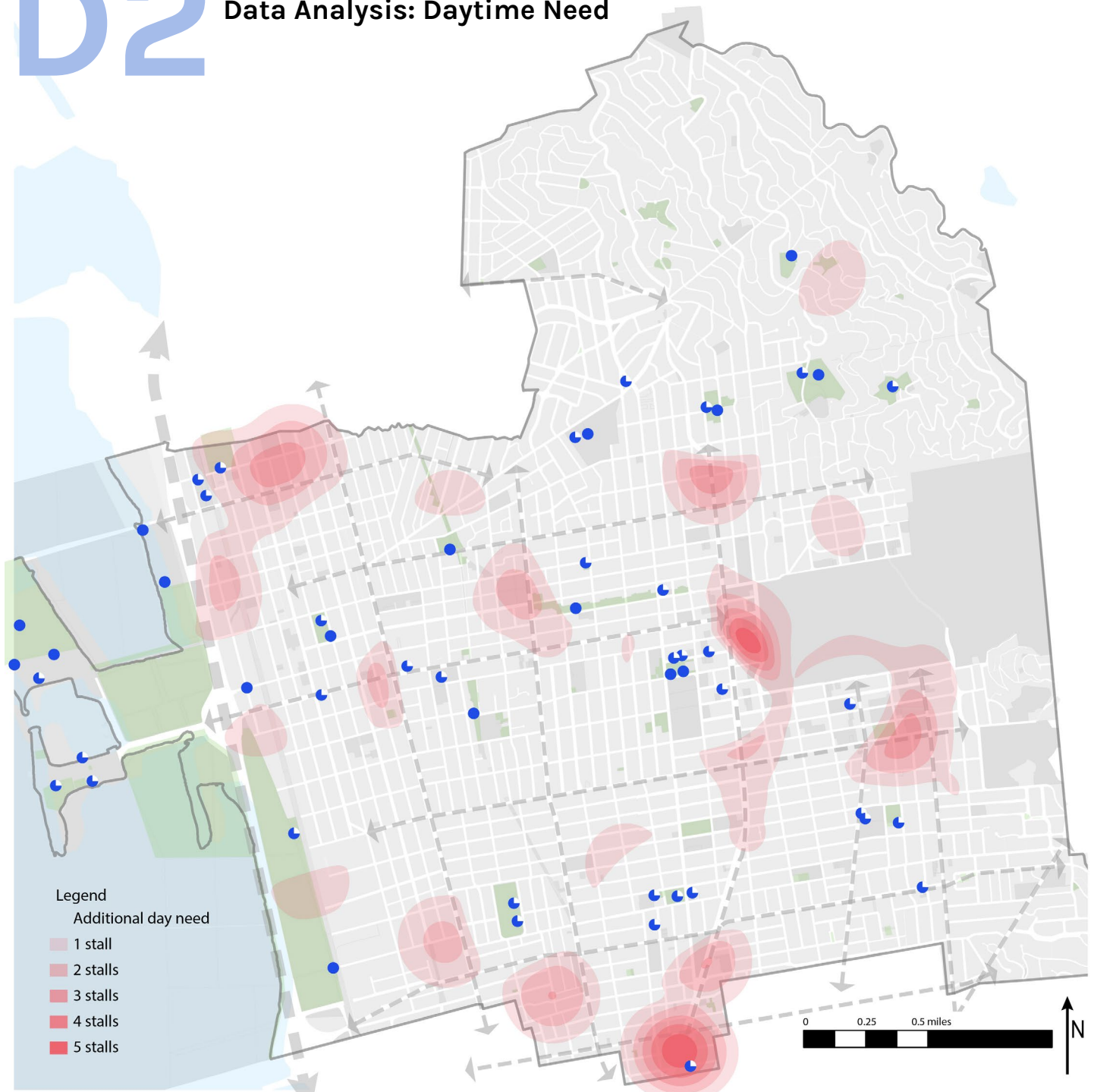


Data: The project’s online survey ran from March to April 2020, and received 140 responses. One section of the survey asked for feedback on 22 proposed approximate locations for new restrooms. The locations were based on previous stakeholder feedback and the above data analysis. The map on this page shows how people ranked and prioritized the suggested locations: the bigger the circles, the higher the priority.

Conclusions: This analysis suggests some general priorities as follows (not sorted in terms of priority): Cesar Chavez Park, Downtown locations, Telegraph locations, particularly Telegraph & Dwight, and South Adeline. Locations at Telegraph and Bancroft were not prioritized as highly.

D2

Data Analysis: Daytime Need



Analysis: We used the heatmap feature in QGIS to transform point data into spatial data. This combines location data for existing and need with the recommended maximum distance to restrooms for different user groups. The need data used here is the number of stalls needed: calculated by dividing the number of users with the users per restroom stall guideline (see section 5 of the main report). This can then be compared to the number of existing stalls.

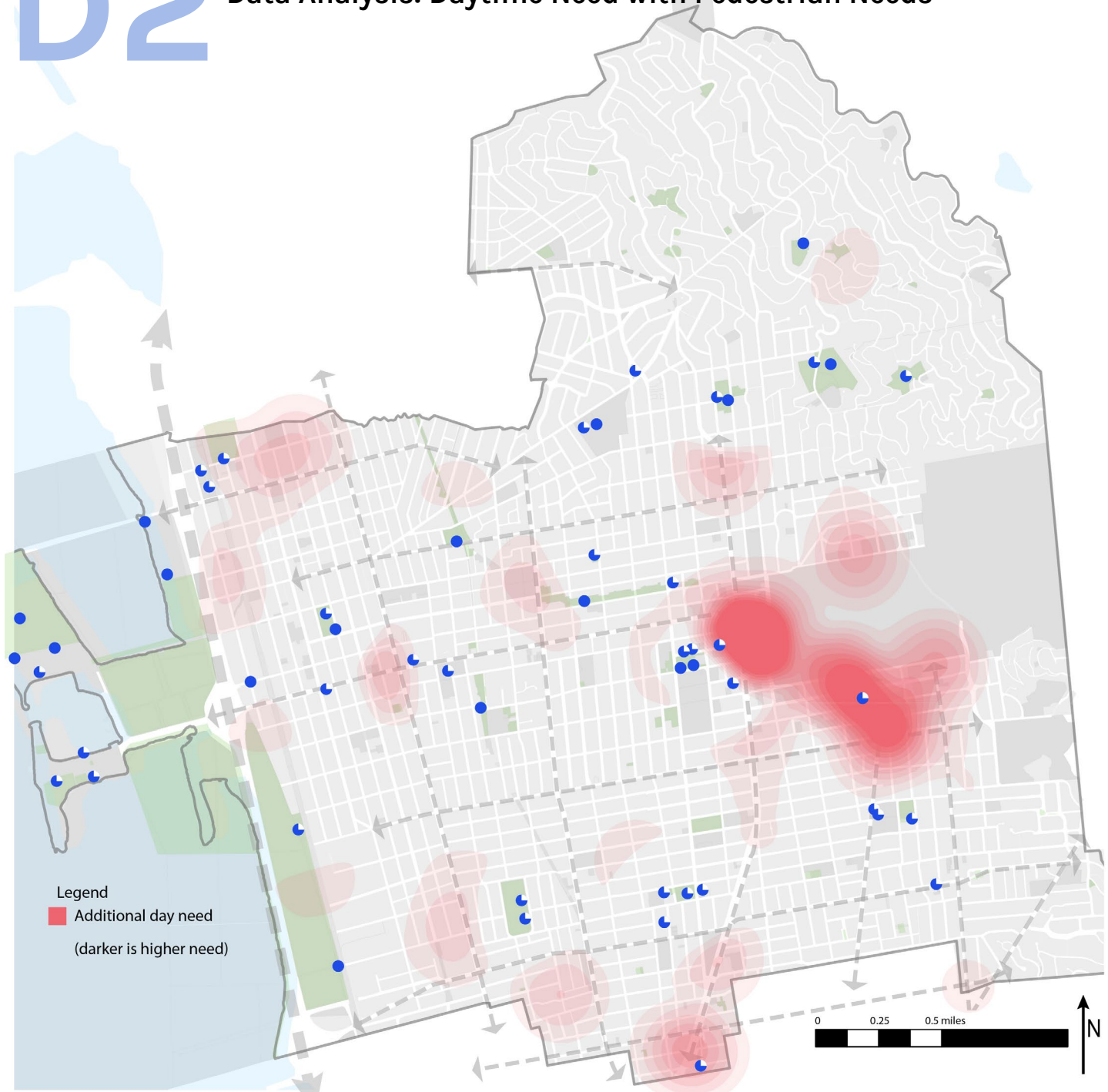
The heatmap is the result of subtracting

the heatmap for daytime existing stalls from the heatmap for daytime need, without pedestrian data. The darker red shows higher additional need incremented by number of stalls.

Conclusions: First, this confirms that there is additional need that the existing facilities can't meet, even if they were fully functional and operating to the maximum of their capacity. This resulting heatmap shows additional need concentrated in several locations across Berkeley.

D2

Data Analysis: Daytime Need with Pedestrian Needs

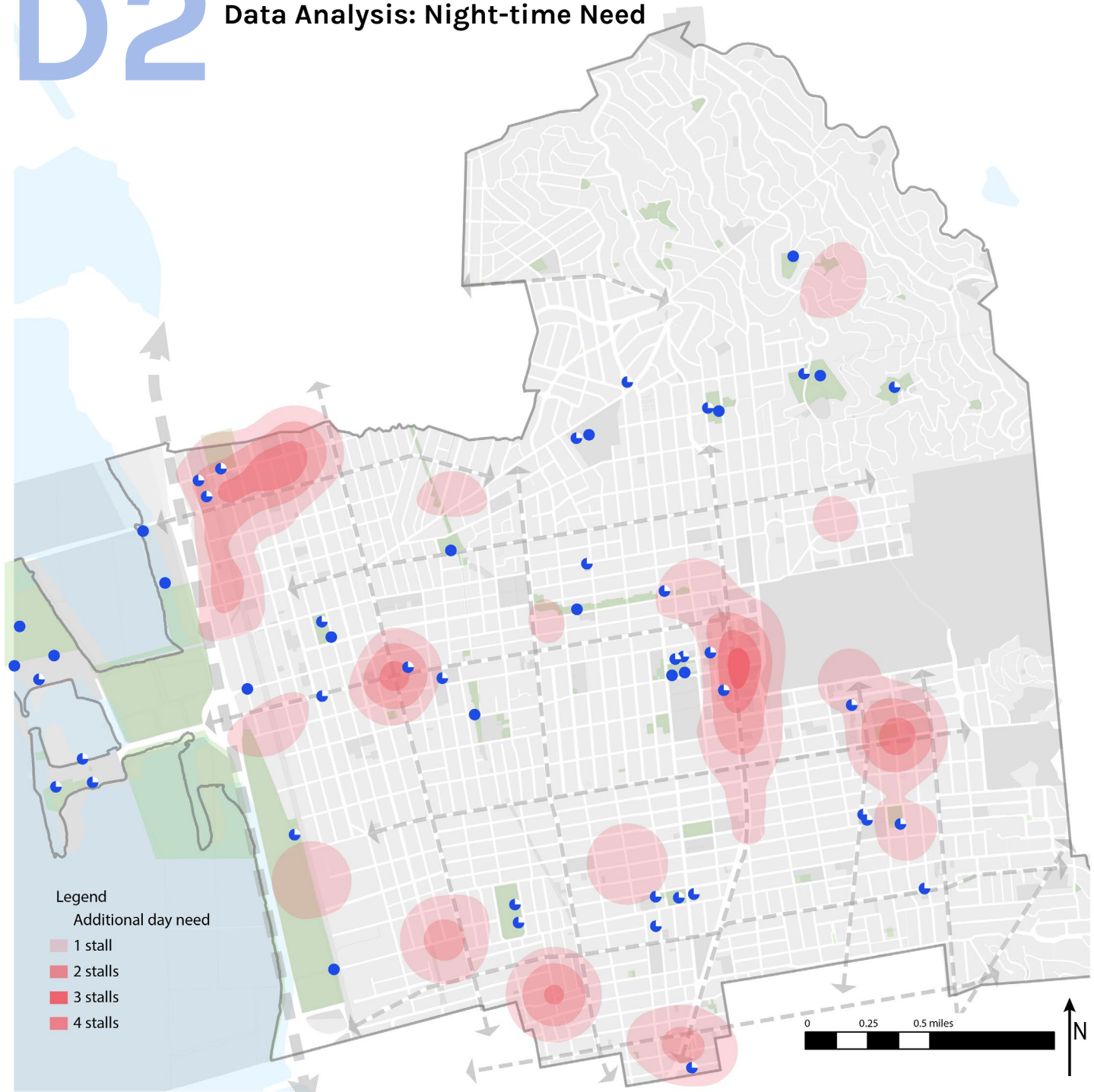


Analysis: This heatmap shows additional daytime need with pedestrian need data factored in. We ran the daytime analysis with and without pedestrian demand because the pedestrian data-set is independent from the BART or bus data and likely includes significant duplication to these other transit layers.

Conclusions: This map shows a significant increase in need when pedestrian data is factored in, particularly around Downtown, Telegraph, and around UC Berkeley's campus. Note that these numbers, mostly comprised of students and the campus community, have regular on-campus access to restrooms.

D2

Data Analysis: Night-time Need



Analysis: The same heatmap analysis was completed with night-time existing restroom stalls and night-time need for restrooms. The map shown here is the additional need once existing facilities are factored in.

The darker red indicates higher need and the color gradation shows the specific number of stalls needed in each area.

Conclusions: This shows some night-time need that is in close proximity to existing facilities that are closed at night that could be met by extending hours of existing facilities. It also identifies additional high need areas that are not in close proximity to existing facilities.

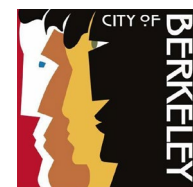
BERKELEY WASH ASSESSMENT

SITE VISITS SUMMARY



HYPHAE DESIGN LABORATORY, 2020

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E1

Site Visits Introduction

Hyphae conducted site visits at the following facilities which are also shown on the map to the right.

Staffed Facilities without Showers

- Berkeley Main Public Library
- Live Oak Community Center
- James Kenney Community Center
- Frances Albrier Community Center
- MLK Jr Youth Services Center

Staffed Facilities with Showers:

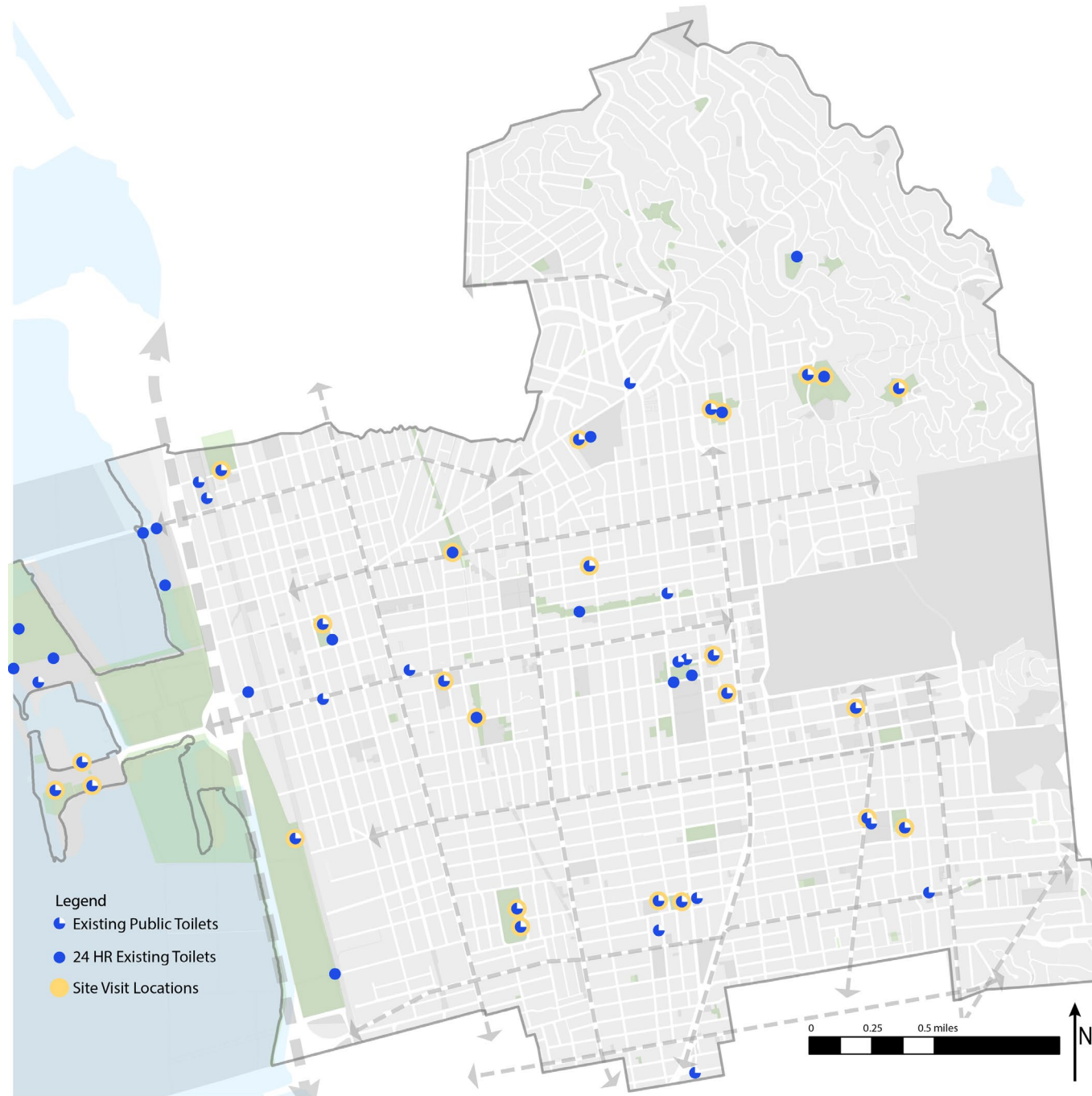
- King School Swim Center
- West Campus Swim Center
- Willard Administration Building

Locked Unstaffed Facilities:

- Marina South Cove
- Virginia-McGee Totland
- San Pablo Park
- Grove Park
- Marina (K Dock)
- Glendale-La Loma Park
- Berkeley Rose Garden
- Shorebird Park
- Aquatic Park
- Harrison Park (Skate Park)
- Channing St. Garage
- Center St. Parking Garage
- Willard Park

Unlocked 24 Hour facilities:

- Codornices Park
- Live Oak Park
- Strawberry Creek Park
- Cedar Rose Park



E2

Site Visit Assessment: Qualitative & Quantitative

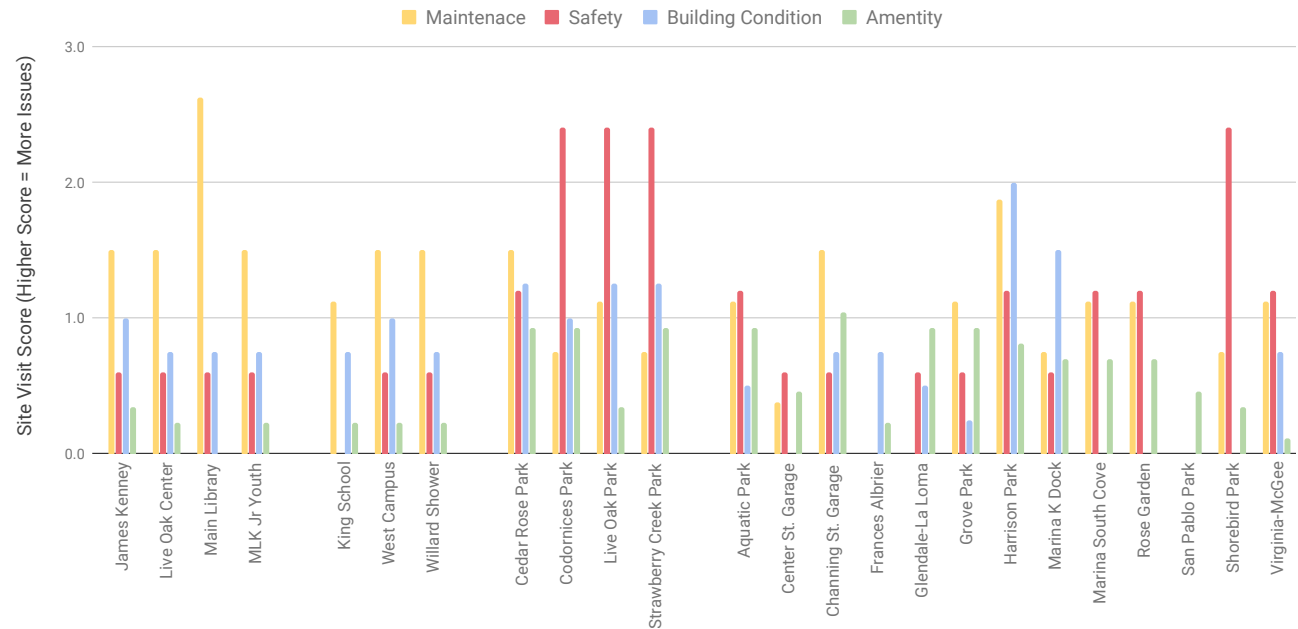
We developed a quantitative assessment tool to evaluate each facility in addition to photos and qualitative evaluation. The tool ranks site from one to three across factors within the following: maintenance & servicing, safety, amenities, building conditions, and neighborhood/community. The graphs to the right summarize this data and the next pages shows the tool.

The following collection of site visit logs summarizes photos and qualitative notes from each site visit in the following categories: community, design, operations & maintenance, and recommendations based on site conditions. We asked the following questions for each category

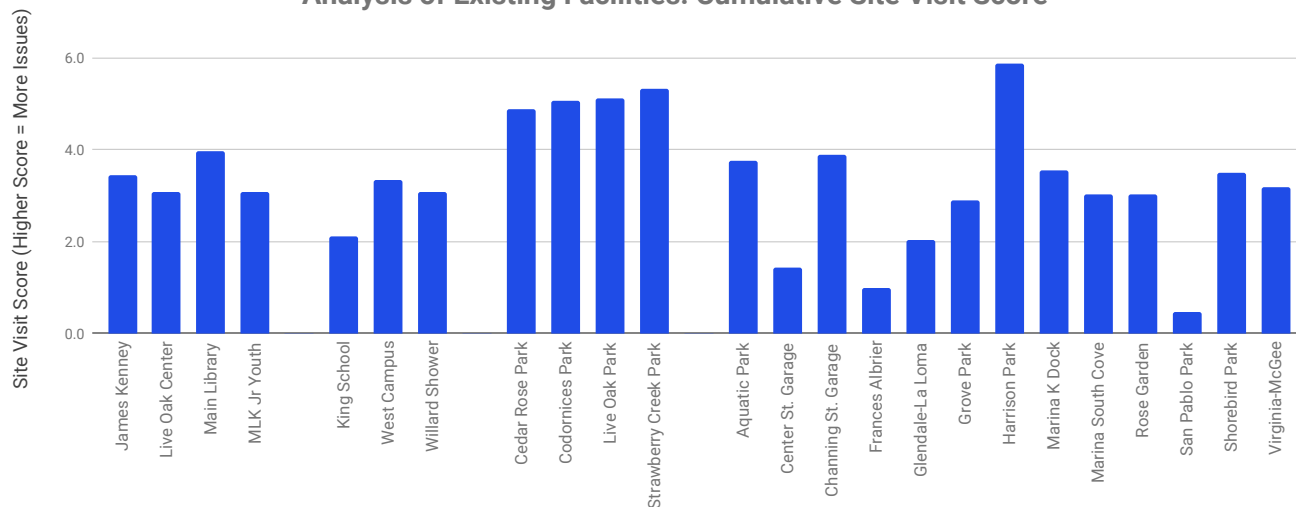
Qualitative Assessment Questions:

- **Community Elements:** What factors are present in the area? Who uses these facilities?
- **Design Elements:** What design elements are present? Functional?
- **Operation/Maintenance:** What is required to operate and maintain these facilities in terms of personnel and resources such as water, energy and material repairs or replacement?
- **Recommendations:** What is initially recommended for this facility to improve access, aesthetics or functionality?

Analysis of Existing Facilities: Site Visit Score



Analysis of Existing Facilities: Cumulative Site Visit Score





Site Visit Quantitative Assessment Tool

SITE SURVEY CHECKLIST FORM

Circle the score for each item that applies in each category. At the completion, sum the Poor Scores only for each category and then sum the total scores for the facility. Use Poor Score to rank relative priority.

Item

Facility Name:
Facility Address:
GPS Location:
Berkeley Department Responsible:
Open Hours:
Date Opened:
Hard New Construction Costs:
Soft New Construction Costs:
Contact Person/Info:

FACILITY TYPE (Check all that apply)	Number(s)
Plumbed Restroom(s)	
Drinking Fountain(s)	
Portable Toilet(s) (Porta-Potty)	
Portable Handwash Station	

MAINTENANCE/SERVICING

3 = Poor

2 = Fair

1 = Good

Comments

Is this restroom or the adjacent property considered a high incident location (from 311 data)?	3 (yes)		1 (no)	
Does this restroom have a history of requiring a high level of maintenance and repair?	3 (yes)		1 (no)	
Are there or have there been problems with the sewer backing up?	3 (yes)		1 (no)	
Is there a hose bib available for maintenance use?	3 (no)		1 (yes)	
Are the interior fixtures vandal resistant?	3 (no)		1 (yes)	
Are the wall materials graffiti resistant?	3 (no)		1 (yes)	
Are there visible signs of vandalism: (graffiti, broken elements)?	3 (yes)		1 (no)	
Maintenance/Service Comments:				
Maintenance/Service Score				

SAFETY

3 = Poor

2 = Fair

1 = Good

Comments

How visible is the restroom and area around it from public activity?	3	2	1	
How well lit is the interior?	3	2	1	
Does any shrubbery or panels create hiding places around the doors?	3 (yes)		1 (no)	
Is there lockable interior privacy screening?	3 (no)		1 (yes)	
Is it in a high crime area	3 (yes)		1 (no)	



Site Visit Quantitative Assessment Tool

Safety issues identified:				
SAFETY SCORE:				

LEVEL OF SERVICE (AMENITIES)	3 = Poor	2 = Fair	1 = Good	Comments
Is a drinking fountain available?	3 (no)		1 (yes)	
Are there working hand driers or well-stocked paper towel container (Mens)?	3 (no)		1 (yes)	
Womens?	3 (no)		1 (yes)	
Unisex?	3 (no)		1 (yes)	
Is there at least one sink (Mens)?	3 (no)		1 (yes)	
Womens?	3 (no)		1 (yes)	
Unisex?	3 (no)		1 (yes)	
Is there hand sanitizer available (Mens)?	3 (no)		1 (yes)	
Womens?	3 (no)		1 (yes)	
Unisex?	3 (no)		1 (yes)	
Are seat covers available (Mens)?	3 (no)		1 (yes)	
Womens?	3 (no)		1 (yes)	
Unisex?	3 (no)		1 (yes)	
Is hand soap available (Mens)?	3 (no)		1 (yes)	
Womens?	3 (no)		1 (yes)	
Unisex?	3 (no)		1 (yes)	
Does the restroom have a trash container (Mens)?	3 (no)		1 (yes)	
Womens?	3 (no)		1 (yes)	
Unisex?	3 (no)		1 (yes)	
Are mirrors provided (Mens)?	3 (no)		1 (yes)	
Womens?	3 (no)		1 (yes)	
Unisex?	3 (no)		1 (yes)	
Is there a diaper changing station (Mens)?	3 (no)		1 (yes)	
Womens?	3 (no)		1 (yes)	
Unisex?	3 (no)		1 (yes)	
Is there at least one urinal (Mens)?	3 (no)		1 (yes)	
What type of ventilation, passive or active (fan)?				
What type of locking mechanism does the facility have, none, keyed lock or magnetic lock?				
Amenities Comments:				
LEVEL OF SERVICE SCORE:				



Site Visit Quantitative Assessment Tool

BUILDING CONDITIONS	3 = Poor	2 = Fair	1 = Good	Comments
How is the cleanliness/appearance?	3	2	1	
Are toilets porcelain or stainless steel?	3=Porcelain		1=Stainless steel	
Are urinals porcelain or stainless steel?	3=Porcelain		1=Stainless steel	
Are sinks porcelain or stainless steel?	3=Porcelain		1=Stainless steel	
Are any of the fixtures broken or damaged?	3	2	1	
What is the overall condition of the exterior walls?	3	2	1	
What is the overall condition of the interior walls?	3	2	1	
Is there any noticeable floor or wall cracking?	3	2	1	
If there are interior partitions, are they firmly fastened and in good condition?	3	2	1	
What is the condition of the exterior doors?	3	2	1	
Is necessary signage clear and visible?	3	2	1	
Does the interior have a noticeable odor?	3	2	1	
Building Condition Comments:				
Building Score:				

NEIGHBORHOOD/COMMUNITY	No	Yes	Comments
Is the facility within or within sight of a park or recreational facility?			
Is the facility located within sight of a bus stop?			
Is the facility within sight of a bike trail?			

E3 Site Visit Logs: Aquatic Park

Community Elements

This facility is on the East side of the Aquatic Park lagoon which is bordered on the other side with Interstate 80/580. Aquatic Park has a Frisbee golf course and a children's playground adjacent to the restroom. It is also near a bike trail and bridge which crosses the interstate and connects to the Marina. The closest other public restrooms are in the Marina.

Design Elements

The restroom has a men's room to the left and a women's room to the right. In between is a maintenance and storage area. Only the central area has a solid roof; both the restrooms have wooden slats across the top. This was intended to prevent people from sleeping in the restrooms, but it allows all of the weather elements to enter.

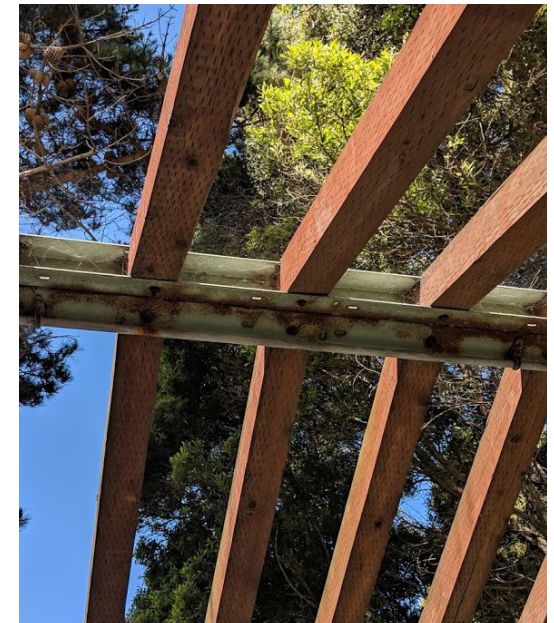
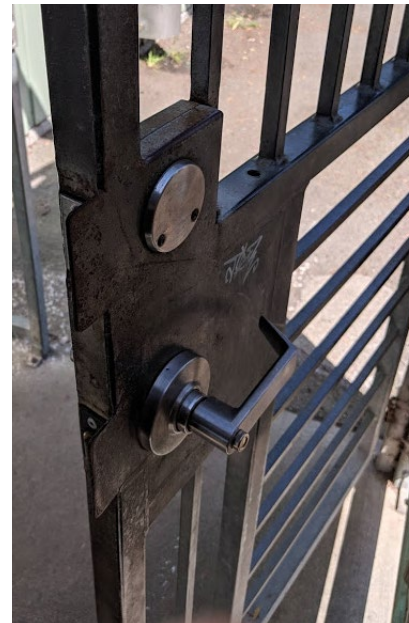
The exterior doors consist of bars and a lock. The men's room has a urinal, toilet, and sink with no separation between. The women's room has a toilet with no door, but a partition that separates it from the sink. Both restrooms are set up to be single person usage. It appears that someone from the outside could open the outside door by reaching through the bars, so it doesn't feel safe. At night it is locked with a deadbolt to make entry not possible.

Operation/Maintenance

The toilets, urinals, hand dryer, sink and soap dispensers are all push-button operated. They appear to be operating properly and to be resilient and resistant to vandalism. The facility is dirty and rust and stains are visible throughout.

Recommendations

- Repaint walls all the way to the floor
- Repair rust areas to prevent further deterioration
- Replace or adjust the door so that the user can lock it fully



E3

Site Visit Logs: Berkeley Public Library Main Branch - Downtown

Community Elements

This facility is located in the heart of downtown Berkeley on Shattuck Avenue at Kittredge. The library is the largest branch in the Berkeley Public Library system. Anyone is welcome to use the restrooms. There is a large homeless population that frequents the library and its restrooms.

Design Elements

The library has 5 floors, and there are men's and women's restrooms on floors 2, 3, and 5. On floor 4, there are two private unisex restrooms which are designated only for children or children and parents. There are no adult unisex facilities which causes challenges for non-cis gendered people.

Operation/Maintenance

The facilities are modern and well maintained. The restrooms were observed to be clean. Staff identify that some people wash their clothes or themselves in the restrooms. Staff also identify people waiting outside in the morning for the library to open to use the restrooms.

Recommendations

- New unisex facilities to accommodate transgender and gender nonconforming people
- Adding restrooms on the first floor for easy access
- Nearby 24-hour restroom to meet night-time demand



E3 Site Visit Logs: Cedar Rose Park

Community Elements

This restroom is at the South edge of Cedar Rose Park, between a bicycle/walking path and Cedar Avenue. It is well situated for users of the park or the Ohlone Greenway bicycle and pedestrian path.

Design Elements

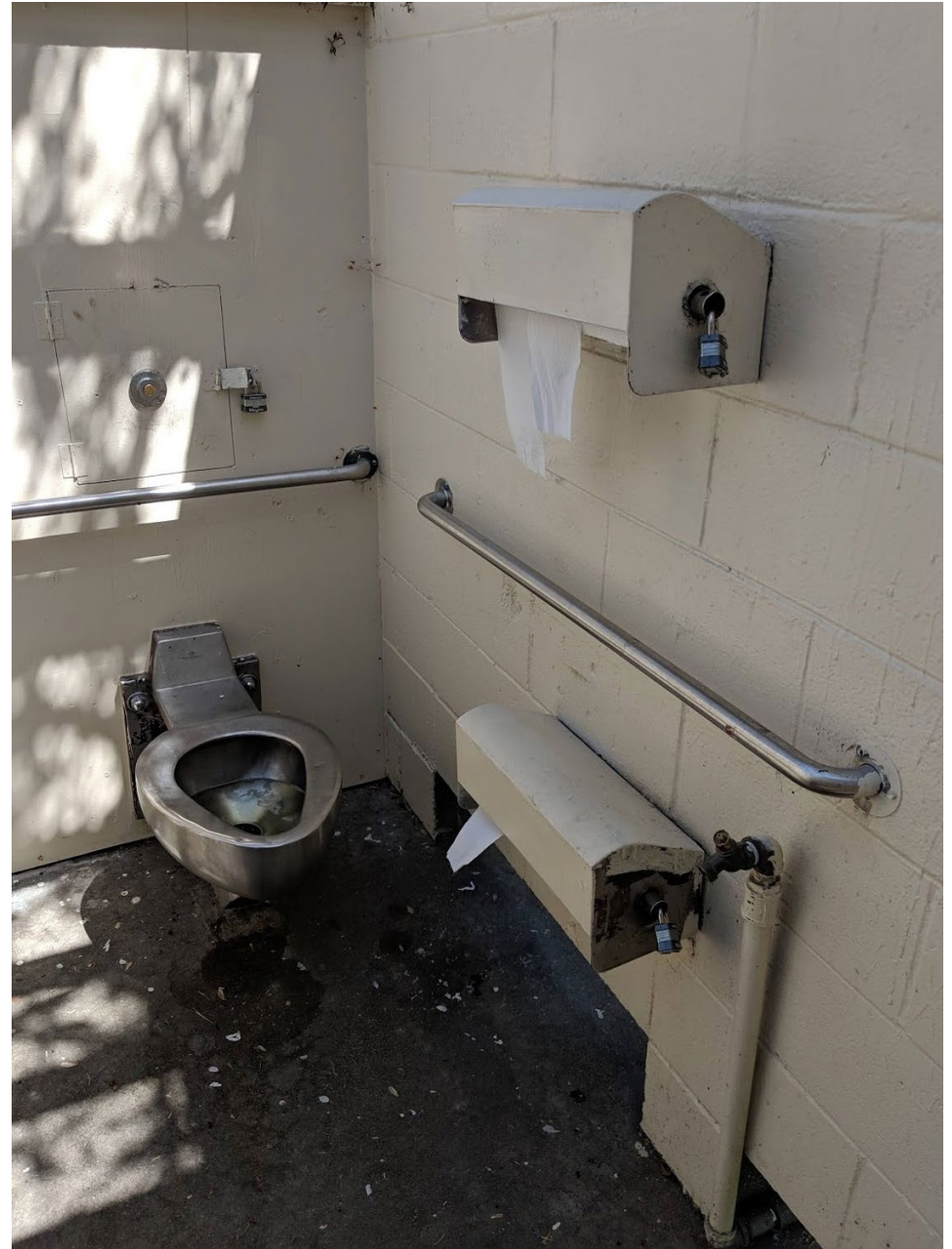
This is the most basic form of restroom that the City owns. It is a square concrete block construction, with an open doorway and only wooden slats for a roof. It is entirely open to the elements. The open doorway has no door, and only a chain which the user links across the doorway opening to signal that it is in use. There is no signage whatsoever and a push-button operated toilet. It cannot be locked, so it is open 24 hours per day, and due to the chain being the only barrier, it does not feel like a safe restroom.

Operation/Maintenance

The restroom has evidence of past graffiti. The City maintenance worker said that people often flush trash or other items down the toilet, such as t-shirts. This blocks up the sewer pipe, and the sewer has been cleared of obstructions numerous times.

Recommendations

- Plant trellises or mural to prevent graffiti
- Install a new full height locking door



E3 Site Visit Logs: Center Street Garage

Community Elements

The Center Street Garage is located in Downtown Berkeley and there are two restrooms on the ground floor.

Design Elements

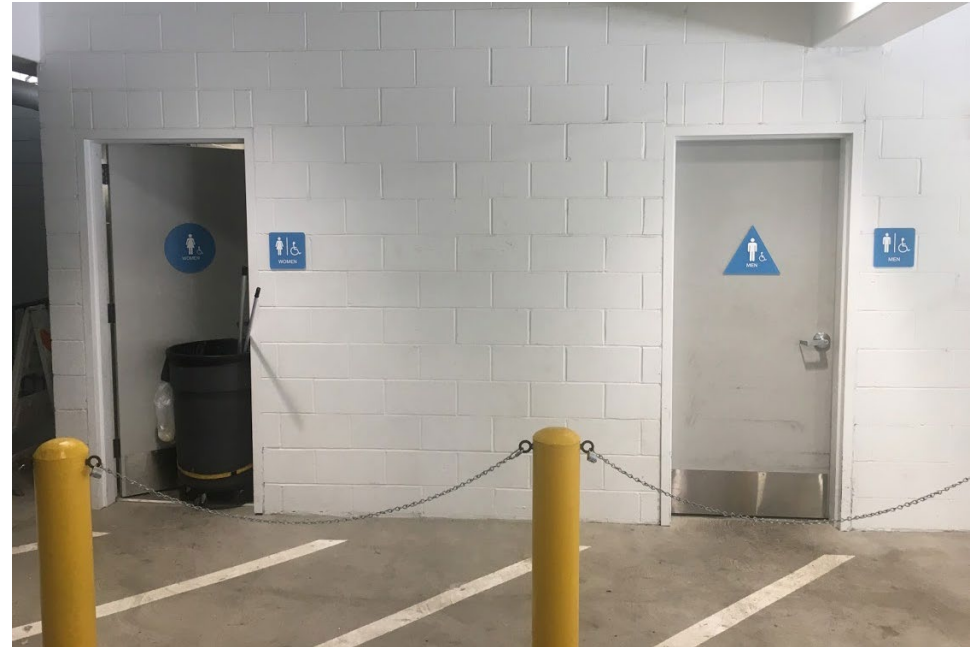
These restrooms are very new and clean. There is one men's and one women's room.

Operation/Maintenance

The restrooms are well maintained. All of the fixtures look to be very durable. The garage security guard monitors use of the restrooms

Recommendations

- Change gender signs to be gender neutral
- Add wayfinding and signage at the street level to increase public awareness of the restrooms



E3 Site Visit Logs: Channing Street Garage

Community Elements

The Channing Street Garage building includes a parking garage and ground floor shops and offices. There is one men's and one women's room on the ground floor near the center.

Design Elements

These facilities are rather basic with just one toilet in each room. There is an attractive artistic paint job on the exterior.

Operation/Maintenance

The restroom appears to have a history of heavy use and vandalism. This is only evident on the inside. The restrooms are insufficiently cleaned. There is exterior signage but it blends in with other street signage.

Recommendations

- Add more amenities to improve the user experience and hygiene
- Add a urinal to the men's room
- Increase frequency of cleaning
- Consider adding staffing
- Change the women's restroom to gender neutral and enable the closing and locking of the exterior door



E3

Site Visit Logs: Civic Center Restroom and Porta-Potties

Community Elements

There is a restroom facility on the back (West) side of the Civic Center building. There is signage that says it is open from 4pm-10pm daily. We arrived at 5pm and it was locked. The restroom apparently has been closed during school hours because of high school student usage, but it was observed to be closed during the what was supposed to be open hours.

Martin Luther King Jr. Park hosts many events throughout the year and the Saturday Farmer's Market is held adjacent to the park weekly, so the park receives a large influx of visitors throughout the year in addition to regular, daily visitors.

Design Elements

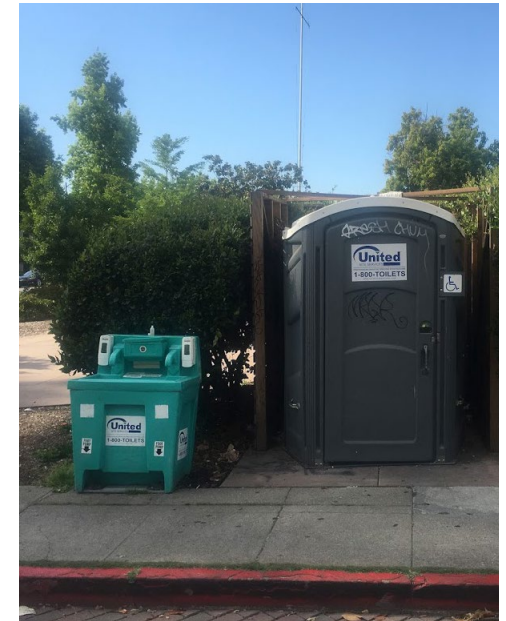
We could not inspect the restroom attached to the Civic Center building as it was locked. There are two porta-potties in the park. One is behind the Civic Center building, and one on the corner of Allston Way and Martin Luther King Jr. Way. The one behind the Civic Center building is more heavily used than the one on the street corner.

Operation/Maintenance

The porta potties were somewhat dirty and heavily used, but they were functioning. Only one of the porta-potties had an exterior handwashing sink.

Recommendations

- Consider staffing to enable the Civic Center restroom to be reopened longer hours
- Replace the sign to accurately indicate open hours
- Replace the porta-potties with more durable portable restrooms for the short-term
- Ensure that both portapotties have sinks
- Consider a new permanent restroom in the park in addition to opening the Civic Center restroom



E3 Site Visit Logs: Codornices Park

Community Elements

This restroom facility is in Codornices Park, which is east of the Berkeley Rose Garden. Codornices Park has various picnic facilities as well as playgrounds, hiking trails and sport recreation areas.

Design Elements

This is one of the simple single person use facilities without a door or sink or other amenities. There is a water fountain on the exterior. The lattice roof is not closed and allows all weather to enter the restroom.

Operation/Maintenance

The restroom is open 24/7. It appears to have a history of heavy use and vandalism.

Recommendations

- Add amenities (sink, soap, hand drying) to improve the user experience and hygiene
- Add a full-length door for user safety



E3

Site Visit Logs: Frances Albrier Community Center - San Pablo Park

Community Elements

These restroom facilities are located within the Frances Albrier Community Center located within San Pablo Park, and are only accessible while the building is open. There is a men's and a women's restroom. They are used primarily by children who are visiting the center for programs being held there. The website says that the audience area for the stage can accommodate up to 200 people at one event.

Design Elements

The restrooms are spacious, clean, and relatively modern, with porcelain fixtures.

Operation/Maintenance

No operations and maintenance problems were reported or observed. The incidence of vandalism is likely less due to the location inside the Community Center.

Recommendations

- Consider additional amenities to make the restrooms accessible to young children
- Change the restrooms to gender neutral if possible



E3 Site Visit Logs: Glendale-La Loma Park

Community Elements

Glendale-La Loma Park is nestled into the Berkeley Hills and is located adjacent to a softball field. The park is in very good condition.

Design Elements

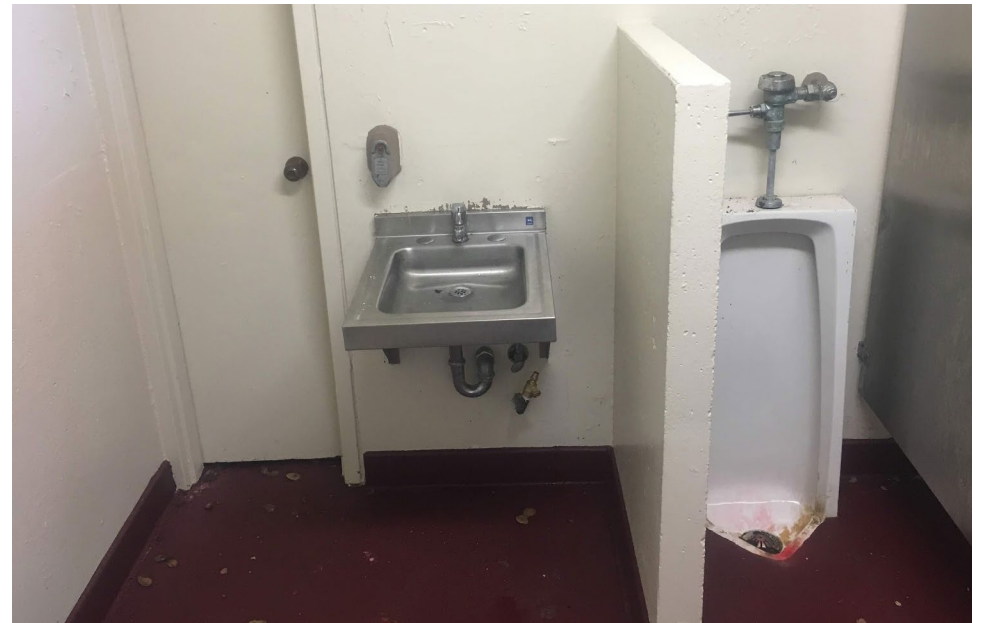
There is one men's and one women's restroom, both common use. They were in good condition and clean.

Operation/Maintenance

This is a very low maintenance facility, with just two bathrooms. No known maintenance problems exist. The restrooms are clean and in good condition.

Recommendations

- Change restrooms to be gender neutral



E3 Site Visit Logs: Grove Park

Community Elements

Grove Park is located in South Berkeley along Martin Luther King Jr. Way and includes a baseball field, tennis courts, and basketball courts. Adjacent to the West is Martin Luther King Jr. Youth Services Center. The Berkeley Public Library South Branch is located across the street to the East. The restrooms are located in between the tennis and basketball courts. The MLK Services Center and the Library also have publicly accessible restrooms.

Design Elements

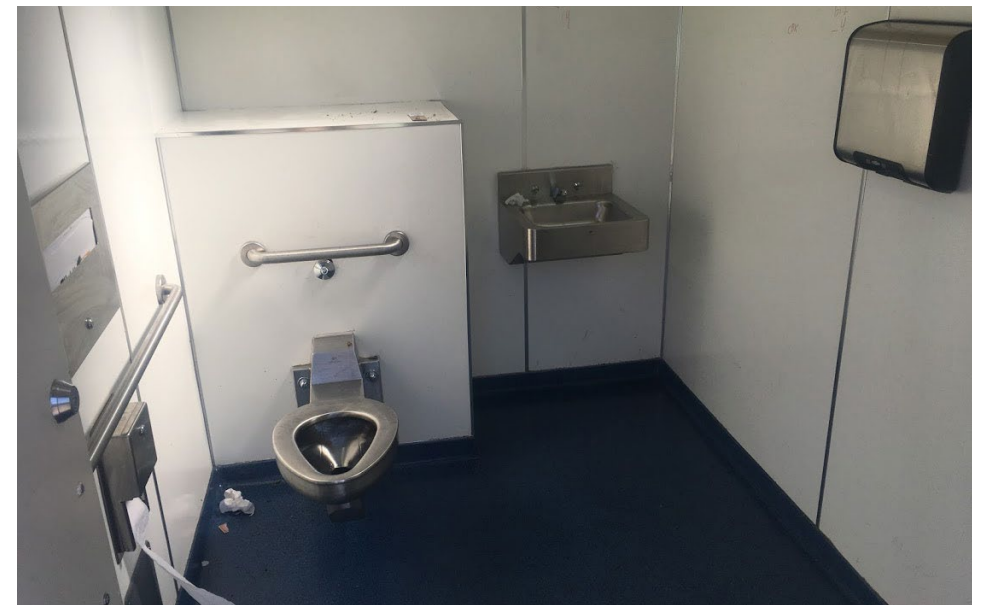
Two single person use restrooms, one men's and one women's facility. Both are modern and clean. Since they are single use.

Operation/Maintenance

The operation of the toilets and sinks is by push button, and they were operating in good condition at the time of the site visit.

Recommendations

- Change signage to gender neutral



E3 Site Visit Logs: Harrison Park

Community Elements

Harrison Park is a recreational park which includes an athletic field (currently under renovation) and the Berkeley Skate Park. On the date of the site visit, the skate park was very busy. Staff at the skate park said that the restroom is very busy with homeless people and with people who live in campers in the neighborhood. Immediately adjacent to the restroom is Harrison House an 80-bed shelter which provides mental health, housing, employment, education, drug/alcohol recovery services for homeless individuals and families.

Design Elements

The facility is designed to accommodate heavy use and potential vandalism. There is a large piece of stainless steel above the sinks which was intended for use as a mirror, but does not actually function as a mirror because it does not produce a clear reflection.

Operation/Maintenance

Staff said that the two sinks at the facility are used regularly for bathing and washing clothes. Staff also reported heavy use and maintenance needed.

Recommendations

- Replace the mirror with a functioning mirror
- This facility could be expanded or consider additional facilities in the nearby area
- Shower and laundry facilities needed in this vicinity



E3

Site Visit Logs: James Kenney Community Center

Community Elements

The James Kenney Community Center is a community center with multiple facilities including basketball courts indoors and softball outdoors.

Design Elements

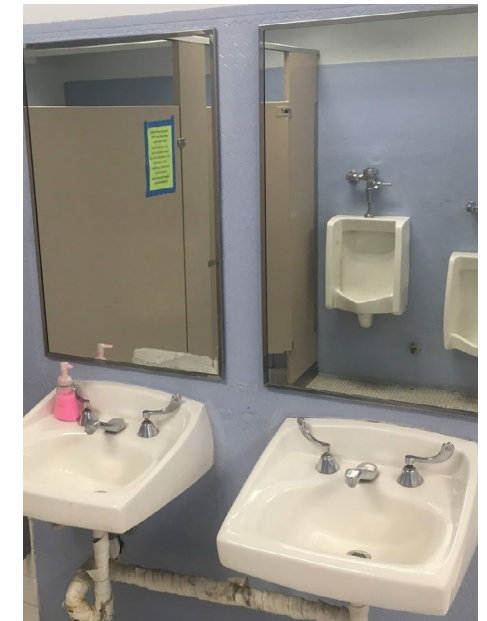
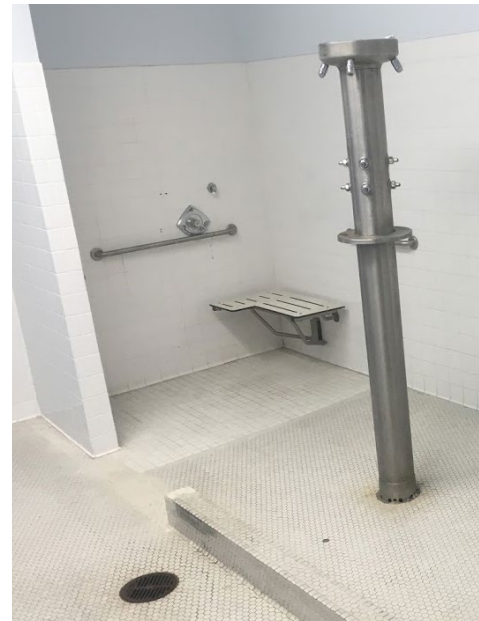
The interior has a men's and a women's locker room on the first floor as well as separate men's and a women's restroom on the second floor and a unisex restroom with exterior access. There is also a portapotty in the southeast corner of James Kenney Park.

Operation/Maintenance

There is regular staffing for the indoor and outdoor facilities and many youth programs as well as open gym times. The showers have been capped off in both locker rooms and are not in use. This is intended to prevent homeless people from showering in the locker rooms. The unisex bathroom is single use and is generally locked to prevent homeless people from sleeping in it.

Recommendations

- Consider necessary staffing and operational hours to open showers and exterior restroom



E3 Site Visit Logs: King Swim Center

Community Elements

The King Swim Center is one of two public swimming pool facilities in Berkeley. It is located in North Berkeley adjacent to King School Park and Martin Luther King Jr. School.

Design Elements

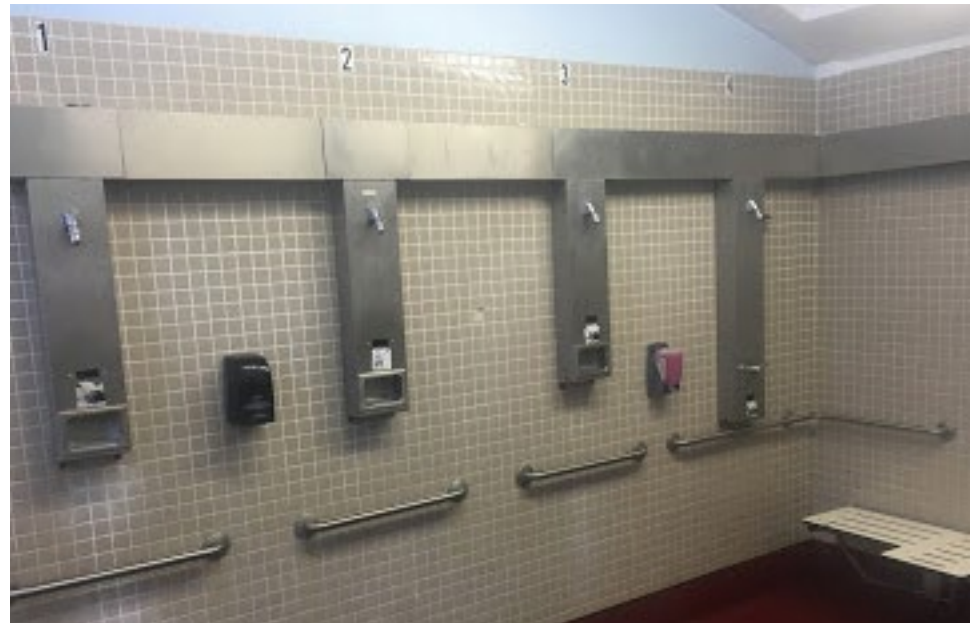
The facility includes several pools and a men's and a women's locker room. The facility is somewhat dated but everything appears functional. The showers are open room showers with multiple shower heads close to each other.

Operation/Maintenance

No significant maintenance issues were reported. Showers are offered for users of the pool and can be bought individually or in packages. The staff mentioned that there have been incidences of people using the shower without paying, and if that occurs, then the person will receive a warning.

Recommendations

- The facility could be modernized and the aesthetic appearance improved, but it is currently functioning well
- Add a unisex shower and dressing area
- And/or renovate the shower area with several single stall showers for privacy, gender neutrality, and safety



E3 Site Visit Logs: Live Oak Community Center

Community Elements

The Live Oak Community Center is a hub for many community programs including sports and the Live Oak Theater. There are four restrooms inside, and an outdoor restroom which is open 24 hours.

Design Elements

This is a multi-purpose facility. The restrooms are somewhat dated, however the facility is scheduled to be closed for major renovations from August 2019 to sometime in the summer of 2020.

Operation/Maintenance

The restrooms are clean and well maintained, with staff present in the building whenever the facilities are open.

Recommendations

Since the building is being renovated and plans are already set, there are no recommendations at this time



E3 Site Visit Logs: Live Oak Park

Community Elements

This restroom facility is in Live Oak Park, which also includes the Live Oak Community Center. The park is sometimes used for festivals such as the Berkeley World Music Festival. During these events, additional portapotties are brought in temporarily. The park has various picnic facilities, a creek that runs through it, and an open field area.

Design Elements

This is one of the simple single use facilities without a door. It has no roof, but an open trellis overhead. The trellis is covered with attractive vines. This restroom has a drinking fountain on the exterior and a portable hand washing station with non-potable water, soap and paper towels in front.

Operation/Maintenance

The restroom is open 24/7. It appears to have a history of heavy use and vandalism. All systems were functioning at the time of site visit.

Recommendations

- Add more amenities (permanent sink, toilet seat covers) to improve the user experience and hygiene
- Add a full-length door for safety



E3 Site Visit Logs: Marina K Dock

Community Elements

This restroom facility is publicly accessible to people visiting the Marina and is located by the entrance to Dock 'K'.

Design Elements

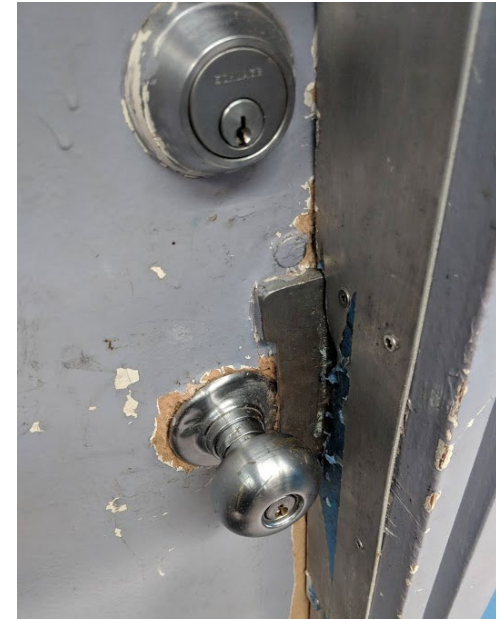
This restroom facility appears to be roughly the same age as the L/M Dock restroom nearby. It is divided into one men's and one women's room with a maintenance room in between. The fixtures are porcelain.

Operation/Maintenance

The doors appear to have been damaged in previous break-ins. The restrooms appear to be very worn. The floor paint is chipped and worn away.

Recommendations

- Repaint or tile the floors
- Replace the existing door with solid doors with new locks. A magnetic door locking system may help with security.
- Replace the mirror with a more functional mirror



E3 Site Visit Logs: Marina Shorebird Park

Community Elements

This facility is located at the southwest corner of the Berkeley Marina, adjacent to the Shorebird Park Nature Center, the Adventure Playground, and a small Amphitheater. It is well situated for users of these park facilities.

Design Elements

There is one men's and one women's bathroom with a maintenance room in between. Similar to the nearby South Parking Lot restroom, it has a magnetic lock.

Operation/Maintenance

The maintenance staff reported recent vandalism in the men's restroom.

Recommendations

- Replace gendered signs with gender neutral signs
- Consider replacing fixtures with more durable fixtures
- Consider staffing



E3 Site Visit Logs: Marina South Cove

Community Elements

This restroom facility is very new and modern, and is located at the South end of the Berkeley Marina. It is located adjacent to the UC Berkeley Aquatic Center, Cal Adventures and the Cal Sailing Club.

Design Elements

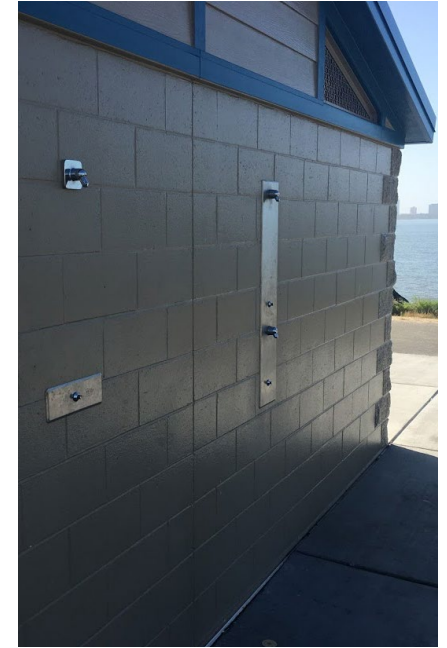
There are four separate restroom facilities in one building; a men's room, a women's room and two unisex toilets. The men's and women's rooms have magnetic lock systems. If someone finds themselves locked in after the 5pm closing time, they can push a button and the magnet will release. The unisex bathrooms are single person usage and can be locked with a deadbolt from the inside. Two cold outdoor showers are included on the North side.

Operation/Maintenance

When we visited, both unisex bathrooms were locked and the maintenance person said that the doors are always locked except when there is a big event happening and they they are opened only during the event. This is done to prevent people from living in the restroom. There is a back of house utility room in the center of the building with all of the exposed plumbing and control systems. It was very well organized and clean.

Recommendations

- Consider staffing to open the unisex facilities
- Change the gendered facilities to gender neutral



E3

Site Visit Logs: Martin Luther King Jr. Youth Services Center

Community Elements

Martin Luther King Jr. Youth Services Center is located in South Berkeley adjacent to Grove Park. Grove Park has one restroom facility. The facility staff said that the gym is usually used for programmed youth activities, but there are also open gym hours.

Design Elements

There are three restroom facilities inside the building. There is also a unisex restroom for staff only, and a men's and a women's room. The men's room has showers, but these have been capped off and are out of order.

Operation/Maintenance

The restrooms were in good working condition and relatively clean. There were no reports of significant maintenance issues.

Recommendations

- Consider opening the unisex restroom for public use or adapting some of the existing restrooms to unisex
- Consider upgrades and staffing to reopen shower facilities



E3 Site Visit Logs: Rose Garden

Community Elements

This restroom facility is adjacent to the Berkeley Rose Garden and a tennis court. It can also serve people using Codornices Park which is just across the street, and it can be easily accessed via a tunnel under the road.

Design Elements

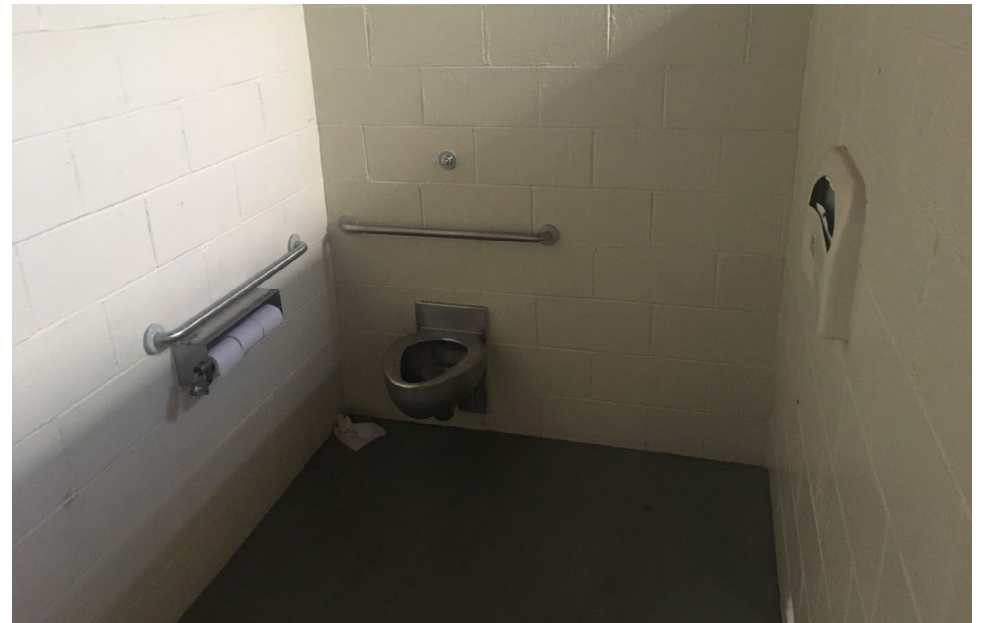
This facility is divided into a men's room and a women's room with an attached maintenance room behind. It is clad in wood paneling and it fits in well with the vegetation surrounding it. There are flowering vines planted around it, so it is covered with flowers and it fits in well with the adjacent Rose Garden.

Operation/Maintenance

The restrooms are open during the time that the Rose Garden is open. It is in good working condition.

Recommendations

- Replace gender signs with unisex signs



E3 Site Visit Logs: San Pablo Park

Community Elements

These restroom facilities are located within San Pablo Park between tennis courts and baseball fields. It is well situated to serve visitors to the park.

Design Elements

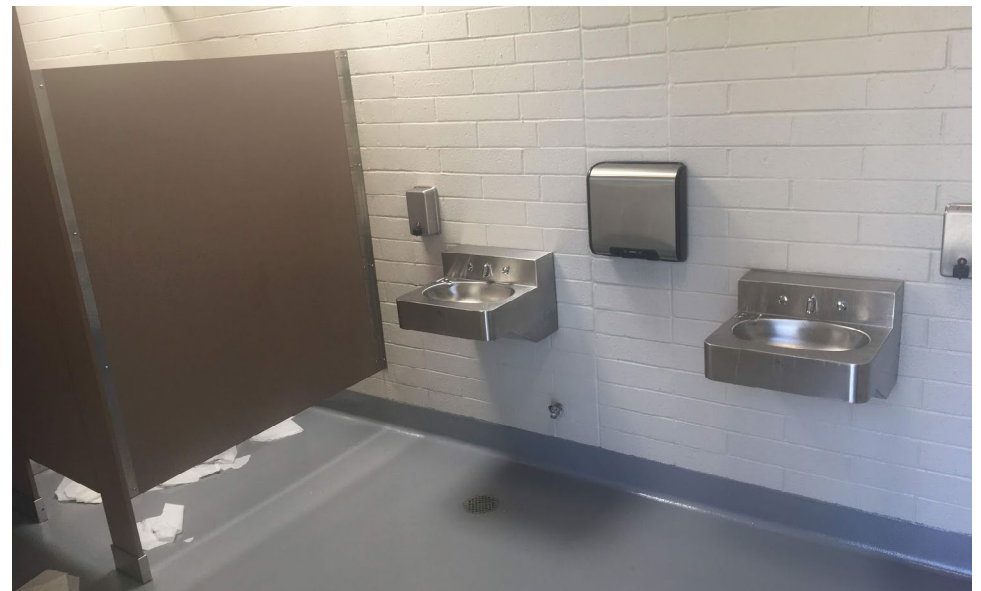
There is one men's room and one women's room. All of the fixtures and appliances are brand new. The restrooms have forced air ventilation by a fan, instead of passive, as in the other restrooms.

Operation/Maintenance

The restroom appears to be designed to be very durable and resistant to vandalism.

Recommendations

- Change gendered restrooms to unisex
- Improve wayfinding and signage



E3 Site Visit Logs: Strawberry Creek Park

Community Elements

This restroom facility is in Strawberry Creek Park, which includes a nature area along Strawberry Creek, open recreation areas, a playground, a soccer field, and tennis courts. The restroom is in the southern end of the park, well situated for serving the users of the sports facilities.

Design Elements

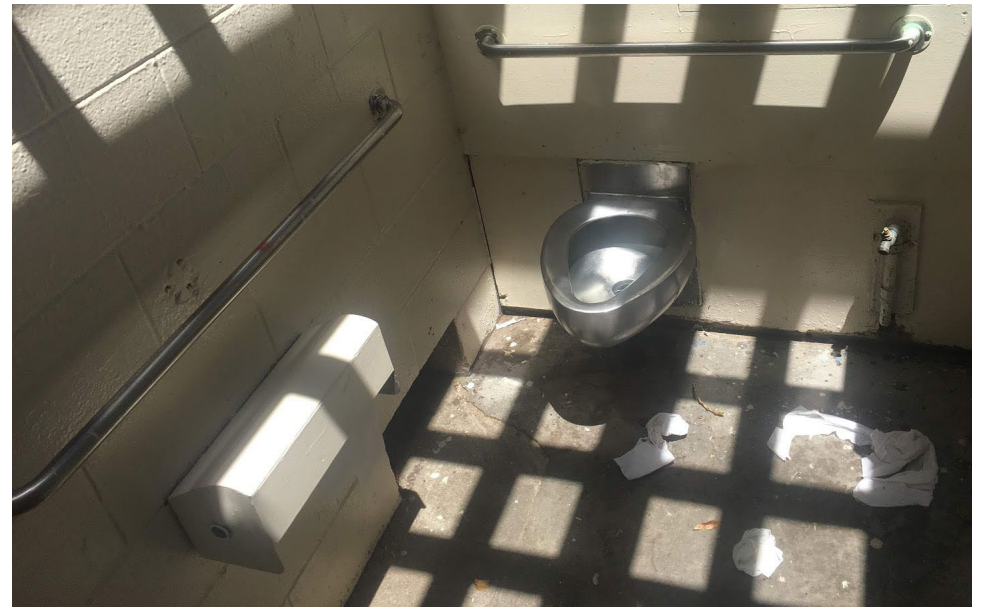
This is one of the simple single person use facilities without a door. There is an open trellis overhead, but no vines.

Operation/Maintenance

The restroom is open 24/7. It appears to have a history of heavy use and vandalism.

Recommendations

- Add amenities (sink, soap, hand drying) to improve the user experience and hygiene
- Plant vines to cover the overhead trellis and walls to improve the aesthetic appearance



E3 Site Visit Logs: Virginia-McGee Totland

Community Elements

The Virginia-McGee Totland is a park designated for small children in South Berkeley. The park is designated for children and their parents only and it is completely fenced in. There is one building on the property and it currently is used by the Jon's School of Music, which is a children's music program.

Design Elements

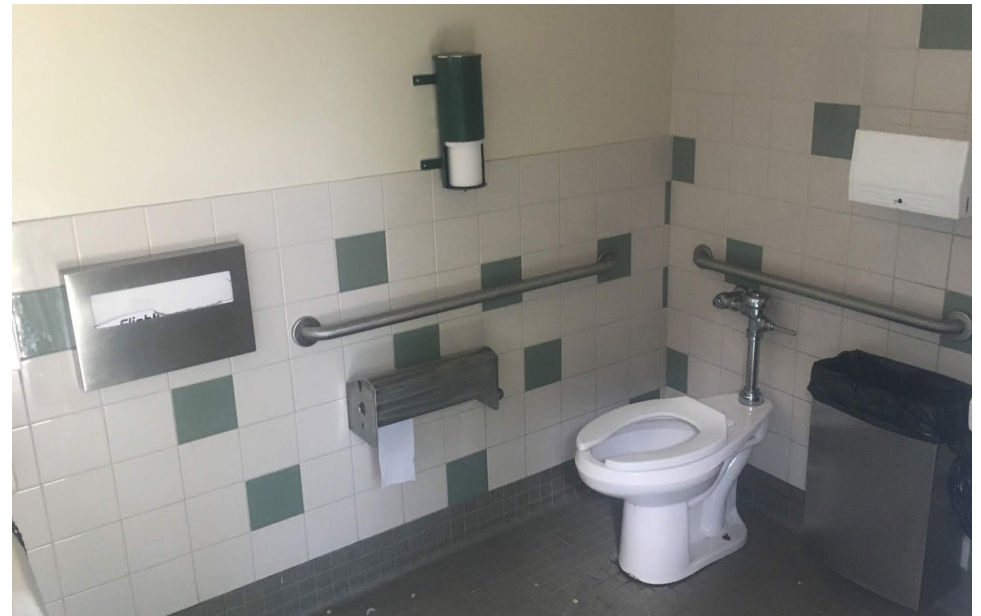
There is one private unisex restroom, which has full facilities for diaper changing, etc.

Operation/Maintenance

There are no known problems with the facilities

Recommendations

- Add amenities to make the facility more accessible to young children: ie. a step for the sink, child friendly toilet seat, etc.



E3 Site Visit Logs: West Campus Swim Center

Community Elements

The West Campus Swim Center is one of two public swimming pools in Berkeley. It is quite similar to the King Swim Center. West Campus is located near University and Curtis Streets in West Berkeley.

Design Elements

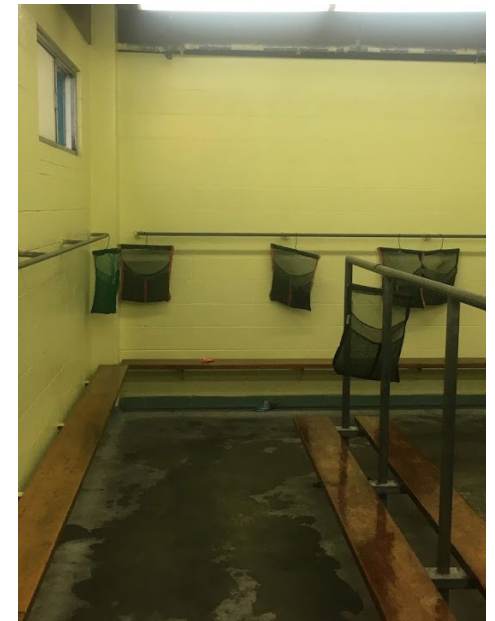
This is a fully operational swimming facility with a men's and a women's locker room. Showers are located in an open shower rooms with shower heads in close proximity.

Operation/Maintenance

There is a significant number of staff at the facility including lifeguards and swim teachers during open hours. There were no significant maintenance problems reported. Showers are pay to use for the public at \$3 each, or additional available packages.

Recommendations

- Add a unisex shower and dressing area
- And/or renovate the shower area with several single stall showers for privacy, gender neutrality, and safety



E3 Site Visit Logs: Willard Administration Building

Community Elements

The Willard Swim Center was formerly a public swimming pool facility which was defunded and now exists as an administrative center and public showers. It is the only publically owned shower facility in Berkeley not connected to a swim center.

Design Elements

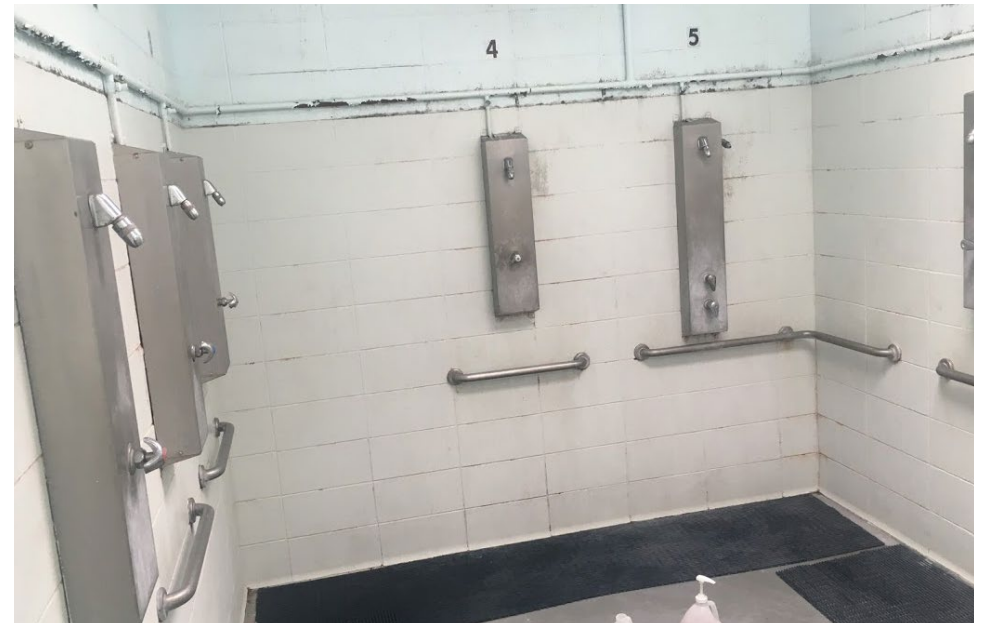
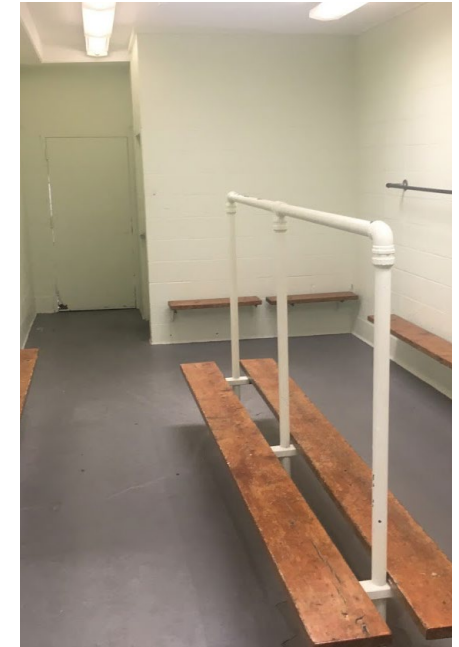
There is a men's and women's locker and shower rooms. Shower rooms are open with shower heads in close proximity to each other.

Operation/Maintenance

The facility is open for showers from 7:30-8:30 pm Monday through Friday and 9:00-10:00 am on Saturday and Sunday. Free towels and soap are provided. Restrooms are also available at this time. There is some wear on the facility with peeling paint, etc.

Recommendations

- Add a unisex shower and dressing area
- And/or renovate the shower area with several single stall showers for privacy, gender neutrality, and safety
- Repaint and upgrade facility



E3 Site Visit Logs: Willard Park

Community Elements

This restroom is in Willard Park, south of the UC Berkeley campus and at the southeast end of Willard Park. The restroom is part of a building which is used for youth activity programs. The park has tennis courts and an administration building formerly used for Willard Pool.

Design Elements

This is one of the simple single person use facilities with a grated metal door.

Operation/Maintenance

The restroom is open 24/7. It appears to have a history of heavy use and vandalism.

Recommendations

- Add amenities (sink, soap, hand drying) to improve the user experience and hygiene
- Replace or amend door so that someone outside can not unlock it to increase safety

