

TRANSPORTATION ELEMENT

INTRODUCTION



The Transportation Element establishes policies for the movement of people, goods, and vehicles through the city. To successfully compete with other retail and entertainment destinations, Downtown must offer an attractive sense-of-place. In the Downtown Area, transportation design and operation decisions should give priority to pedestrians.

The Transportation Element and Land Use Element are closely related by land use policies that direct new development to areas of the city already well served by public transportation services and land use policies emphasizing the importance of transit-oriented design in new development. The Transportation Element emphasizes the importance of making more efficient use of the existing transportation systems that serve these areas. The relationship between the two Elements is also evident in the correlation of the Land Use Diagram and the Transportation Element maps, which identify the major vehicular, transit, bicycle, and emergency

evacuation routes through the city. The Vehicular Circulation Network map, Transit Network map, Bicycle Circulation Network map, and Emergency Access and Evacuation Network map are included at the end of this Element.

The following plans and studies inform the Transportation Element:

- Downtown Plan, South Berkeley Plan, South Shattuck Strategic Plan, and University Avenue Strategic Plan.
- Berkeley Resource Conservation and Global Warming Abatement Plan (1998).
- Berkeley Bicycle Plan (2000).
- Berkeley Bicycle and Pedestrian Safety Task Force Recommendations (2000).
- Southside/Downtown Transportation Demand Management (TDM) Study (2001).

POLICY BACKGROUND

A detailed description of transportation conditions in Berkeley is included in Conditions, Trends and Issues: A Background Report for Updating the City's General Plan (1993). The major transportation issues addressed in the Transportation Element are summarized below.

Traffic and Congestion

Since 1977, traffic volumes and traffic congestion have generally continued to increase in Berkeley and in the larger region. Between 1990 and 2020, the vehicle miles of travel on Bay Area roads is expected to grow by 59 million miles per day, an increase of 55%. Interstate 80 through Berkeley, Ashby Avenue, University Avenue, College Avenue, and San Pablo Avenue continue to experience significant congestion during the commute hours.

The table below includes a sample of 24-hour traffic volumes on major streets in Berkeley. As shown in the table, traffic volumes have generally been increasing. On some of the most congested streets (i.e., College Avenue, lower University Avenue, and the Warring/Derby corridor) the high level of congestion, and City efforts to increase safety through addition of stop signs or new signals, resulted in an actual reduction in volumes of traffic.

Figure 1: Sample Traffic Volumes

Sample 24-Hour Traffic Volumes				
Sample Street Segment	1977 24-Hour Volume	1987 24- Hour Volume	2000 24-Hour Volume	Percent Change 1977 to 2000
San Pablo (Ashby to Dwight)	23,400	24,000	29,500	+26%
University (Sacramento to California)	29,000	36,200	32,400	+12%
Shattuck (Dwight to Adeline)	30,000	33,500	36,400	+21%
Shattuck (south of Ward)	20,000	19,000	22,300	+12%
Ashby (Shattuck to Telegraph)	22,500	30,500	24,700	+10%
Warring (Derby to Dwight)	21,500	25,000	20,500	-5%
College (Ashby to Derby)	15,200	14,200	13,000	-14%
Bancroft (Piedmont to College)	6,000	6,700	5,100	-15%
Adeline (south of Ashby)	15,000	15,000	18,100	+21%
Telegraph (Ashby to Oakland City Line)	23,000	24,600	28,200	+23%
Telegraph (north of Ashby)	26,600	26,000	19,900	-25%

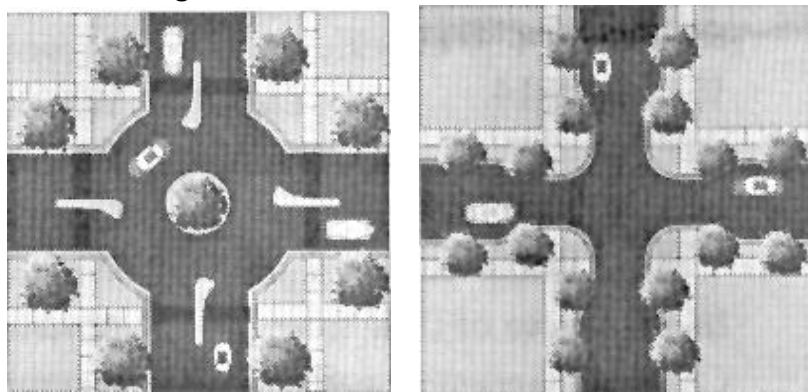
The increase in traffic volumes and congestion in Berkeley may be attributed to several factors:

1. Growth in the local and regional economy has resulted in additional jobs and commuter trips into Berkeley each day. With increasing housing prices regionwide and in Berkeley in particular and a limited supply of housing affordable to low- and middle-income workers, the growing Berkeley workforce is increasingly forced to look for housing outside of Berkeley. Between 1980 and 2000, the number of jobs in Berkeley increased by about 18,600 and the number of housing units only increased by about 541.
2. Growth in the retail sector, both locally and in neighboring jurisdictions, has resulted in additional non-commute trips.
3. The typical Berkeley household owns more cars. Between 1970 and 1990, the population decreased by over 13,000 in Berkeley, but the number of cars owned by Berkeley residents increased by 10,000, which may indicate that each household in Berkeley is making more daily non-commute trips.
4. Lack of adequate public funding for transit resulted in service reductions in the 1990s, which discouraged transit use.
5. Federal and State policies to subsidize the cost of gasoline, road construction, and maintenance encourage automobile ownership and use.
6. Lack of a strong regional planning effort to address regional congestion has resulted in a piecemeal and sometimes contradictory strategy for improving the regional transportation system.

Traffic Management, Traffic Calming, and Congestion

Increased volume and congestion result in increased neighborhood traffic and neighborhood requests for traffic management and traffic calming devices. Berkeley has over 30 years of experience in neighborhood traffic management and calming. During this time, traffic management improvements have included traffic signal timing and coordination, bicycle and automobile activated signals (about 25% of all signals are activated), rush-hour on-street parking restrictions, addition of left-hand-turn signals, and other improvements to improve the flow of traffic. To calm the flow of traffic in neighborhood areas, the City has used diverters, speed humps, and signage. Although many of these efforts have successfully reduced traffic on certain residential streets, the City's diverter system has also resulted in higher volumes on some arterial streets and some residential streets. Similarly, citizen complaints about the effects of speed humps on the disabled and concerns about emergency vehicle access resulted in a 1995 moratorium on the installation of additional speed humps.

Figure 2: Traffic Circles and bulb-outs



Traffic Circles and bulb-outs have been used successfully in Berkeley neighborhoods to calm traffic without diverting traffic onto neighboring streets. Recent citywide traffic counts illustrate the relationship between traffic calming and congestion in Berkeley. In response to neighborhood concerns about high traffic volumes and high speeds on the Derby-Warring corridor, the City added several stop signs and directional signs directing motorists to Telegraph Avenue. As a result of the changes, traffic has slowed, and congestion on the corridor has increased, but the numbers of vehicles on the corridor have decreased as drivers search for alternatives to avoid the congestion. On University Avenue, the City added left-turn signals to facilitate turning at Sixth Street and improve safety at the intersection. The changes immediately improved safety at the intersection, which improved access to Sixth Street, but also resulted in a dramatic increase in congestion on University Avenue. A review of the citywide traffic counts shows that over the last ten years, despite the congestion, traffic volumes on University Avenue have actually lessened, and as might be expected, traffic volumes on Hearst Avenue (parallel to University Avenue) have increased as drivers look for alternatives to the congested University Avenue.

In conclusion, it may be stated that in general the city's vehicular network of major and collector streets (see Figure 10) is very close to volume capacity. Any action that encourages more people to drive will result in more congestion. Any action that discourages use of one major or collector street by diversion or slowing of traffic is likely to increase congestion and traffic volumes on other, nearby streets. In addition to inconvenience, congestion contributes to the deterioration of air quality in the Bay Area and an increase in health problems. Increasing traffic volumes and worsening congestion in Berkeley and the Bay Area have contributed to increasing air quality problems throughout the region. In 1998, the Environmental Protection Agency revoked the Bay Area's clean air designation.

Although the additional congestion caused by modifications to city streets in an effort to slow or calm traffic is often an uncomfortable side effect, many traffic and transit experts argue that increased congestion is one of the most common reasons drivers choose to shift from the automobile to other transportation modes. (In addition to congestion, the availability of low-cost parking and availability of public transportation alternatives also influence commute decisions. Both of these issues are addressed below.) As congestion increases, the amount of time and money that is needed to drive increases. As the costs and time spent driving increase, these

factors begin to become comparable to public transportation. However, for public transportation to be an effective alternative, changes such as "transit-only" lanes become necessary to ensure that public buses or trolleys are not caught in the automobile congestion.

Parking

With the growth of the economy, both locally and regionally, and the increase in traffic volumes, parking continues to be an issue in Berkeley. Long term City policy has discouraged commuter parking in Downtown, generally by encouraging high costs for all day parking. However, as parking rates have climbed, "meter feeding" on-street parking has become a tempting option for people who park all day. Downtown is also perceived as lacking sufficient parking, partially because there is a lack of signage directing people to available parking. Effective parking requires a comprehensive approach that distinguishes between the needs of retail patrons versus commuters and looks to the price of parking and information technologies as a means to manage the parking supply more effectively.

In the Southside area and in neighborhood and avenue shopping areas, public parking and on-street parking are sometimes filled to near capacity. These near capacity conditions continue to generate problems for adjacent neighborhood areas, which experience on-street parking shortages due to the overflow from nearby commercial areas. The University of California is a major generator of parking demand and provides a significant number of off-street parking spaces on and around the campus. Much of the University parking is restricted to University staff, faculty, and students and below-market-rate pricing has fostered a high demand among the University parking users for the limited number of spaces. The overflow parking problem in the neighborhoods surrounding the Downtown and the Southside is exacerbated by sometimes inadequate enforcement of the residential permit parking system, inappropriate issuance of permanent and temporary parking permits, and all-day parkers who are willing to move their automobiles every two hours or feed meters all day.

Pedestrians, Bicyclists, and Safety

Compared to other cities in the county and in the state, Berkeley has a very high number of residents who walk to work. According to the 1990 Census, more Berkeley residents walked to work (17%) than took transit (15%). The highest walk-to-work rates are found in the neighborhoods immediately adjacent to the University and Downtown between Cedar to the north, Ashby to the south, and Martin Luther King Jr. Way to the west. In the Southside, over 50% of the employed residents reported that they walked to work in 1990. The percentage of Berkeley residents who walked to work was about four times the percentage of walking commuters for the county as a whole (4%). These walking trips have a significant effect on the city's street system. If Berkeley's rate of walking to work were as low as the county average, as many as 12,500 automobile trips per day would be added to Berkeley traffic. In addition to commute trips, many Berkeley citizens walk for pleasure and for non-work-related trips. In a 1989 survey of Berkeley residents, 70% said that they sometimes walked to a store to shop or run errands. In recent years, the City of Berkeley has continued to make positive improvements to the street network to

facilitate pedestrian travel, such as the widening of the Center Street sidewalk between BART and the University of California campus.

As envisioned in the 1977 Master Plan, bicycles continue to be an important mode of transportation in Berkeley. In 1990, about 5% of employed Berkeley residents commuted by bicycle, a high percentage for an urban area. The City has installed additional public bicycle racks in recent years and designated a network of bicycle boulevards, which are identified on the Bicycle Circulation Network map. In April 2000, the City Council adopted the Berkeley Bicycle Plan and Bicycle Boulevard Design Tools and Guidelines. The Bicycle Plan is incorporated by reference into the General Plan and the Bicycle Plan's goals are included below in the policy section of this chapter. The Bike Plan's network of bikeways is shown on the Bicycle Circulation Network map at the end of the Element.

Despite efforts to improve pedestrian and bicycle safety, Berkeley has more than two times the rate of pedestrian, and more than four times the rate of bicyclist injury than other cities. In comparison to 44 cities of a similar size in California, Berkeley ranks number one in both pedestrian and bicycle injury and death. This disparity is partly explained by the fact that Berkeley has higher rates of walking and bicycling than other cities in the state. Moreover, Berkeley is home to a large disabled community, which faces the same dangers as pedestrians and bicyclists as they attempt to negotiate crowded streets throughout the city.

The following table (Figure 3) identifies the 15 most dangerous intersections in the city for bicyclists and pedestrians:

Figure 3: Dangerous intersections in Berkeley

Intersection	Number of Accidents
Shattuck at University	29
Durant at Telegraph	15
Ashby at Sacramento; Oxford at University; and Gilman at San Pablo (tied)	13 each
Allston at Shattuck; Ashby at MLK; San Pablo at University; and Bancroft at Bowditch (tied)	12 each
Ashby at San Pablo; Bancroft at Dana; College at Russell; Hearst at Oxford; Milvia at University; and MLK at University (tied)	11 each

Public Transportation

Since 1977 public transportation services have increased throughout the city. With the cooperation of AC Transit, every residence in Berkeley is within one-quarter mile of a transit line. In 1993, based on the transit service measure of "seat miles per capita" Berkeley had nearly double the transit service of the average metropolitan area in the United States, placing the city in the top 10 metropolitan areas nationwide. As of 1999 about 1,200 buses passed through the Downtown on a daily basis, and all of AC Transit's 18 local bus lines connect with a BART station.

Although Berkeley remains one of the top 25 cities in the country in percentage of commuters using public transportation, public transportation remains the "least preferred" mode of transportation for many Berkeley residents. During the 10 years between 1980 and 1990, the citywide population remained stable, but bus ridership declined from 17% to 7% for Berkeley resident commuters, and BART ridership increased only slightly, from 3% to 8%. During this same period, the number of Berkeley residents who reported that they took public transportation dropped by 1,500 to approximately 15% of the population, and the residents who reported that they drove alone to work increased approximately 3,700 to a total of 24,742 (approximately 25% of the population). Although ridership numbers in Berkeley for AC Transit since 1990 are not available, data from BART turnstiles in Berkeley show that between 1990 and 1999 ridership increased about 4%.



Public transit remains the only mode available for many Berkeley residents. AC Transit estimates that approximately 76% of its riders did not have the option of using an automobile for their trips. Of the 2,000,000 Bay Area residents who rely on non-automobile modes of transportation, most are seniors, children, low-income, or disabled. Historically, urban transit systems such as AC Transit and San Francisco Muni have been underfunded relative to the suburb-serving systems such as BART. BART receives a far higher public subsidy (\$3.00 per passenger) than AC Transit (\$0.65 per passenger).

Since 1990, regional agencies, transportation agencies, city governments, public institutions, AC Transit, and BART have been making improvements to the public transportation system to increase ridership and reduce traffic congestion in the Bay Area. AC Transit and cities in the region have been working on improvements to the system to make it a more attractive alternative for more Bay Area residents. The San Pablo Avenue corridor, extending from Richmond in the north to Oakland in the south, is the focus of several transit improvement projects, including the Signal Interconnect Study, Transit Operations Study, and the Bus Rapid Transit Technical Assistance Program. The San Pablo Avenue Signal Interconnect Study will coordinate all traffic signals along San Pablo Avenue, giving priority to buses and emergency vehicles. The San Pablo Avenue Operations Study is examining improvements to transit services and facilities to offer faster bus service along the corridor. The Federal Transportation Administration has chosen the San Pablo Avenue corridor as an important route for the development of a Bus Rapid Transit (BRT) project by offering technical assistance to AC Transit and the cities along the corridor. The BRT program combines planning and technological devices to allow buses to operate with the speed, reliability, and efficiency of light rail vehicles at only a fraction of the cost. AC Transit also conducted a Major Investment Study to consider options for improving transit on the Telegraph Avenue corridor between Berkeley and San Leandro with shuttles or light rail.

The following photomontage (Figure 4) illustrates how a light rail or dedicated transit lane on transit corridors such as University Avenue, San Pablo, or Telegraph Avenue could significantly increase transit ridership.

Figure 4: Photomontage illustrating light rail



In 1999, AC Transit and UC Berkeley began the Class Pass Pilot Program that allows full-time, registered UC Berkeley students unlimited rides on both local and transbay routes by adding a mandatory transit fee to their academic registration fee. AC Transit and UC Berkeley believe that this program gives students incentives to use the bus more often as an alternative to driving. For the spring 2000 semester, 17,000 students acquired class passes.

In Silicon Valley, the Santa Clara Valley Transportation Authority established the "Eco-Pass" program in 1996, which is similar to the "Class Pass." The program allows a company of any size in the Santa Clara Valley Transportation Authority service area to purchase transit passes for its employees at a deep discount; passes allow employees to ride transit for free. At some companies, transit ridership has doubled. Similar programs exist in other parts of the country, including Dallas, Texas, and Boulder, Colorado.

All Bay Area employers are eligible for "Commuter Checks," which are coupons that can be used to purchase Bay Area transit passes, or pay for fares on registered vanpools/bus pools. The program is a pre-tax payroll deduction program that allows employers to provide transit vouchers to employees as a tax-free benefit. It can work as an employer-paid benefit or as a deduction from the employee's existing salary. The program can cut the cost of transit tickets and vouchers by 40%. In a recent survey of Bay Area commuters, only 19% indicated that they had heard of the Commuter Check program.

Locally, the University of California, Alta Bates Hospital, and the West Berkeley Transportation Management Agency/Bayer Corporation operate regular shuttle services. The City and the University of California provide funds for Berkeley TRIP, which is a storefront in Downtown that provides ridesharing, carpooling, vanpool, and public transportation information and/or tickets.

The City funds several transportation services and provides some funding for public improvements to make public transportation a more attractive option. The City provides vans and

other services to senior citizens, the homeless (Social Service Transport), and the disabled (Paratransit Program). The City provides a transit subsidy (\$20) that can be used to discount the cost of monthly BART and AC Transit tickets for some but not all of the City's employees. (The program is included in the contract negotiations for each union group.)

In recent years the City has been working with local transit providers to fund maintenance of bus shelters throughout the city and make improvements to the Berkeley Amtrak Station. Since 1993 Amtrak has eliminated the Berkeley stop from the San Joaquin line due to low ridership counts. However, passenger counts on the Capitol Corridor line have been increasing. The existing rail stop at the foot of University Avenue is substandard. Amtrak has informed the City that the stop must be upgraded to provide an acceptable level of service to persons traveling to and from Berkeley by rail. Needed improvements include a new transit plaza, adjacent bus stops, seating, lighting, public art, and street trees. The stop also requires a full platform upgrade. The platform needs to be raised, widened, and lengthened to meet minimum standards.

Streets and Sidewalks

The citywide system of streets and sidewalks is the essential infrastructure that allows people, bicycles, buses, trucks, emergency vehicles, and automobiles to move around the city. Without a well-maintained system of streets and sidewalks, the Berkeley community will be unable to meet many if not all of its transportation objectives over the next 20 years.

The Berkeley street system is comprised of 221 miles, 206 miles of which are improved with asphalt, and seven miles of which are constructed of poured concrete. In periods of limited budgets and/or perceived needs of higher priority, street maintenance is typically the first element of a street program to be cut, thus lowering short-term costs, but significantly increasing the long-term costs. After Proposition 13, deferred maintenance and the resultant street deterioration have become commonplace in many California cities, including Berkeley.

Since 1985, Berkeley has employed a Pavement Management System (PMS) program, designed by the Metropolitan Transportation Commission (MTC) to help prioritize asphalt street repair. The PMS method reverses typical maintenance priorities in order to extend performance life and prevent accelerated deterioration, thus obtaining the most value from budgeted resources. The program is designed to maximize the number of streets maintained in "excellent" to "fair" condition, and to allow sections already in "poor" or "failing" condition to continue to deteriorate prior to reconstruction. The emphasis of PMS is on preventing the street sections from reaching the "poor" condition, because sections classified as "poor" or "failed" require reconstruction, which is very expensive and is the least cost-effective use of available funds. Berkeley's 5 Year Capital Improvement Program allocates over \$13 million over the 5-year period for street improvements from 2001 to 2006. Figure 5 shows the streets planned for repaving over the next 5 years (2001 through 2006).

Figure 5: Street Repaving Projects Planned for 2001-2006



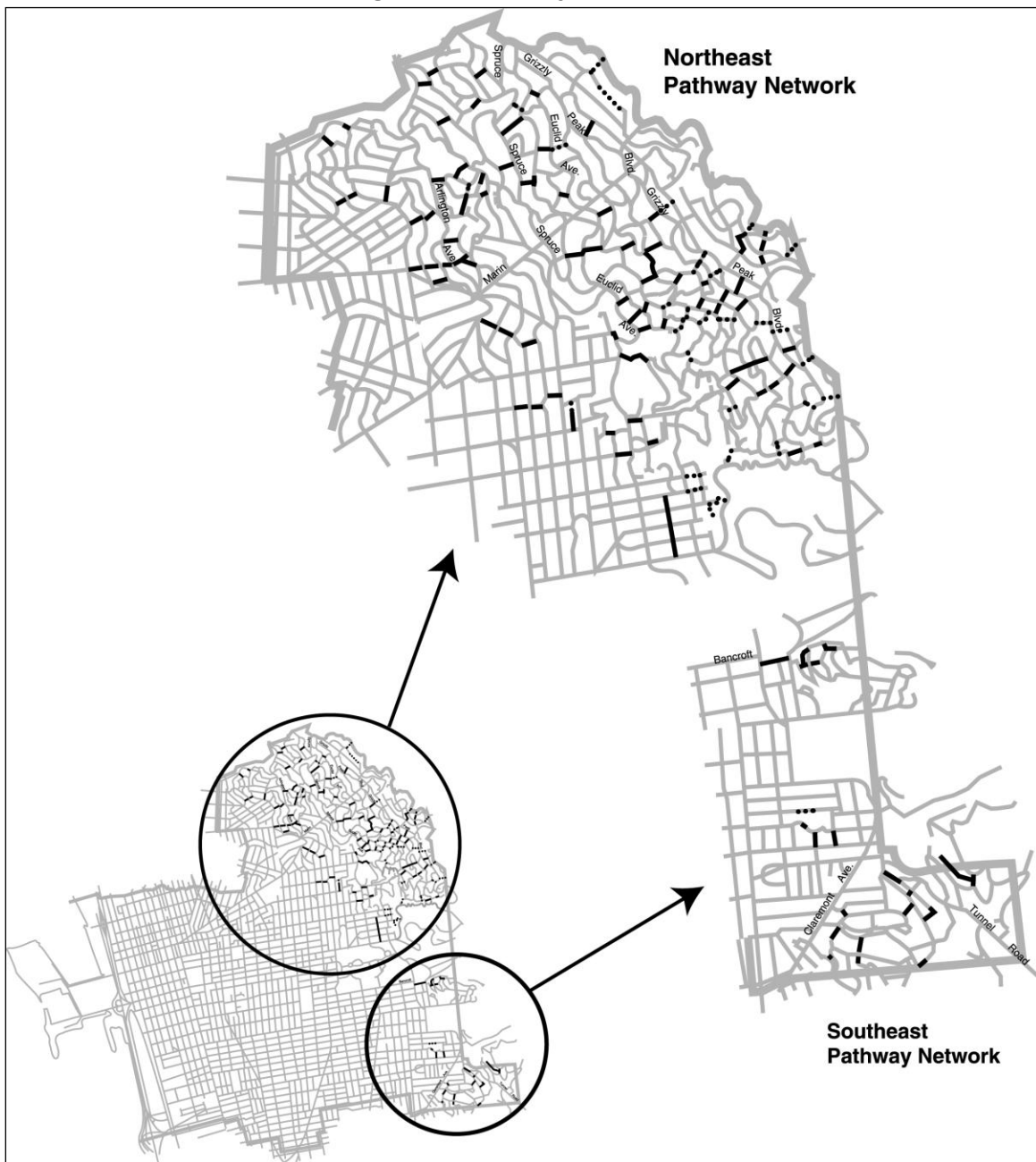
There are approximately 300 miles of concrete sidewalks in Berkeley. City staff estimates that approximately 95 miles of the city's sidewalks are currently in need of repair or replacement. At a cost of \$6.00 per square foot, to complete the repairs would require approximately \$18 million. The adopted 2000/05 Capital Improvement Program allocates approximately \$3.4 million over five years to the repair and replacement of sidewalks and pathways.

Presently, there are two types of sidewalk repair conducted by the City: emergency repair and a long-term "spiral" repair. Emergency repairs are initiated both by citizen complaint and by routine City Engineering inspection. The degree of repair is either a temporary safety measure consisting of concrete removal and/or the placement of an asphalt overlay, or permanent concrete repair, depending on the particular circumstances of the damaged walk and the available resources. The "spiral" repair program provides for permanent repair and is designed for systematic maintenance

in which the segmented phases of work are defined, beginning from the Civic Center area and spiraling outward toward the city limits.

Northeast and Southeast Berkeley have unique networks of pedestrian pathways. These pathways provide pedestrian access in the hill areas between streets, quiet resting places, panoramic viewpoints, and a critical evacuation alternative to the often narrow and winding streets in the hills. There are approximately 135 paths. Figure 6 shows the approximate location and general extent of the city's pathway networks. The Department of Public Works maintains a detailed database of public pathways and publicly dedicated rights-of-way.

Figure 6: Pathway Networks



ELEMENT OBJECTIVES

The policies and actions of the Transportation Element are intended to achieve the following six objectives:

- Maintain and improve public transportation services throughout the city.
- Reduce automobile use and vehicle miles traveled in Berkeley, and the related impacts, by providing and advocating for transportation alternatives and subsidies that facilitate voluntary decisions to drive less.
- Improve the quality of life in Berkeley neighborhoods by calming and slowing traffic on all residential streets.
- Maintain and improve the existing infrastructure and facilities for the movement of people, goods, and vehicles within and through the city.
- Improve the management of public parking to better serve the needs of residents, businesses, and visitors.
- Create a model bicycle- and pedestrian-friendly city where bicycling and walking are safe, attractive, easy, and convenient forms of transportation and recreation for people of all ages and abilities.

POLICIES AND ACTIONS

Public Transportation

Policy T-1 Regional Transit Policy

Advocate for regional coordinated transit services and regional transportation policy to reduce automobile use and increased funding for public and alternative transportation improvements.

Action:

- A. Vigorously pursue regional, statewide, and national policies that encourage greater transit use by providing funding to improve transit services, to subsidize lower fares and free (or nominal-cost), seamless transfers among transit systems, and to provide AC Transit with an increased, more stable operating budget.

Policy T-2 Public Transportation Improvements

Encourage regional and local efforts to maintain and enhance public transportation services and seek additional regional funding for public and alternative transportation improvements. (Also see Economic Development and Employment Policy ED-6.)

Actions:

A. Work with AC Transit to:

1. Expand service and reduce waiting time and transfer times for people who have to use more than one bus to get to their destination.
2. Increase east-west cross-town service.
3. Add transit-only or transit/HOV-only lanes where appropriate on any streets or portions of streets that are part of the city's transit network.
4. Implement improvements to make transit more convenient, dependable, and attractive, such as benches at bus stops, transit shelters, transit centers, information kiosks, and signs.
5. Upgrade the City's traffic signal system to provide transit-priority operation.
6. Continue to replace older diesel buses with quieter, less polluting vehicles.
7. Establish an AC Transit/BART/UC/LBNL/City/BUSD transit coordinating council to improve transit service in the Southside and Downtown areas.

B. Work with BART to:

1. Maintain and expand the frequency and hours of BART service through Berkeley.
2. Continue its efforts to provide electric charging stations and electric vehicles at BART stations.
3. Provide 24-hour service in support of Downtown cultural and residential uses and provide direct connections to San Francisco in evening hours.

C. Promote and market public transportation by:

1. Improving access to information about public transportation alternatives and schedules.
2. Pursuing joint marketing campaigns with transit agencies and event sponsors promoting alternative ways to get to city districts and events.

D. Improve shuttle and transit services by:

1. Increasing shuttle and transit services from Rockridge and the Rockridge BART station to Downtown BART and the campus.

2. Increasing shuttle services between neighborhood commercial areas and between BART stations and employment centers, such as West Berkeley.
3. Promoting express shuttle services to complement local transit service and ensure that Berkeley residents and commuters have information about shuttle services readily available.
4. Testing the feasibility of a low-cost shuttle or "jitney" service for Berkeley residents.
5. Encouraging transportation providers to coordinate and consolidate the installation of new jointly used shelters.
6. Encouraging expansion of transit, rail service, and inter-modal connections in West Berkeley.
7. Developing a mass transit validation program in Berkeley commercial districts similar to a parking validation program.

Policy T-3 Eco-Pass City Program

Increase transit use and reduce automobile traffic and congestion in Berkeley by creating an Eco-Pass program.

Action:

- A. Work with AC Transit, BART, neighboring jurisdictions, major employers, and neighboring transit districts to establish an "Eco-Pass" program for Berkeley employers that would allow pass holders free unlimited rides on AC Transit and/or BART. Once the program is established:
 1. Provide Eco-Passes for all City employees.
 2. Establish participation in the Eco-Pass program as a condition of approval for all new businesses with over 50 employees.
 3. Encourage existing area employers, particularly major employers such as UC Berkeley, Berkeley Unified School District, Lawrence Berkeley National Laboratory, and Alta Bates Medical Center, to join the program.
 4. Contact all employers with 50 or more employees to encourage their participation in Eco-Pass.
 5. Work with the participating transit agencies to offer a neighborhood Eco-Pass, which would allow neighborhoods to participate in the program, similar to the Boulder, Colorado, Neighborhood Pass.

6. Consider creation of a Citywide Transit Pass for Berkeley residents financed by a tax that would allow pass holders free unlimited rides on AC Transit and/or BART.
7. As an interim measure, contact and encourage area employers to participate in the existing Commuter Check program. Maintain or increase existing transit subsidies for City employees and encourage other employers to maintain and increase existing transit subsidies.

Policy T-4 Transit-First Policy

Give priority to alternative transportation and transit over single-occupant vehicles on Transit Routes identified on the Transit Network map (Figure 7, page T-31).

Action:

- A. In residential areas, restrict fixed-route transit services to Primary and Secondary Transit Routes shown on the Transit Network map.

Policy T-5 Light Rail/Bus Rapid Transit

Support regional efforts to develop light rail or bus rapid transit service connecting East Bay cities.

Actions:

- A. Locate light rail or bus rapid transit systems on the primary transit corridors identified on the Transit Network map.
- B. Consider bus rapid transit, with bus priority signals and bus priority lanes on transit corridors, as an interim and low-cost alternative to a new light rail system.
- C. Aggressively pursue regional funding sources with AC Transit and neighboring cities for a light rail or bus rapid transit system.
- D. Continue to work with AC Transit and regional transportation agencies to evaluate potential major public investment strategies and alternatives to improve transit services for Berkeley citizens, including light rail and bus rapid transit.
- E. Work with local merchants to build support for a light rail system and bus rapid transit and minimize potential impacts to businesses from construction and loss of parking.
- F. Investigate a low-cost open trolley service along major pedestrian and shopping corridors such as University, Shattuck, and Telegraph as an interim or permanent solution similar to the Santa Barbara waterfront trolley system.
- G. Support AC Transit's Major Investment Study with its recommendations to achieve long-term rail on Telegraph Avenue. Advocate for extension of the recommendations to the foot of University Avenue and connection with service enhancements on San Pablo Avenue.

Policy T-6 Transportation Services Fee

Ensure that new development does not impact existing transportation services and facilities. (Also see Land Use Policy LU-28.)

Action:

- A. Prepare a nexus study (pursuant to Government Code Section 66000 et seq.) to enable imposition and collection of a Transportation Impact Fee for new development projects.

Policy T-7 Special Transit Programs

Continue to maintain and improve access and mobility for the disabled, seniors, and youth with programs such as paratransit, the taxi voucher program, and senior vans.

Actions:

- A. Work with paratransit service providers to better meet the needs of the disabled community, including: accommodating scooters and all types of wheelchairs, improving response time, expanding hours of service, and requiring drivers to take sensitivity training to better assist disabled riders.
- B. Work cooperatively in the development of a comprehensive County program.

Policy T-8 Amtrak

Encourage additional Amtrak service to Berkeley and pursue platform and vicinity improvements to make the train stop more attractive and safe.

Actions:

- A. Continue to pursue future opportunities to establish a staffed train station in Berkeley.
- B. Consider joint use possibilities for a new station and possible reuse of the former China Station restaurant as a passenger station.
- C. Consider designating some of the available parking spaces as all-day parking spaces dedicated to Amtrak users.
- D. Pursue joint marketing strategies with Amtrak, 4th Street, West Berkeley, and Marina merchants to advertise and promote train access to West Berkeley.
- E. Expand express transit/shuttle connections to Amtrak stations and connections from Amtrak to the BART stations.
- F. Advocate for continued Capitol Corridor services and timely service to San Jose.
- G. Advocate for East Bay participation with planning and the use of the Trans-Bay Terminal, maintaining a high-speed rail connection to the Trans-Bay Terminal, across San Francisco Bay Bridge to Southern California.

Policy T-9 Ferry Service

Continue to evaluate the possibility of working with the City of Albany, the racetrack owners, regional transportation agencies, and AC Transit to establish a ferry terminal and regular San Francisco ferry service from Berkeley at the foot of Gilman Street or at the foot of University Avenue as an alternative to the Bay Bridge and as an essential recovery element following a significant seismic event.

Actions:

- A. Ensure transit, shuttle, and bicycle connections are in place before beginning ferry service to minimize parking demand and traffic caused by people driving to the ferry service.
- B. Prioritize transit, pedestrian, and bicycle public expenditures over expenditures of public funds for ferry service, and ensure that new ferry service will not result in a reduction in public subsidies for existing transit services.
- C. Ensure that ferry services are less environmentally detrimental than the automobile. Advocate for low-emission, environmentally sensitive ferries.

Automobile Use Reduction

Policy T-10 Trip Reduction

To reduce automobile traffic and congestion and increase transit use and alternative modes in Berkeley, support, and when appropriate require, programs to encourage Berkeley citizens and commuters to reduce automobile trips, such as:

1. Participation in a citywide Eco-Pass Program (also see Transportation Policy T-3).
2. Participation in the Commuter Check Program.
3. Carpooling and provision of carpool parking and other necessary facilities.
4. Telecommuting programs.
5. "Free bicycle" programs and electric bicycle programs.
6. "Car-sharing" programs.
7. Use of pedal-cab, bicycle delivery services, and other delivery services.
8. Programs to encourage neighborhood-level initiatives to reduce traffic by encouraging residents to combine trips, carpool, telecommute, reduce the number of cars owned, shop locally, and use alternative modes.

9. Programs to reward Berkeley citizens and neighborhoods that can document reduced car use.
10. Limitations on the supply of long-term commuter parking and elimination of subsidies for commuter parking.
11. No-fare shopper shuttles connecting all shopping districts throughout the city.

Policy T-11 City of Berkeley

Establish the City of Berkeley as a "Model Employer" in the area of trip and emission reduction. (Also see Environmental Management Policies EM-18 through EM-22.)

Actions:

In addition to establishing a Berkeley Eco-Pass program (see Transportation Policy T-3):

- A. Eliminate free or low-cost parking provisions from employee individual and union contracts.
- B. Establish employee automobile use reduction goals. To meet these goals, consider: in addition to Eco- Pass, expanding the fleet bicycle program, providing a vacation day bonus for bicycle or transit use, and establishing flex hours and telecommuting programs.
- C. Publicize the Guaranteed Ride Home Program for carpoolers and parents who use alternative transportation.
- D. Locate City worksites near major public transportation facilities to the extent feasible.
- E. Provide express shuttle service during peak hours between transit hubs and outlying worksites.
- F. Purchase only energy efficient gasoline powered, "hybrid," and biodiesel and other alternative-fuel City vehicles.
- G. Encourage development of compressed natural gas and other alternative-fuel stations.
- H. Use market pricing mechanisms to discourage all-day parking in City garages.
- I. Add transit information and information about Eco-Pass (once established) and Commuter Check to all business license application related mailings.
- J. Provide secure bicycle parking at all major City worksites.

Policy T-12 Education and Enforcement

Support, and when possible require, education and enforcement programs to encourage carpooling and alternatives to single-occupant automobile use, reduce speeding, and increase pedestrian, bicyclist, and automobile safety.

Actions:

- A. Consider developing a program that rewards households, block groups, or neighborhood organizations that can document their reduction in automobile use. Consider discounts on electric bicycles to reward automobile use reduction.
- B. Encourage hotels, motels, and other visitor destinations to provide visitors with information on public transportation and bicycle services and facilities.

Policy T-13 Major Public Institutions

Work with other agencies and institutions, such as the University of California, the Berkeley Unified School District, Lawrence Berkeley Laboratory, Vista Community College, the Alameda County Court, and neighboring cities to promote Eco-Pass and to pursue other efforts to reduce automobile trips. (Also see Land Use Policy LU-39.)

Actions:

- A. Encourage other agencies and institutions to match or exceed the City of Berkeley's trip reduction and emission reduction programs for their employees.
- B. Encourage other agencies, institutions, and cities to use market-pricing mechanisms to reduce automotive use and discourage all-day parking.
- C. Encourage the University of California:
 - 1. To maintain and improve its facilities and programs that support and encourage pedestrians, bicyclists, and transit riders.
 - 2. To provide bicycle facilities, "all hour" bicycle paths, and timely pavement maintenance.
 - 3. To locate non-student-serving offices and additional staff and student housing at or near BART stations outside Berkeley.
- D. Encourage the Berkeley Unified School District to establish programs and facilities to reduce automobile use among staff, faculty, and students, including:
 - 1. Training in safe and competent bicycle use.
 - 2. Providing safe and convenient bicycle facilities.

3. Working with parents to establish carpools, "bicycle to school groups," and "bus to school groups."
4. Create programs that offer incentives to use public transportation such as Eco-Pass.
- E. Obtain "Safe Routes to School" grants and other funds for programs to make it safer for students to travel to school.
- F. Continue limiting the number of residential parking permits given to BUSD faculty and staff.
- G. Assist the University of California and the Berkeley Unified School District in developing satellite parking lots with shuttle service for students and staff.
- H. Encourage the University of California, the Berkeley Unified School District, and other major institutions to cap parking at current levels while seeking to reduce automobile use.
- I. Encourage institutions to create incentives for their employees and students to live locally.
- J. Encourage all public and private institutions, including schools, health clubs, recreation centers and other community destinations to organize carpools and shuttles.

Policy T-14 Private Employers

Encourage private employers to reduce the demand for automobile travel through transportation demand management programs that include elements such as:

1. Trip reduction incentives such as Commuter Check and Eco-Pass.
2. Flexible work hours and telecommuting to reduce peak-hour commute congestion.
3. Carpool and vanpool incentives to reduce single-occupancy vehicle use.
4. Provision of mass transit pass/credit instead of free employee parking (parking "cash-out" programs).
5. Providing bicycle facilities.
6. Market pricing mechanisms for employee parking to reduce automotive use and discourage all-day parking.
7. Local hiring policies.
8. Numerical goals for trip reduction.

Policy T-15 Local Hiring

Establish Berkeley residency as a preference for hiring, and encourage other public employers, institutions, and private employers to hire locally. (Also see Economic Development and Employment Policy ED-1.)

Policy T-16 Access by Proximity

Improve access by increasing proximity of residents to services, goods, and employment centers. (Also see Land Use Policies LU-13 and LU-23, Housing Policy H-16, and Environmental Management Policy EM-41 Action B.)

Actions:

- A. Locate essential commercial and other services in transit-oriented locations to reduce the need for cars and enable people living near transit and services to reduce auto trips.
- B. Encourage higher density housing and commercial infill development that is consistent with General Plan and zoning standards in areas adjacent to existing public transportation services.
- C. Encourage the University of California to provide additional housing within walking distance of campus to reduce University-related traffic.
- D. Encourage siting of child-care facilities and other services in large residential or commercial facilities to reduce traffic impacts associated with child-care drop-off and pick-up.
- E. In locations served by transit, consider reduction or elimination of parking requirements for residential development.

Policy T-17 Transportation Planning

Involve local residents, businesses and institutions in all stages of transportation planning. (Also see Citizen Participation Policies CP-1 through CP-5 and CP-8 through CP-10.)

Policy T-18 Transportation Impact Analysis and Vehicle Miles Traveled

When considering transportation impacts under the California Environmental Quality Act, the City shall consider how a plan or project affects all modes of transportation, including transit riders, bicyclists, pedestrians, and motorists, to determine the transportation impacts of a plan or project. Plans and projects shall be designed to deliver significant benefits to travel by pedestrians, bicycle, or transit, and/or reduced impacts on air quality, greenhouse gas emissions and safety. For the purposes of CEQA, Vehicle Miles Traveled (VMT) shall be the metric used to analyze the transportation impacts of a plan or project.

Action:

- A. Replace level of service (LOS) with Vehicle Miles Traveled (VMT) as the metric to analyze transportation-related environmental impacts under CEQA.

Policy T-19 Air Quality Impacts

Continue to encourage innovative technologies and programs such as clean-fuel, electric, and low-emission cars that reduce the air quality impacts of the automobile. (Also see Environmental Management Policies EM-18 through EM-22.)

Actions:

- A. Establish bicycle and low-emission vehicle preferred parking areas.
- B. Install electric vehicle charging stations in all City-owned parking facilities downtown and at major parking facilities and employment centers.
- C. Where appropriate, install timed signals on major streets to allow traffic to move at a steady 25 miles an hour on major and collector streets, and a steady 15 or 20 miles an hour on neighborhood streets to minimize air quality impacts from "stop and go" traffic.

Neighborhood Traffic Calming

Policy T-20 Neighborhood Protection and Traffic Calming

Take actions to prevent traffic and parking generated by residential, commercial, industrial or institutional activities from being detrimental to residential areas. (Also see Land Use Policies LU-9, LU-10, and LU-11.)

Actions:

- A. Continue to support and actively move forward neighborhood strategies to slow and "calm" traffic.
- B. Endorse strategies to reduce shortcutting and speeding and minimize the use of neighborhood streets by through traffic.
- C. Endorse traffic calming strategies that primarily slow traffic.
- D. Discourage strategies that divert traffic from one residential street to another residential street.
- E. Require that strategies provide for the movement of emergency vehicles to and through the neighborhoods and recognize the needs of the disabled, pedestrians, transit riders, and bicyclists.

- F. Make use of street modifications, including sidewalk bulb-outs, and appropriate traffic calming measures to slow traffic on neighborhood streets to 15 or 20 miles per hour and limit 24-hour volumes to less than 1500 cars per day.
- G. Support and encourage neighborhood traffic watch associations to work with local enforcement to report and prosecute traffic violations in neighborhood areas.
- H. Establish a Residential Traffic Calming Program that includes objective criteria for evaluating neighborhood traffic problems such as traffic volume, pedestrian and bicycle accident rates, and vehicle speeds, especially in areas where children and seniors are concentrated. Include processes to ensure neighborhood participation in the development and evaluation of potential traffic calming solutions.
- I. Implement strategies that slow and calm traffic on residential streets including both local streets and residential segments of collector and major streets.
- J. Develop engineering, education, and enforcement strategies to discourage speeding on local, collector and major streets. Prioritize speed limit enforcement on local streets and on residential segments of collector and major streets.
- K. Evaluate effectiveness of enforcement efforts to prevent speeding and consider increasing the number of traffic enforcement officers if necessary to reduce and control speeding.
- L. Establish levels of service standards for residential areas on collector and major streets.
- M. In residential areas, restrict the use of large buses to Primary and Secondary Routes shown on the Transit Network map, whenever feasible.

Policy T-21 Speed Limits

Pursue changes to State regulations to allow cities to enforce a 15- or 20-mile-per-hour residential speed limit.

Policy T-22 Traffic Circles and Roundabouts

Encourage the use of landscaped traffic circles to calm traffic in residential areas.

Action:

- A. Consider roundabouts as a viable traffic-calming device, especially at the Shattuck and Adeline intersection, the Gilman Street Freeway on and off ramps, and at other appropriate intersections in the city.

Policy T-23 Truck Routes and Truck Traffic

To the greatest extent possible, protect residential streets from hazardous or heavy traffic.

Actions:

- A. Revise and maintain signed truck routes throughout the city to facilitate movement of goods and materials and minimize the impact of trucks in residential areas. Restrict tank vehicles with potentially hazardous materials in residential and other areas such as the Hazardous Fire Area.
- B. Post signs to indicate location of truck routes; and on residential streets where truck traffic is a problem, indicate that through truck traffic is prohibited. Prohibit through truck traffic on streets that are not designated truck routes.
- C. Provide a City phone number with voice mail on which citizens can report license numbers and names of trucking companies that violate truck route regulations.
- D. Consider requiring as part of the City review process for major projects that a construction truck route plan be approved by the City and followed by all contractors and subcontractors.

Policy T-24 Ashby Avenue

Take actions necessary to reduce congestion, improve pedestrian and bicycle crossings, and improve the quality of life for residents on Ashby Avenue.

Action:

- A. Ensure safe pedestrian crossing of Ashby Avenue along its entire route, but particularly to City facilities such as schools, senior citizen centers, and libraries.

Infrastructure and Facility Improvements

Policy T-25 Street Maintenance

Maintain streets, sidewalks, and other public infrastructure to reduce long-term replacement costs.

Actions:

- A. Maintain a citywide resurfacing schedule that will ensure that street maintenance and repair occur in a timely manner and reduce the need to conduct more expensive street reconstruction.
- B. Coordinate pedestrian and transit public improvements with street repairs and repaving.
- C. Ensure that street repairs and repaving are completed without negatively affecting the disabled or bicyclists (e.g., ensure that all repaving and patching provides a smooth surface for bicyclists and wheelchairs).
- D. Continue to give priority to streets designated as Bikeways for road maintenance and repair.

- E. Coordinate the work of agencies such as EBMUD and others to minimize the digging up of City streets.

Policy T-26 City Streets

Do not widen local, collector, or major streets unless necessary to allow passage of emergency vehicles, or remove parking from residential streets for the purpose of expanding automobile traffic lanes. (Also see Disaster Preparedness and Safety Policy S-22.)

Policy T-27 Freeway Expansion

Oppose additional freeway construction in Berkeley, either on new routes or through the expansion of existing facilities.

Policy T-28 Emergency Access

Provide for emergency access to all parts of the city and safe evacuation routes. (Also see Disaster Preparedness and Safety Policy S-22.)

Actions:

- A. Do not install new full diverters or speed humps on streets identified on the Emergency Access and Evacuation Network map unless it is determined by the Fire and Police Departments that the installation will not significantly reduce emergency access or evacuation speeds. The Fire Department should be able to access all Berkeley locations within four minutes (see Disaster Preparedness and Safety Element). All other proposed traffic calming devices or obstructions to the free flow of traffic on these streets should be reviewed by the Fire and Police Departments to ensure that the proposed change will not significantly increase emergency response times or hinder effective evacuation of adjacent neighborhoods.
- B. Maintain and improve pedestrian pathways throughout the city that are dedicated for public use and provide an alternative to the streets in case of an emergency evacuation.
- C. Maintain and make available to the public up-to-date maps of all emergency access and evacuation routes.
- D. Where necessary, consider parking restrictions to ensure adequate access for emergency vehicle access and evacuation in hill area neighborhoods with narrow streets.
- E. Prioritize evacuation routes for undergrounding of overhead utilities.

Policy T-29 Infrastructure Improvements

Facilitate mobility and the flow of traffic on major and collector streets (shown on the Vehicular Circulation Network map at the end of the Element), reduce the air quality impacts of congestion, improve pedestrian and bicycle access, and speed public transportation throughout the city by making improvements to the existing physical infrastructure.

Actions:

- A. Provide timely pavement maintenance and eliminate hazards on bicycle routes.
- B. Designate or add transit-priority lanes or transit-only lanes.
- C. Add or eliminate left turn lanes.
- D. Establish commute period parking restrictions.
- E. Regularly maintain pavement.
- F. Improve freeway approaches and interchanges at Ashby Avenue (including removal of Potter Street ramp) and Gilman Street (to improve pedestrian and bicycle circulation to the waterfront and facilitate truck access to West Berkeley).
- G. Complete the San Pablo Avenue Corridor Plan improvements designed in cooperation with the surrounding cities.
- H. Time traffic signals on major transit corridors to give priority to and speed movement of transit vehicles.

Policy T-30 Traffic Signals

Continue to pursue better signal devices and systems to facilitate movement on Berkeley's limited road network. Consider:

- 1. Signals that provide separate phases for through (straight) traffic, pedestrians and cyclists, and turning traffic.
- 2. Bus-activated signals.
- 3. All-way stop signals that allow the free flow of pedestrians through the intersection.
- 4. "Smart" signals to calm traffic and improve intersection safety.
- 5. Timed traffic signals to give priority to and speed movement of transit and emergency vehicles.
- 6. Pedestrian /bicycle-activated signals that allow bikes and pedestrians to cross busy streets.

Parking

Policy T-31 Residential Parking

Regulate use of on-street parking in residential areas to minimize parking impacts on neighborhoods. (Also see Land Use Policy LU-10.)

Actions:

- A. Improve enforcement of the Residential Preferential Parking Program.
- B. Restrict Residential Parking Permits to residents of the district and further limit the number of guest passes that can be issued to a single address.
- C. Correct abuses of 14-day and 1-day Residential Preferential Parking visitor permits.
- D. Do not issue parking permits to residents of new car-free housing developments or to residents of projects which have been granted variances to reduce required off-street parking.
- E. Discourage use of on-street parking for long-term storage of cars.
- F. Enforce regulations against parking on lawns and sidewalks.
- G. Ensure provision of adequate off-street parking for new projects in low-density residential areas.
- H. Add information on transit alternatives on parking tickets.
- I. Allow the expansion of RPP areas if it is found that additional residential streets are being used for employee and other commercial parking or vehicle storage.
- J. Revise the RPP program to further restrict the number of permits issued to institutional users and set clear standards for issuance of RPP permits to institutions that include requirements for on-site transportation demand management programs and transportation alternatives.

Policy T-32 Shared Parking

Encourage Berkeley businesses and institutions to establish shared parking agreements, which would make the most efficient use of existing and new parking areas. (Also see Economic Development and Employment Policy ED-6.)

Policy T-33 Disabled Parking and Passenger Zones

Ensure adequate disabled parking and passenger drop-off zones.

Actions:

- A. Require access to adequate disabled parking and passenger drop-off zones in all new commercial and residential developments.
- B. Improve enforcement of disabled "blue zone" parking.

Policy T-34 Downtown and Southside Parking Management

Manage the supply of Downtown and Southside public parking to discourage long-term all-day parking and increase the availability and visibility of short-term parking for local businesses. (Also see Economic Development and Employment Policy ED-6 and Downtown Area Plan.)

Actions:

- A. Offer reduced rate or free parking for carpools and van pools at City garages and selected street locations.
- B. Improve signage and access to existing public parking, including UC lots open to the public, in the Downtown and in the Southside.
- C. Increase all-day parking rates, maintain lower parking rates for short-term parking, eliminate monthly parking passes, provide "cash-out" programs, and extend hours of operation in City garages.
- D. Improve lighting and security in Downtown garages to encourage better utilization during off-peak hours.
- E. Require all City employees and officials to pay the fair market rate for parking.
- F. Limit employee parking based on need for a vehicle on the job, number of passengers carried, disability, and/or lack of alternative public transportation.
- G. Identify locations to increase short-term, on-street parking capacity through re-striping and angled parking in commercial areas.
- H. Enforce existing short-term parking laws in commercial districts (e.g., meter parking) to alleviate abuse.
- I. Provide information on transit alternatives, commuter checks, and obtaining transit passes at City parking garages and on City parking tickets. Give this information to everyone who applies for a long-term parking permit in any City-owned parking lot or garage.
- J. Encourage visitors attending sporting events, entertainment events, theatrical performances and special events in the Downtown and Southside areas to use transit so that some existing parking remains available for other visitors.

- K. Increase the availability of short-term parking by encouraging better utilization of existing parking as recommended by the Southside/Downtown Transportation Demand Management Study, including making parking that is currently not available to the public, available for short-term parkers.
- L. Work with the business and arts community and owners of existing parking lots and garages, including the University, to cooperatively manage parking demand and parking resources, coordinate parking policies, parking rates and parking information programs, and widely disseminate parking maps and parking information.

Policy T-35 Public Parking Supply in the Downtown and Southside

Prioritize implementation of improved parking conditions in the Downtown and Southside through better utilization of existing parking and through implementation of policies to reduce demand for parking.

Actions:

- A. Reduce demand for parking by implementing specific actions in the Southside/Downtown Transportation Demand Management Study (see Tier One, Tier Two, and Tier Three programs and actions in the TDM Study) particularly taking actions to improve transit services and implementing an Eco-Pass program (see Policy T-3), and implementing commuter, shopper, and visitor shuttles (see Policy T-2).
- B. Increase availability of existing parking, including UC parking, to shoppers, visitors, and other short-term users (see also Policy T-34).
- C. Establish baseline parking supply and utilization data and monitor parking conditions on an ongoing basis in all City and UC parking lots and garages available to commuters, shoppers, and other visitors to determine effectiveness of implementation of Actions A and B.
- D. Conduct a visitor access survey to improve understanding of visitor use of and demand for parking (including bicycle parking) and transit at different times and locations in the Downtown and Southside and to help inform implementation of Actions A and B. If visitor access survey indicates substantial visitor/customer demand for short-term parking, determine how the City's parking policies and administration can be strengthened to discourage all-day commuter parking and make more visitor/customer parking available.
- E. Create a prioritized implementation plan for Actions A and B, including a schedule, so that the community can track the progress of implementation.
- F. Working cooperatively with the Downtown Berkeley Association and other stakeholders, develop approaches (incentives and disincentives) that would discourage employees from parking at meters, preventing those spaces from being used by short-term visitors and customers.

- G. Develop a consolidated parking strategy to determine locations and priorities for new shared parking to serve Downtown's growth. Parking expansion shall be prohibited at the Civic Center Park.

Policy T-36 Satellite Parking Facilities

Explore opportunities to move existing long-term parking supply out of the Downtown, University, and Southside areas by creating satellite parking lots with express shuttle service to the Downtown and Southside areas.

Policy T-37 University of California and Large Employer Parking

Encourage large employers, such as the University of California and Berkeley Unified School District, to allocate existing employee parking on the basis of a) need for a vehicle on the job, b) number of passengers carried, c) disability, and d) lack of alternative public transportation. (Also see Land Use Policy LU-39.)

Action:

- A. Encourage the University of California to cap its parking supply at current levels, to postpone any plans to expand its existing (year 2009) parking supply, and instead to encourage transit use and alternative modes of transportation, and better manage and utilize existing parking.

Policy T-38 Inter-Jurisdictional Coordination

Establish partnerships with adjacent jurisdictions and agencies, such as the University of California and the Berkeley Unified School District, to reduce parking demand and encourage alternative modes of transportation.

Actions:

- A. Manage off-street parking facilities.
- B. Create satellite parking lots for employees and students.
- C. Promote programs such as the AC Transit Class Pass for students and employees to reduce parking demand.
- D. Encourage the University to increase all-day parking fees to market rates.
- E. Encourage the University to make all University parking available at market rates to the public during evening hours and summer sessions.
- F. Promote bicycle and pedestrian travel through training, education, incentive programs, and physical improvements such as path improvements and signage, bicycle lockers, and shower facilities.
- G. Encourage BUSD and UC to provide bicycles for staff use and job-related tasks.

Policy T-39 High-Tech Parking

To make the most efficient use of available land, encourage consideration of high-tech computerized parking (e.g., lifts and or "robotics") when replacing existing public parking or when providing off-street parking for multi-family residential projects.

Policy T-40 Parking Impacts

When considering parking impacts under the California Environmental Quality Act for residential projects with more than two units located in the Avenue Commercial, , or High Density Residential land use classifications, any significant parking impacts identified that result from the project should be mitigated by improving alternatives to automobile travel and thereby reducing the need for parking. Examples include improvements to public transportation, pedestrian access, car sharing programs, and bicycle facility improvements. Parking impacts for these projects should not be mitigated through the provision of additional parking on the site. For the Downtown Area, a comprehensive parking strategy should be developed (see Downtown Area Plan). The City finds that:

1. Parking supply and demand may easily be adjusted by changing local pricing policies and by changing how the supply is managed.
2. As the parking supply increases or parking costs decrease, automobile use becomes a more attractive transportation alternative and demand for parking increases. As parking supply decreases and its price increases, demand decreases.
3. Increasing the parking supply increases automobile use, which causes a measurably negative impact on the environment.

Policy T-41 Structured Parking

Encourage consolidation of surface parking lots into structured parking facilities and redevelopment of surface lots with residential or commercial development where allowed by zoning.

Actions:

- A. Strategically locate structures to serve commercial and employment centers through the use of express shuttle and trolley service.
- B. Encourage housing above parking in transit-oriented locations.
- C. Provide parking and recharging facilities for alternative vehicles such as bicycles and electric and low-emission vehicles.
- D. Whenever feasible, orient automobile access to parking lots and garages away from designated bicycle ways and boulevards and avoid blank walls along pedestrian ways.

Bicycles

(Also see the Berkeley Bicycle Plan)

Policy T-42 Bicycle Planning

Integrate the consideration of bicycle travel into City planning activities and capital improvement projects, and coordinate with other agencies to improve bicycle facilities and access within and connecting to Berkeley.

Policy T-43 Bicycle Network

Develop a safe, convenient, and continuous network of bikeways that serves the needs of all types of bicyclists, and provide bicycle-parking facilities to promote cycling.

Actions:

- A. Expand the supply of highly secure bicycle parking near transit hubs and commercial areas.
- B. Encourage business owners to provide bicycle parking, showers, and lockers for employees and bicycle parking for customers.
- C. Encourage, and when appropriate require, new multi-family residential developments to provide secure locker space for resident bicycles and for such things as dollies, shopping rollers, wagons, and carts that facilitate a non-motorized lifestyle.

Policy T-44 Bicycle Safety

Improve bicycle safety for riders, pedestrians, and drivers through continuing education of motorists and bicyclists as well as rigorous enforcement of laws for both bicyclists and automobile drivers.

Policy T-45 Bicycle Promotions

Promote bicycle use by increasing public awareness of the benefits of bicycling and of the available bike facilities and programs.

Policy T-46 Bicycle Funding

Secure sufficient resources from all available sources to fund ongoing bicycle improvements and education.

Policy T-47 Bicycle Delivery Services and Other Utility Cycles

Support pedal cab, bicycle delivery services, and other utility cycle uses.

Actions:

- A. Encourage local businesses to support utility cycle businesses.
- B. Continue to use bicycle delivery services for City of Berkeley deliveries.

- C. Continue to provide bicycles for use by City of Berkeley employees for work-related local trips.
- D. Encourage use of human-powered utility cycles by Berkeley residents.
- E. Consider supporting a pilot program to introduce and promote use of utility cycles in Berkeley.

Pedestrians and Persons with Disabilities

Policy T-48 Pedestrian Plan

Create a Pedestrian Plan for the purpose of developing additional strategies and policies to make Berkeley safer for pedestrians and to make Berkeley a more pedestrian-friendly city.

Policy T-49 Disabled Access

Improve pedestrian access for the entire disabled community.

Actions:

- A. Fund sidewalk, crosswalk, curb, signalization and signage, and talking signal improvements.
- B. Use regulation and incentives to require or encourage accessibility upgrades for private businesses.
- C. Encourage businesses to exceed the minimum standards set by the ADA "readily achievable barrier removal" requirement.

Policy T-50 Sidewalks

Maintain and improve sidewalks in residential and commercial pedestrian areas throughout Berkeley and in the vicinity of public transportation facilities so that they are safe, accessible, clean, attractive, and appropriately lighted.

Actions:

- A. Prioritize pedestrian-serving public improvements, such as sidewalk repair and widening, bus shelters, street trees and lighting, public art, fountains, and directional signs.
- B. Establish safe, attractive pedestrian connections between residential areas, transit, shopping areas, and schools and other community facilities.
- C. Ensure that sidewalks are kept in good repair and are level, with a suitable grade for pedestrians and wheelchairs. Discourage, and when possible prevent, new developments from creating uncomfortably steep grades.

- D. Ensure adequate unobstructed sidewalk passage by appropriate placement of street furniture and amenities and prevention of obstruction of travel ways by such items as advertisement signs, merchandise, and utility boxes.

Policy T-51 Pedestrian Priority

When addressing competing demands for sidewalk space, the needs of the pedestrian shall be the highest priority.

Policy T-52 Pedestrian Safety and Accessibility

Provide safe and convenient pedestrian crossings throughout the city.

Actions:

- A. Seek to ensure that the distance between signal-controlled intersections, "smart crosswalks," or stop signs is never more than one-quarter mile on major and collector streets. At intersections with severe or high pedestrian/automobile collision rates and at heavily used pedestrian crossings, consider all-way stop signals that allow the free flow of pedestrians through the intersection, "smart" signals to calm traffic and improve intersection safety, and pedestrian/bicycle-activated signals that allow bikes and pedestrians to cross busy streets without inviting traffic onto cross streets.
- B. Consider pedestrian crosswalk "runway" lights in the pavement at intersections with severe or higher than average pedestrian collision rates.
- C. Encourage and educate the public on the use of painted and unpainted crosswalks; enforce jaywalking regulations on main arterials.
- D. Encourage the creation of accessible pedestrian medians or islands in wide streets where people have to cross more than two lanes.
- E. Enforce pedestrian right-of-way laws.

Policy T-53 Intersections with Severe or High Collision Rates

Reduce pedestrian and bicycle collisions, injuries, and fatalities.

Action:

- A. Undertake a review of intersections or street locations with a high number of collisions and/or a high percentage of fatal or permanently disabling collisions and develop programs with appropriate mix of education, enforcement, and engineering changes to improve the safety of these intersections and locations. Consider:
 - 1. Adding signage at intersections, warning the public that the intersection has been the site of several traffic collisions or fatalities.
 - 2. Moving bus stops to the far side of the intersection so that buses do not block visibility at the intersection when stopping to pick up passengers.

3. Providing an all-red, pedestrian phase to especially congested intersections, giving pedestrians the ability to cross the intersection in any direction before vehicles are given a green light.
4. Lighted crosswalks.
5. Maintaining a minimum 50-foot red, no-parking zone adjacent to the intersection to increase visibility.
6. Re-timing pedestrian crossing signals to allow more time for pedestrian crossing.
7. Other actions recommended by the Bicycle and Pedestrian Safety Report.

Policy T-54 Pathways

Develop and improve the public pedestrian pathway system. (Also see Land Use Policy LU-11 and Disaster Preparedness and Safety Policy S-22 Action A.)

Actions:

- A. Allocate resources to identify and improve unimproved pathways.
- B. Maintain a complete and accurate inventory and database of Berkeley's Pathway Network, to include all known public paths, dedicated easements, and rights-of-way.
- C. Work with residents and interest groups adjacent to pathways to prepare a "Top Priority Improvement List" for pathway restoration. Give highest priority for public investment to paths that: 1) include neighbor support and a clear title, 2) provide an evacuation route, 3) continue existing paths, and 4) improve neighborhood circulation and provide access to community services and facilities.
- D. Continue to make repairs and safety improvements on public paths and restore unimproved paths.

Transportation Maps

Policy T-55 Street Networks: Increasing Access and Mobility

To ensure the effective and convenient movement of people and goods, ensure a successful integration of land use patterns and transportation systems, and encourage transitions to more environmentally sensitive modes of transportation, the Berkeley General Plan includes four network maps: the Vehicular Circulation Network map, the Transit Network map, the Bicycle Circulation Network map, and the Emergency Access and Evacuation Network map. The network maps identify the city's transportation infrastructure and establish priorities and standards for its use and improvement. These priorities and standards shall be used in conjunction with General Plan policies to determine priorities for use and determine network modifications to facilitate

certain modes of travel. In all cases, the City shall recognize that the transportation network is a shared network that requires shared use and that to effectively achieve the transportation, land use, community safety, and economic development objectives of the General Plan will require careful consideration and balancing of competing objectives and needs. The network maps are intended to facilitate these future decisions.

Figure 7: Transit Network

The Transit Network map shown below identifies the network of streets that are necessary for efficient and effective transit services throughout the city. These streets are the highest priority for transit improvements, such as bus shelters and planned improvements that may serve light rail or ferry services. The network map does not depict every street that may be used by transit services and it is not meant to limit transit and shuttle services from streets not shown on the map.

Primary Routes shown on the map are the highest priority routes necessary to serve existing needs and inter-city connections.

Secondary Routes are routes that are necessary to provide convenient access to other areas of the city and supplement the Primary Routes.

Planned Routes identify the highest priority additions to the transit circulation network.

Variations to the network may occur during final planning, design, funding, and implementation of specific transit improvements without a General Plan amendment.

Figure 8: Bicycle Circulation Network

The Bicycle Circulation Network map shown below identifies the streets necessary for the efficient and safe movement of bicyclists throughout the city. These streets are the highest priority for bicycle treatments and improvements.

Bicycle Boulevards are roadways that have been designated for planned modifications to enhance bicyclist safety and convenience. The Bicycle Boulevards are intended to serve as the city's primary bikeways.

Bicycle paths, lanes, and shared roadways (Class 1, 2, 2.5, and 3) are defined in the Bicycle Plan. They serve as the secondary bikeways necessary to provide safe and convenient access throughout the city. Distinctions and details on bikeway designations, improvements, and priorities are included in the Bicycle Plan.

Variations to the network may occur during final planning, design, funding, and implementation of specific bicycle improvements without a General Plan amendment.

Figure 9: Emergency Access and Evacuation Network

The Emergency Access and Evacuation Network map identifies the roadways in the city that must be maintained for emergency access and emergency evacuation in case of a major disaster, such as fires, earthquakes, floods, reservoir rupture, or hazardous materials release.

Figure 10: Vehicular Circulation Network

The Vehicular Circulation Network map (figure 10) classifies the city's street system. The Vehicular Circulation Network map and Transit Network map fulfill the State Government Code requirement that the General Plan provide a map or diagram showing the "general location and extent of existing and proposed major thoroughfares, transportation routes, and terminals." (The Vehicular Network map maintains the 1977 Master Plan Circulation Plan Map, pursuant to Council action on December 18, 2001. See Transportation Element Amendment #1.)

Local Streets are for local slow traffic, bicycles, and pedestrians. Local streets should be maintained and improved to create a safe and comfortable environment for residents living on the street and in the area. Improvements should emphasize the needs of the pedestrian first, bicyclists second, and vehicles third. Additional vehicular capacity should only be added if needed for public safety reasons. Street design improvements should discourage vehicular speeds above 15 or 20 miles per hour to maintain a safe environment for children, pedestrians, and bicyclists. Local streets are not shown on the map. If a street is not a collector or major street, it is a local street.

Collector Streets serve the movement of automobiles, buses, pedestrians, and bicycles between neighborhoods and across the city. Collector streets should be maintained and improved to balance the needs for a safe and comfortable environment for the residents living on these streets as well as the needs of the general public to be able to move efficiently through the city on a variety of modes, including bicycles, automobiles, transit buses, and shuttles. Street design improvements should discourage vehicular speeds above 25 miles per hour and maintain a smooth flow of traffic. In cases where a collector street is identified as a bicycle boulevard on the Bicycle Circulation Network map, improvements should emphasize the bicyclist first, and the automobile second. Collector streets in manufacturing areas should be improved to facilitate truck access and commercial traffic.

Major Streets serve the movement of automobiles, trucks, buses, pedestrians, and bicycles across the city, connecting to the regional transportation network, and to other jurisdictions. Major streets should be maintained to facilitate the efficient flow of automobiles and large vehicles through the city and out of the city. Improvements should encourage a smooth flow of traffic and discourage speeds above 25 miles an hour. In cases where a major street is identified as a Transit Route on the Transit Network map, improvements should emphasize the movement of public transit vehicles first and private automobiles second. In cases where major streets enter the Downtown, improvements should emphasize the pedestrian first, transit second, and the automobile third.

Scenic Routes. A segment of an established regional network of routes which traverse or provide the most efficient routes to or between areas of major scenic, recreation, or cultural attractions.

Figure 7. Transit Network

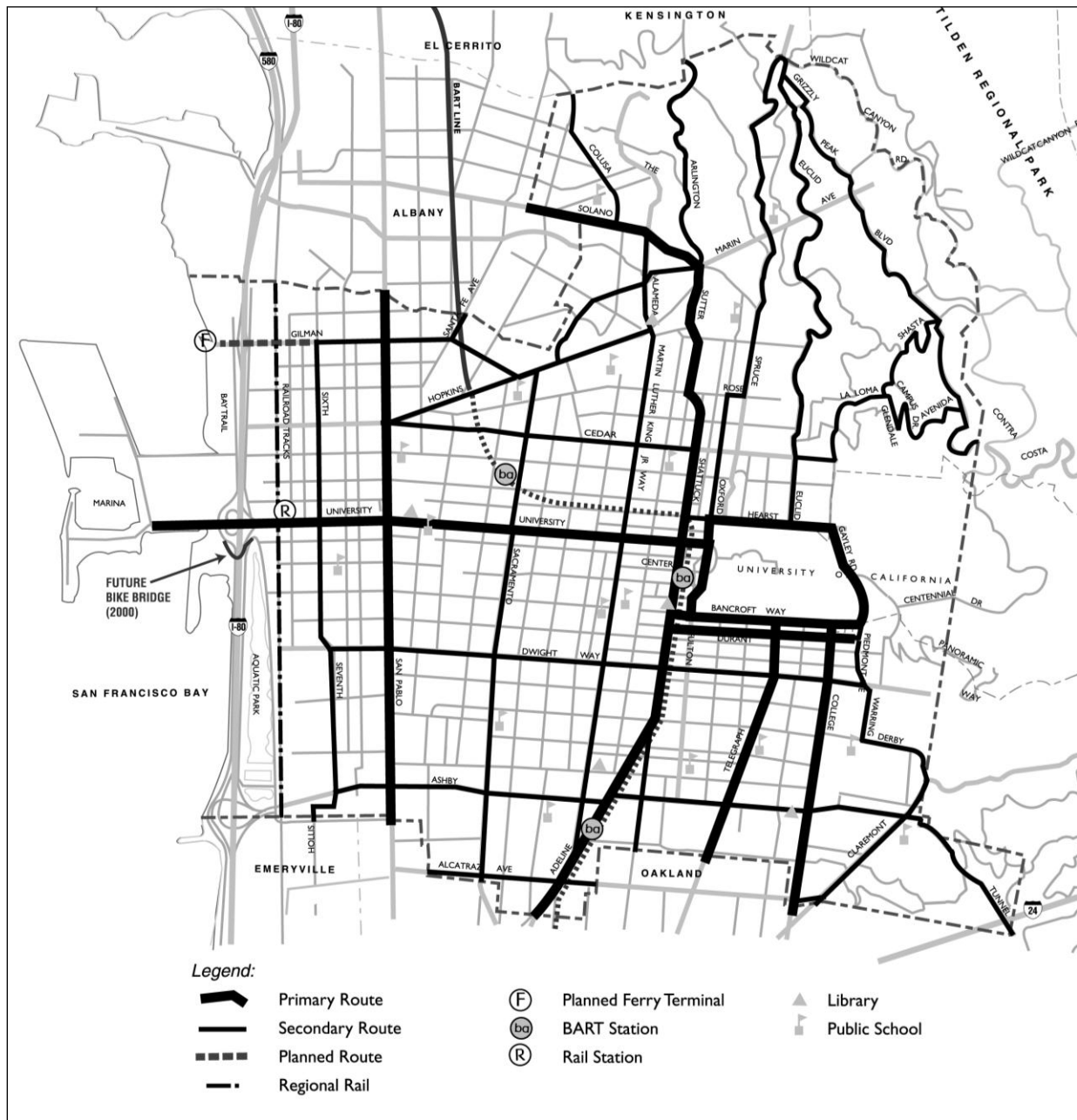
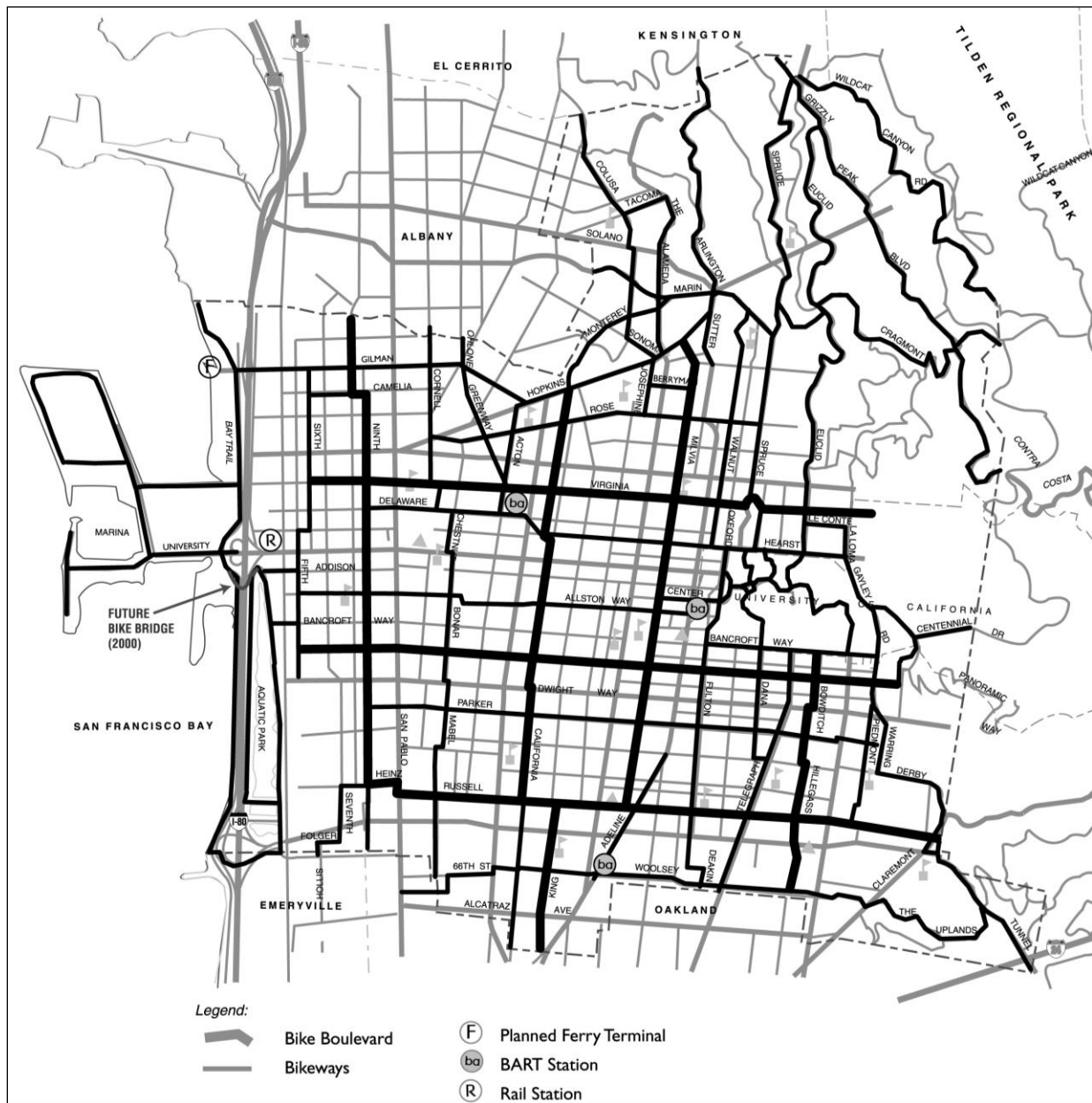


Figure 8: Bicycle Circulation Network



(If any conflicts exist between this map and the Berkeley Bicycle Plan Map, the Berkeley Bicycle Plan Map should govern.)

Figure 9: Emergency Access and Evacuation Network

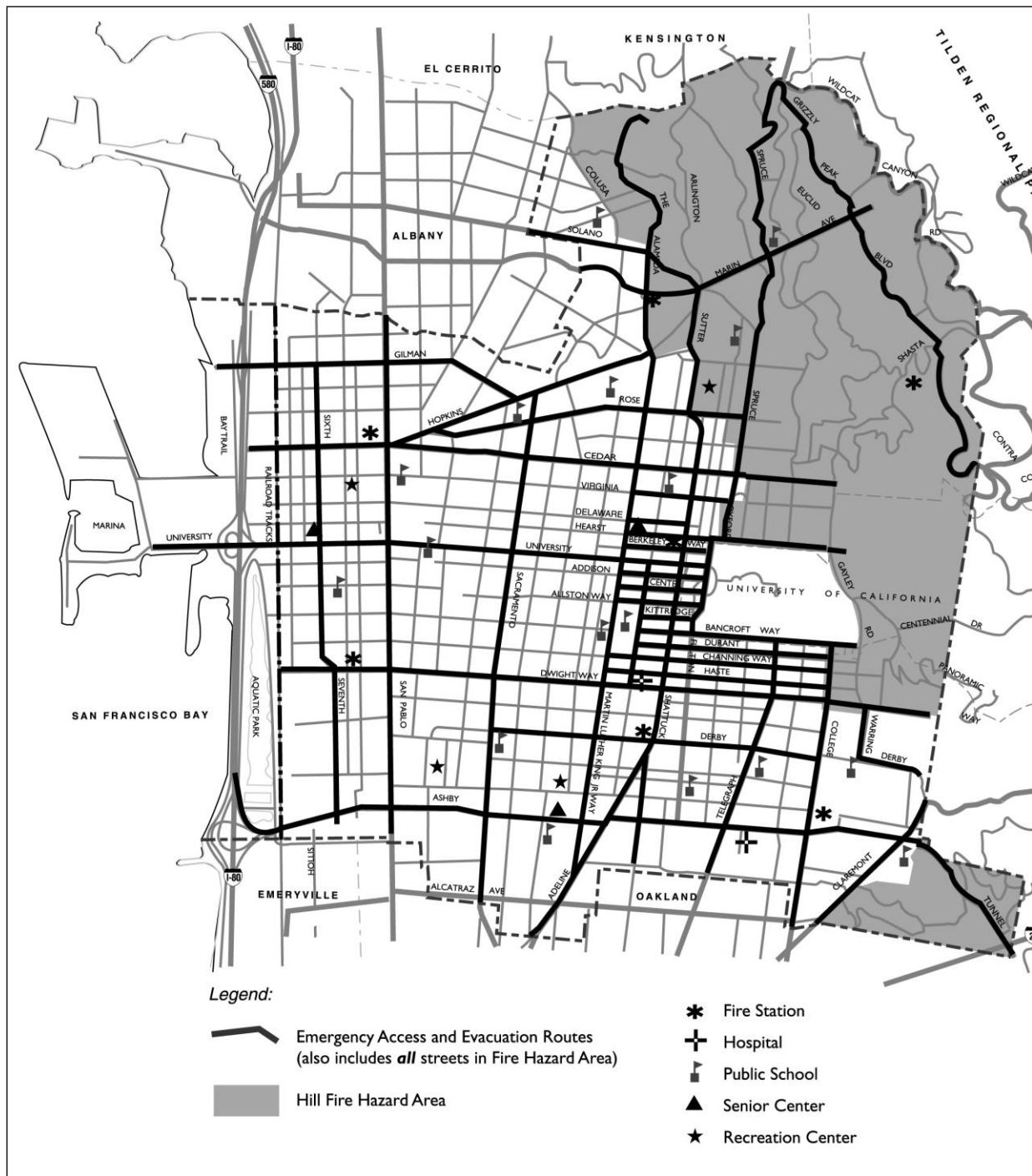


Figure 10: Vehicular Circulation Network

