



City of Emeryville Pedestrian and Bicycle Plan

Adopted: May 15, 2012

PART 2: IMPLEMENTATION STRATEGY

May 2012

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Part 2: Implementation Strategy

Part 2 of this Plan provides solutions for improving pedestrian and bicycle travel in Emeryville. It contains a comprehensive set of programmatic and infrastructure improvements that will bring Emeryville closer to the vision of a community where walking and bicycling are a convenient, safe, and integral part of daily life.

Improvements are presented in the following chapters:

Chapter 4: Pedestrian and Bicycle Programs

This chapter describes programmatic improvements, such as education and enforcement programs, that are essential to increasing the desirability and safety of walking and biking.

Chapter 5: Citywide Improvements

This chapter describes citywide infrastructure projects, such as parklets, pedestrian and bicycle signage, and bicycle parking, which should be implemented throughout the city to improve pedestrian and bicycle travel.

Chapter 6: Bicycle Boulevards

This chapter describes the City's policy for designating, constructing, and monitoring bicycle boulevards. It includes infrastructure improvements that will enhance the City's bicycle boulevard network.

Chapter 7: Site-Specific Infrastructure Projects

This chapter describes specific infrastructure projects that are needed to make it safer and more convenient to walk and bike in Emeryville. Projects include pedestrian improvements, overcrossings, paths, and the recommended bikeway network. The chapter includes maps of projects and a prioritized list of recommendations, including cost estimates for individual projects.

Chapter 8: Funding and Implementation

This chapter summarizes how the City has historically funded pedestrian and bicycle projects and describes potential new funding sources. It summarizes costs for the recommended programs and infrastructure projects described in Chapters 4 through 7. It also includes two key tools for implementing the recommendations of this Plan: the Action Plan, which includes specific action items the City will take to implement the policies described in Chapter 2; and the Priority Project Sheets, which present this Plan's high-priority projects in more detail.

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4. Pedestrian and Bicycle Programs

Pedestrian and bicycle programs, such as education and enforcement programs, are essential in increasing the desirability and safety of walking and biking. Programs support a pedestrian and bicycle friendly culture, and encourage more people to walk or bike. Many programs can be categorized according to the “Four E’s”:

- **Encouragement** programs provide incentives and support to help people leave their car at home and try walking or bicycling instead. Bicycle encouragement programs, in particular, target “interested but concerned” bicyclists who would like to ride a bike but who may not be confident in their skills or in their interactions with motorists.
- **Enforcement** programs enforce legal and respectful walking, bicycling, and driving. They include a variety of tactics, ranging from police enforcement to neighborhood signage campaigns.
- **Education** programs are designed to improve safety and awareness. They can include in-classroom or after school programs that teach students how to safely cross the street or bicycle in the road. They may also include brochures, posters, or other information that targets pedestrians, bicyclists, or drivers.
- **Evaluation** programs are an important component of any engineering or programmatic investment. They help the City to measure its success at meeting the goals of this plan and to identify adjustments that may be necessary.

The “Four E’s” simply provide a convenient framework for programmatic recommendations. Many programs encompass more than one of these categories.

In addition to these “Four E’s” programs, this chapter includes recommendations for maintenance of pedestrian and bicycle infrastructure, and recommendations for establishing a bicycle sharing program in the City of Emeryville.

4.1. Encouragement

4.1.1 Car-Free Street Events

Car-free street events promote health by creating a safe and attractive space for physical activity and social contact and are cost-effective compared to the cost of building new parks for the same purpose. These events have many names: Sunday Parkways, Ciclovias, Summer Streets, and Sunday Streets. Car-free street events temporarily close streets to motor vehicles and open them to the public for walking, bicycling, dancing, hula hooping, roller-skating, or other activities. They have been very successful internationally and are rapidly becoming popular in the United States. Events can be regularly scheduled or one-time occasions and are generally very popular and well attended.



Closing streets for a car-free community event like Oaklavia creates a temporary space for walking, cycling, skating, dancing, etc. (Image: Tina Tamale via Flickr)

Recommendation

The City should support a regular, recurring car-free street event. While specific locations and times for these events can be developed through community outreach and support, one possibility for the City of Emeryville would be to combine a car-free street event with its Art in Public Places program. Possible locations include Park Avenue, Doyle Street/Greenway, Hollis Street, and Horton Street. Measure B funds could be used for general outreach and marketing.¹¹

4.1.2 Bicycle Friendly Community

The League of American Bicyclists has a well-respected Bicycle-Friendly Communities award program. Communities fill out a detailed application that covers bike-

related facilities, plans, education efforts, promotion initiatives, and evaluation work that has been completed by the jurisdiction. The award is designed to recognize progress that has been made, as well as assist communities

in identifying priority projects to improve bicycling conditions. Receiving the award is a media-worthy event, and may give elected officials the opportunity to receive media coverage for the positive work they are doing. Awards are granted for Bronze, Silver, Gold and Platinum bicycle-friendly communities.



Receiving a Bicycle Friendly Community designation affirms a city's support for bicycling

Recommendation

As part of this Plan, the City has evaluated the potential of applying to become a designated bicycle-friendly community. The City should apply for Bicycle Friendly Communities designation after several of the improvements recommended in this Plan have been implemented.

4.1.3 Safe Routes to School Programs

Safe Routes to School (SR2S) is a program that helps children to get to school by walking, bicycling, carpooling, or transit. It envisions active kids using safe streets, helped by engaged adults including teachers, parents, and police officers, complemented by responsible drivers. Every state has a SR2S coordinator and grant program. The City of Emeryville does not currently have any existing Safe Routes to School programs.

Emeryville is unique in that the schools are located in close proximity to one another. Emery Secondary (grades 6-12), Anna Yates Elementary (grades K-5), the private Escuela Bilingue (pre-K to 8th grade, opening fall 2011), the City's Child Development Center (a preschool), and the planned Emeryville Center for Community Life are all within a few blocks of San Pablo Avenue between 41st and 53rd Streets. San Pablo Avenue is a major impediment to pedestrian travel in the area, and many students have to cross to access their schools.

Example Safe Routes to School programs that could be implemented in Emeryville include:

- **School Travel Plans** – Travel plans are collaborative efforts between school administrators, parents, students, and the City to identify issues related to walking and biking to school and brainstorm

¹¹ Sample programs include San Francisco Sunday Streets: <http://sundaystreetsf.com> and Oakland's Oaklavia: <http://oaklavia.org/media>.

solutions. Planners and engineers can assist with identifying and prioritizing projects to improve conditions around the school.

- **Walking Audits** – Walking Audits are often the starting point of a Safe Routes to School Program as they help students, parents, and neighbors assess routes to schools and identify safety considerations. Stakeholders walk the main routes to school to discuss safety issues and develop possible short-term and long-term solutions. Stakeholders may also use walking audits to evaluate the effectiveness of engineering improvements.
- **Bicycle Rodeos** – Bicycle rodeos are events where police officers or bicycling instructors teach children safe bicycling skills and the rules of the road. The Emeryville Police Department conducts bicycle rodeos. The East Bay Bicycle Coalition offers free bicycle rodeos, which could supplement the City’s efforts.¹²
- **Youth Bicycle Safety Education Classes** – Typical school-based bicycle education programs educate students about the rules of the road, proper use of bicycle equipment, biking skills, street crossing skills, and the benefits of biking.¹³
- **Walking School Buses** – Walking School Buses are formed when a group of children walk together to school and are accompanied by one or two adults (usually parents or guardians). The walking school bus picks up students at designated meeting locations. Walking School Buses can be implemented informally among parents or neighbors or as official school-wide endeavors with trained volunteers and structured meeting times and locations.
- **Student Safety Patrols** – Safety Patrols consist of specially trained students, usually 5th grade and above, who escort students to buses and assist adult crossing guards in helping students cross streets.
- **Friendly Walking/Biking Competitions** – Walking and biking competitions track and reward kids for the number of times they walk, bike, carpool, or take transit to school. Contests can be individual, classroom competitions, or interschool competitions. Local businesses may be willing to provide incentive prizes for these activities.



Bike rodeos (top) and youth bicycle safety classes provide children with knowledge and training about safe and proper bicycle use.



¹² An application to have the East Bay Bicycle Coalition hold a Bike Rodeo can be found here: <http://www.ebbc.org/rodeoapplication>.

¹³ Sample programs include League of American Bicyclists: <http://www.bikeleague.org/programs/education/courses.php#kids1> and Bicycle Transportation Alliance – Portland, OR: <http://www.bta4bikes.org/resources/educational.php>.

Recommendation

The City should collaborate with the Emery Unified School District and Escuela Bilingue to establish a formal Safe Routes to School program. This program can take advantage of existing resources, such as Alameda County's ongoing Safe Routes to School Program, currently implemented by the non-profit TransForm.

4.1.4 Walk and Bike to Work Programs

Emeryville's large employment base means that working with employers may be an effective means of achieving the goals of this Plan. Walking and biking to work has many benefits, including reducing the stress associated with driving in rush-hour traffic, reducing health costs by improving worker health, and helping businesses market their environmental sustainability.

The City already supports alternative commute modes. Every year, the City sponsors Bike to Work Day and contributes to the East Bay Bicycle Coalition's promotion of this event. The City also provides incentives to developers to encourage walking and bicycling to work. Emeryville currently has policies that require bicycle parking and is developing more flexible automobile parking requirements.

Recommendation

The City should continue to work with or provide information to employers about alternative commute options, with the intention of reducing the number of Emeryville workers to drive alone to work. It should continue to support Bike to Work Day and explore additional policies and programs that can encourage walking and biking to work.¹⁴

The City should serve as a role model by actively promoting alternative commute modes for City employees.



The City of Portland, OR makes yard signs available for \$25 or in exchange for five completed "I Share the Road" pledges.

4.2. Enforcement

4.2.1 Bicycle Patrol

Police bicycle patrols not only increase the mobility of officers in dense areas but also provide law enforcement officers with an opportunity to display safe and legal bicycle skills. Furthermore, bicycle patrols show the community that the City actively supports sustainable transportation.

Recommendation

The Emeryville Police Department should establish a bicycle patrol. Given Emeryville's small area and numerous paths, this may be an effective way to police the community.

¹⁴ Information about the commuter choice program can be found here: http://www.fta.dot.gov/news/colleague/news_events_4627.html

4.2.2 Community-Based Traffic Program

Community-based traffic programs are focused on developing relationships between a city's Public Works and Police Departments and its residents. Residents work with City staff to identify problem areas to target for police enforcement, community policing, and potential infrastructure priorities. For example, in response to mounting complaints about speeding and commute traffic, the City of Sacramento implemented a Neighborhood Traffic Management Program.¹⁵ The program also informs the community about how Public Works operates to encourage community members to be proactive about the problems they see in their community.

One possible outcome of the community-based process is the deployment of mobile speed feedback signs or yard signs in response to concerns about traffic speed. Speed feedback signs display the speed of passing motor vehicles, with the intent that motorists will slow down if they are aware of their speed. These can either be permanent signs or trailers that can be periodically moved to new locations.

Recommendation

The City should establish a community-based traffic program that formalizes the way in which the community and the City can work together to identify traffic-related problems, and create effective, low-cost solutions to those problems.

4.2.3 Targeted Enforcement

Targeted enforcement refers to focused efforts of police officers. For example, the Police Department may conduct pedestrian stings at locations where there is a history of pedestrian-motorist conflicts. Similar strategies may be applied to areas with bicycle traffic, perhaps focusing on citation of issues deemed to cause most accidents. In the case of bicyclists, the most dangerous violation is wrong-way riding and for motorists, improper turning and crosswalk violations.

Recommendation

The Police Department should conduct targeted enforcement at locations known for noncompliance with traffic laws and at high conflict or high pedestrian- or bicycle-related collision areas. The Department currently targets enforcement on San Pablo Avenue at 43rd, 45th, and 47th Streets when school is in session. Possible additional locations include minor street crossings of 40th Street, which are uncontrolled intersections with high collision rates.



Road safety campaigns increase the general public's awareness of bicycling and walking and can be used to promote safe roads by and for all users.

4.3. Education

Education programs are recommended to inform motorists and bicyclists of the rights and responsibilities of bicyclists and pedestrians. This section describes strategies to achieve this.

¹⁵ Information about the Neighborhood Traffic Management Program is available at: <http://www.ite.org/traffic/documents/CCA96B62.pdf>

4.3.1 Pedestrian and Bicycle Safety Campaign

A well-produced safety campaign will memorably and effectively highlight walking and bicycling as viable forms of transportation and reinforce safety for all road users. One good example is Sonoma County Transit Agency's "You've got a friend who bikes!" campaign. It combines compelling ads with an easy-to-use website focused at motorists, pedestrians, and bicyclists. Safety and awareness messages should be displayed near high-traffic corridors, printed in local publications, broadcast as radio and/or television ads and be available in Spanish and other languages.

The City of San Jose created a pedestrian and bicycle safety campaign called Street Smarts. The program emphasizes the shared responsibilities of all road users, incorporating a website, flyers, and billboards that remind pedestrians, bicyclists, and motorists of safe travel behaviors.

Recommendation

The City should consider developing a pedestrian and bicycle safety campaign.¹⁶ The campaign could be based on the successful Street Smarts program, or other local efforts.

4.3.2 Adult Bicycling Skills Classes

Adult bicycling skills classes enable community members to learn safe bicycling skills. The most common program is the League of American Bicyclists courses, taught by League Certified Instructors. Courses cover bicycle safety checks, fixing a flat, on-bike skills, crash avoidance techniques, and traffic negotiation.¹⁷



Adult bicycle skills courses can help bicyclists have the information and skills they need to avoid hazards and follow the law.

Recommendation

The Police Department currently conducts bicycle skills classes. Bicycle skill classes can be taught by other qualified instructors in addition to the Police Department. To supplement existing efforts, the City should find funding to support classes through the East Bay Bicycle Coalition or other qualified instructors (in addition to the police).

4.3.3 Citation Diversion Program

A diversion class can be provided to motorists in lieu of a citation and/or fine. Individuals would have the option of taking a onetime, free or inexpensive class instead. In Marin County, interested citizens can take the class even if they did not receive a ticket. This program is a good way to educate road users about bicycle rights and responsibilities, and can also increase public acceptance of enforcement actions.

Recommendation

The City should pursue establishing a Citation Diversion Program to educate drivers who drive unsafely about safe driving around pedestrians and bicyclists.

¹⁶ Sample program: Sonoma County (CA) Transit: <http://www.sctransit.com/bikesafe/bikes.htm> and San Jose Street Smarts: <http://www.getstreetsmarts.org/>.

¹⁷ Information about this program is available here: <http://www.ebbc.org/safety>

4.4. Evaluation

Evaluation programs measure and evaluate the effectiveness of projects, policies and programs. They may include comparing travel mode data over time, collecting bicycle and pedestrian counts, and administering community surveys.

4.4.1 Annual Traffic Counts

Pedestrian and bicycle counts and community surveys act as methods to evaluate not only the effectiveness of specific pedestrian and bicycle improvement projects but can also function as way to measure progress towards reaching City goals. The City of Emeryville has recently adopted a policy requiring all new large developments to conduct pedestrian and bicycle counts as part of the traffic impact analysis. Multimodal counts were conducted in August 2010.

Recommendation

The City should continue to require new large developments to conduct pedestrian and bicycle counts, and should expand traffic counts by:

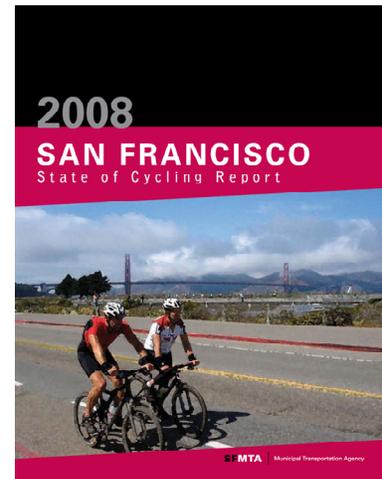
- Conducting before and after pedestrian, bicycle, and vehicle counts on all roadway projects.
- Conducting annual pedestrian and bicycle counts at count locations included in this Plan.
- Exploring the possibility of using automatic counters to collect data on key pedestrian and bicycle corridors. Automatic count technologies can be useful for bicycle count efforts. In-pavement loop detectors accurately count bicycle activity on-street and infrared counters can count pedestrian and bicycle activities on paths.¹⁸

4.4.2 Pedestrian and Bicycle Report Card

Cities around the world have begun monitoring their bicycle and pedestrian programs in order to track the number of non-motorized users, gauge user perceptions of the bicycle and pedestrian networks and identify trends in safety. Results are often published in a periodic bicycle and pedestrian account or report card, which can be distributed to the public as a means of publicizing the city's commitment to improving walking and bicycling conditions.

Recommendation

The City should establish an annual or semi-annual pedestrian and bicycle report card to track progress toward meeting the goals, policies and action items presented in this Plan. Data collection may include a



The San Francisco State of Cycling Report (2008) provides a snapshot of bicycling conditions in the city

¹⁸ The National Bicycle and Pedestrian Documentation Project provides a methodology for conducting counts. Nationwide, most pedestrian and bicycle counts occur in May and the City may consider adopting the same month to allow comparisons between jurisdictions. Resources from National Bicycle and Pedestrian Documentation Project: www.bikepeddocumentation.org

community and workforce survey, pedestrian and bicycle counts, and summary of collision and hospital records.

4.4.3 Monitoring Bicycle Boulevard Metrics

The City of Emeryville is poised to take a leadership role in the development and implementation of bicycle boulevards. Chapter 6 of this Plan presents three goals for evaluating the City’s bicycle boulevards: speed goals, motor vehicle volume goals, and major intersection goals.

Recommendation

The metrics used to monitor the bicycle boulevard goals should be measured regularly at a minimum of every two years to determine whether additional treatments are necessary to bring the street to the target goal. Emeryville should collect this data and evaluate each bicycle boulevard in the case of any of the following:

- Development occurs that is projected to increase motor vehicle volumes on the bicycle boulevard
- The *Pedestrian and Bicycle Plan* is updated
- Substantial community concern is brought to the City

The City can solicit volunteers to assist with these measurements.

4.5. Maintenance

Maintenance issues that may appear minor to motorists, such as overhanging vegetation or debris in the side of the road, can pose safety hazards to pedestrians and bicyclists or make a route inaccessible.

Table 4-1. Suggested Maintenance Schedule

Item	Responsible Party	Frequency
Pedestrian Facility Maintenance		
Sidewalks in non-residential areas: Cracking and ADA accessibility issues.	Adjacent property owners	Ongoing
Sidewalks in residential areas: Cracking and ADA accessibility issues.	City	Ongoing
Curb ramps: bring to ADA compliance during reconstruction, particularly where the ramp meets the roadway	City, Developers	Ongoing
Landscaping: Maintain 8 feet clear overhead	City	1-4 years

Item	Responsible Party	Frequency
Multi-Use Path Maintenance		
Sign replacement/repair	City	1-3 years
Pavement marking replacement	City	1-3 years
Pavement sealing and potholes	City	5-15 years/30-40 years for concrete
Sweeping	City	Monthly – Quarterly (weekly on major routes)
Irrigate/water plants	City	As required while establishing
Planted tree, shrub, and grass trimming/fertilization	City	5 months - 1 year
Maintain furniture	City	Annually
Graffiti removal	City	Weekly/ As needed
Maintain emergency telephones	City	Annually
Bicycle Facility Maintenance		
On-street pavement marking replacement	City	1-3 years
Clean drainage system	City	Annually
Pavement sweeping	City	Monthly
Pavement sealing and potholes	City	As needed, with citywide pavement resurfacing schedule
Tree maintenance on bicycle routes	City	Annually

Recommendation

The City should establish a maintenance schedule for pedestrian and bicycle infrastructure based on best practices, and make this schedule available to the community. Table 4-1 presents a suggested maintenance schedule.

4.6. Bicycle Sharing

Bike sharing is a system that allows users to check out bikes from publicly accessible stations and return them to other locations within the service area. Such systems have become increasingly popular throughout the North America, with successful programs implemented in Washington D.C., Boston, Minneapolis, Montreal, and other programs planned for Seattle, New York, and San Francisco. Policy 1-6 of this Plan guides the City to evaluate the feasibility of providing a citywide bike sharing system, expanding on the initial analysis presented in this Plan.

Difficulty providing bike sharing stations outside the city limits ordinarily prevents cities of Emeryville’s size from implementing bike sharing. However, the city has certain advantages that may improve the feasibility of a system:

- A proposed system in San Francisco; although the two cities are not directly connected by bicycle, reciprocal memberships would enhance the utility of the system for all users.
- Employment density and workplace characteristics may drive bike sharing demand significantly more than residential density. Emeryville’s daytime population is much higher than its evening population and demand may therefore be much higher than its population would suggest.

4.6.1 System Size and Demand

Other North American cities that have pursued bike sharing and that have comparable employment and projected population densities as Emeryville, such as Montreal and Washington D.C., have typically spaced stations approximately a quarter-mile apart from one another. This distance allows users to be generally no more than a 5 minute walk from a bicycle and represents a stations density of approximately 16 stations per square mile.

A potential bike share system should have approximately 17 stations located throughout the City. The number of bikes provided at each station can vary considerably from station to station depending on the characteristics of the area. Other cities have deployed approximately 10 bicycles per station, which translates to 170 bikes in Emeryville.

The first season of bike sharing in Minneapolis recorded 1.1 trips per bike per day. The first season of Capital Bike Share in Washington recorded 1.75 trips per bike per day, though rates are higher now. Assuming a 170 bike system in Emeryville and 1 to 2 trips per bike per day, annual demands could range from 60,000 to 120,000 trips per year. Empirically-derived demand models can be used at a later planning stage to more accurately forecast demands and potential user-generated revenues.

4.6.2 Planning Level Costs

Cost Precedents

Capital costs include provision of bicycles, manufacture and installation of bike-stations, purchase of service and distribution vehicles, development of a website, and purchase and installation of necessary hardware and software. Estimated capital costs for bike sharing programs in Montreal, Washington D.C. and Paris average \$3,600 per bicycle.¹⁹

Operating costs include salaries for maintenance and administrative staff, insurance, replacement costs for broken or stolen equipment, debt-service, gasoline and upkeep costs for redistribution vehicles, website hosting and maintenance, electricity charges for the bike-stations, membership cards and warehouse/storage fees. Across bike-share programs, the average annual operating cost is around \$1,600/bicycle. Operating costs are lowest in Montreal, where solar-powered stations are used.

Assuming a 170 bicycle (17 station) bike share system in Emeryville, capital costs could be in the order of \$600,000 with an annual operating cost of approximately \$270,000.

Funding

There are a number of funding models available under which bike-share programs have successfully operated. Many European systems are entirely funded by advertising in that advertising companies are given a street advertising contract in return for providing and operating a bike share program. In many cities, this is not feasible, as street advertising contracts are already set and the opportunity for additional street advertising is not available. There have also been questions about whether cities get full value for money from this arrangement (i.e. are they selling their advertising contracts too cheaply?).

¹⁹ New York City Department of Planning: *Bike-Share Opportunities in New York City*, 2009.

More recent bike share programs have investigated different funding models and have utilized the following funding sources:

- Federal, state, or local grants: generally used to cover capital costs of the initial system setup.
- Steady public agency income sources: these include using a portion of parking revenues or bus bike rack advertising revenue to contribute to operating the system.
- User fees: collected from subscribers who purchase annual, monthly, or daily passes and from users who exceed the generally free first thirty minutes of a trip. A typical bike-share pricing structure costs approximately \$70 per year for annual membership and approximately \$5 for a day pass. These would likely need to be lower for Emeryville as the program would not provide as extensive a reach as systems in larger cities. However, Emeryville's high employment density and corporate environment also provide valuable opportunities to leverage sponsorship.

Sponsorship

Similar to advertising, companies or individuals can sponsor the system as a whole or as individual stations, the fees going towards covering maintenance and operating costs. These opportunities are likely to be an important component of a bike sharing program implemented in Emeryville. Employers could sponsor bike share stations, either in a publicly accessible location on their campus or at a nearby public location. Two notable case studies are:

- **Nice Ride Minnesota** in Minneapolis is the first example of a public/private bike-share partnership. Capital costs were partially funded by a federal grant and partially by a title sponsor (in exchange for advertising placed on all bicycles in the fleet). Individual station sponsorship is also available to other companies, with that revenue going towards maintenance and operation of the system.
- The **London bike share system** is an example of a naming rights sponsor that paid a premium to have their name associated with the title of the system, i.e. the Barclays London Cycle Hire. This covers the costs of establishing and operating the system at no additional expense to the public agency.

4.6.3 Potential Station Locations

Bike sharing is most effective when combined with a good walking environment and nearby transit facilities. Stations should serve a high density and diversity of users to maintain demand (as much as possible) throughout the day. The following characteristics are attractive for potential bike share stations.

- **High Residential Density:** Proposed station locations should be accessible to the several pockets of high residential density that exist in Emeryville.
- **Employment Centers:** Employment centers can attract bicycle sharing trips as workers may use bikes to commute, as an extension of transit, or to make trips at lunch or other times during the day. The City should inquire among its major employers and office buildings about the potential to provide a bike share station on private property. Such opportunities should balance security needs of the site with public accessibility and visibility of the system.

4 Pedestrian and Bicycle Programs

- **Large Hotels:** Hotels can be a major generator of bike sharing trips, particularly casual users who tend to contribute disproportionately to user-generated revenues. Four large hotels within the City limits and one additional hotel just across the Oakland border present possible locations.

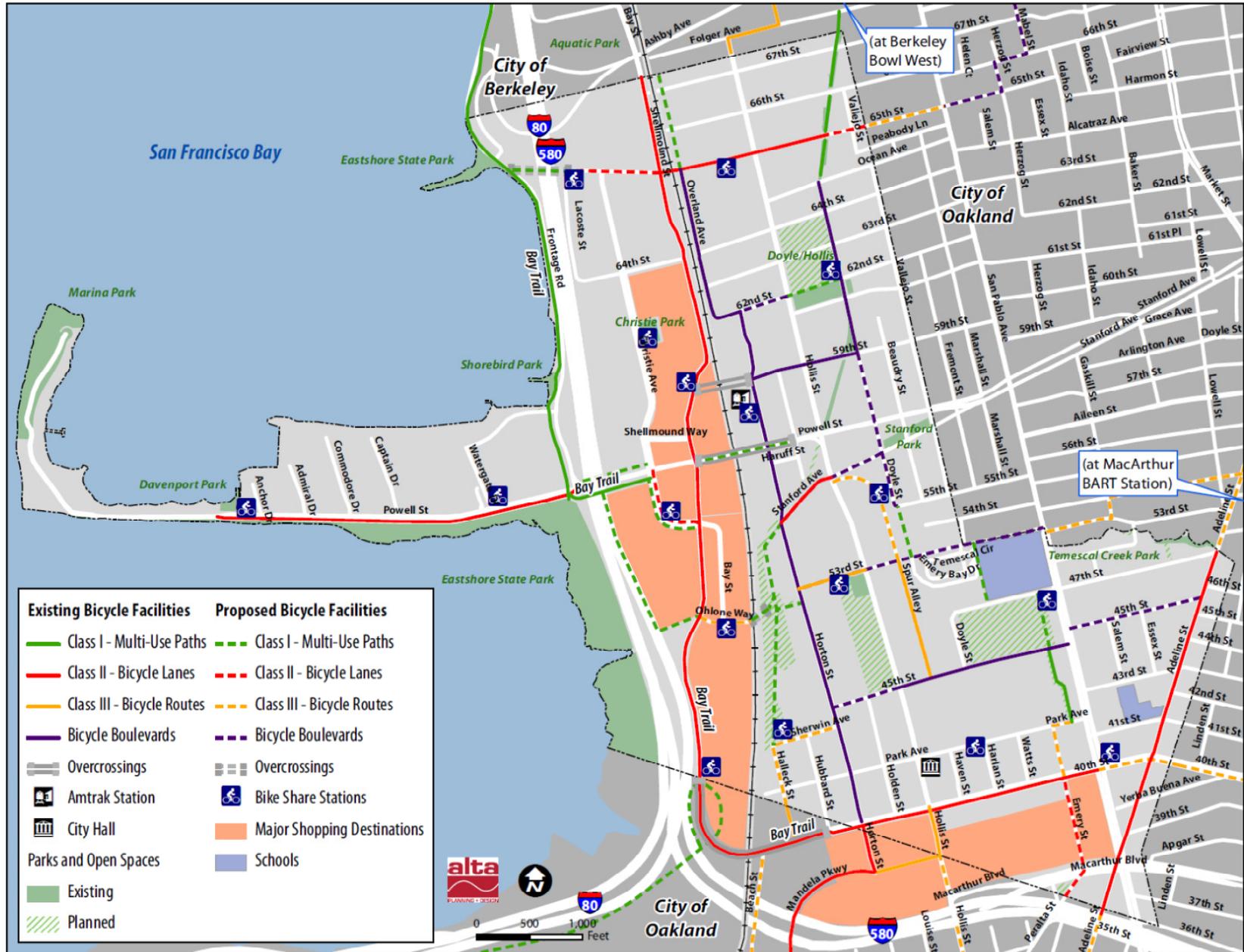
Existing and Proposed Bicycle Facilities: As many bike sharing users may not be experienced bicyclists, it is important to locate stations along protected bikeways where they are most likely to feel comfortable. Locations on multi-use paths, Class II Bikeways, and bicycle boulevards are ideal for station placement. Similarly, placing stations near future bicycle facilities can prompt quicker investment into expanding the bicycling network.

A final consideration for the placement of bike sharing stations is that some key destinations for Emeryville residents and workers may be located outside of the city limits. These include Berkeley Bowl West in Berkeley, the Macarthur BART station in Oakland and even the entrances to many of the large retail stores at the East BayBridge Shopping Center. Stations are therefore recommended at these locations as well. Potential station locations for the 17 station Emeryville bike share system are shown in **Map 4-1**, on the next page.

4.6.4 Station Design

Stations should be visible and accessible and are ideally located as close as possible to major trip generators. The first preference for station placement is generally within the sidewalk space, although this needs to consider the impact on pedestrian through-fare and the placement of utilities and other street features. Stations can also be placed in the street in place of (generally) two to three parking spaces. Public spaces such as parks and plazas or stations on private property may also be appropriate.

There have been significant advancements in the physical needs of a station with the latest generation of technology utilizing a modular station format, solar power, and wireless communication technology to make stations completely portable (they are bolted into place rather than requiring expensive excavation and wiring), cost-effective, and environmentally sustainable.



Map 4-1. Potential Bike Sharing Locations

4 Pedestrian and Bicycle Programs

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