

Why does Alameda need a Bicycle Master Plan?

As an island city surrounded by the spectacular San Francisco Bay, Alameda enjoys one of the finest settings of any city in California. Residents of Alameda have access to beaches, parks, lagoons, wildlife sanctuaries and the Bay Trail with panoramic, breath taking views of the San Francisco Bay and city sky line as well as access to a wide variety of cultural amenities centered around the numerous schools, the College of Alameda and harbor areas. They also enjoy a wide variety of local businesses as well as close proximity to nightlife, restaurants, and movie theaters at the nearby Jack London Square, and access via the ferry service to museums and cultural activities in San Francisco.

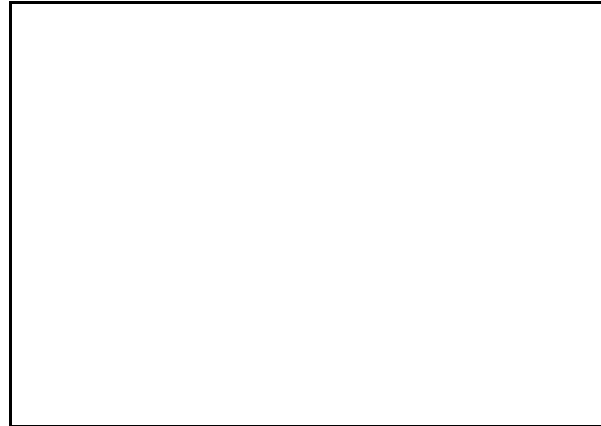
The City is relatively isolated from major transportation corridors, although Webster Street (State Route 61) a major regional route and connection to the City of Oakland to the north, can be congested during commute hours. State Route 61 also provides a direct connection to San Leandro and the Oakland International Airport to the east. Interstate 880, just outside of Alameda in Oakland, provides a connection to the regional highway system running throughout the Bay Area region.

The City is also connected to other regional centers by scheduled transit service provided by AC Transit, and the Bay Area Rapid Transit (BART) system. A major international airport is located nearby in Oakland on the border of Alameda's Bay Farm Island. Nearby Jack London Square has recently become a major regional visitor destination and is served by numerous transit lines, Amtrak, as well as a regular ferry service that connects to Alameda and San Francisco. Relatively few trucks use the downtown avenues, however Buena Vista and Clement Streets are manufacturing corridors that serve as a major truck and traffic thoroughfares for the City's industrial activities.

Historically, the island was home to the Ohlone Indians who lived by hunting, fishing and gathering on the island. In more recent history, life in Alameda has centered around the local Naval Air Station, various maritime activities (both recreational and industrial based) and the area's schools. The area is also known as a major Northern California yachting center. The city has a unique history of preserving the historical character of its homes and buildings rather than allowing for fast-growth and box type developments. As a result the city has retained a wide variety of unique architecturally styled homes and buildings that have helped preserve the City's historic character. As a primarily residential community, many residents commute to nearby employment centers in Alameda, San Francisco and Santa Clara Counties. This trend has been increased by the recent closure of the Naval Air Station, and loss of a significant portion of the island's employment base. However, the recent development of the Harbor Bay and Marina Village Business Parks, as well as redevelopment of Alameda Point (former NAS) and Fleet Industrial Supply Center (FISC) are currently bringing more high quality jobs to the area.

Why does Alameda need a Bicycle Master Plan?

One reason is the conversion of the former Naval Air Station (NAS) to a visitor attraction, shopping and employment center. With the former NAS accounting for a quarter of Alameda's land area, the redevelopment may have a significant impact on the island's demographic composition and travel demand, subsequently increasing the demand for cycling throughout the island.



Simply put, visitors and residents desire to get out of their cars and bicycle on the quiet streets lined with magnificent Victorian-style homes and beautiful tree canopy, bay shore and view, and the rich wildlife sanctuaries. In order to achieve this goal the bicycling environment in Alameda must be enhanced. Having a planning document that identifies facility priorities will enable the city to create an attractive and usable infrastructure.

Another reason is the enjoyment and quality of life for the residents of Alameda. Since bicycling is one of the most popular forms of recreational activity in the United States (with 46% of Americans bicycling for pleasure), we can assume that about 33,350 residents in Alameda bicycle purely for pleasure at least occasionally.

Safety is a primary reason to improve bicycling conditions in Alameda. Concerns for safety is the single greatest reason people don't commute by bicycle, according to a 1991 Lou Harris Poll. Addressing those concerns for bicyclists through physical and program improvements is another major objective of this Bicycle Master Plan. With many redeveloping areas (Alameda Point, FISC, and Northern Waterfront) a comprehensive BMP will provide guidance to secure bicycle access.

What are the Four Issues that Alameda must address to become a Bicycle Friendly City?

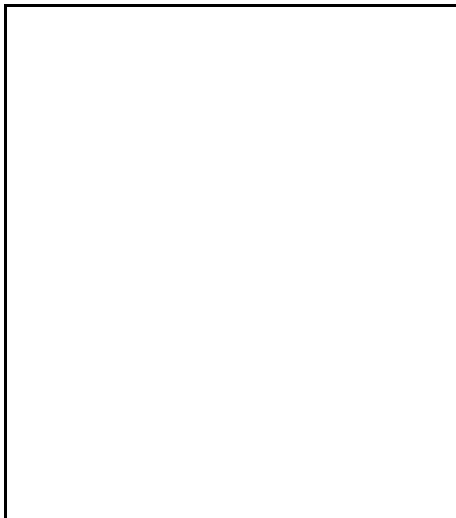
Safety, access, quality of life, and effective implementation are imperative elements for Alameda's success as a bicycle-friendly city.

Safety is the number one concern of citizens, whether they are avid or casual recreational cyclists or bicycle commuters. The city's wide residential streets, which have been historically used as rail and trolley ways, create a fairly safe cycling environment along many of the east-west routes, although this width also contributes to higher vehicle speeds which offsets these benefits. However,

heavy traffic volumes combined with narrower streets along the north-south avenues, which also house the City's commercial areas, create difficult conditions for cyclists. In particular, many bicyclists are forced to use side streets to avoid traffic along the commercial corridors of Park and Webster Streets, making safe access to shopping destinations problematic.

Access for bicyclists to shopping, work, recreation, school, and other destinations is somewhat hampered by the Park and Webster Street corridors. Movement across Santa Clara Avenue via Sherman St. is also hampered by the sheer volume of traffic (especially during the commute hours) and a lack of signaling at the intersection. A major ongoing challenge to bicyclists are the Webster/Posey Tubes, with their extremely narrow paths, along with elevated noise levels and high concentrations of automobile exhaust. Additionally, access to the Bay Farm Island Bike Bridge as well as connecting streets is difficult from both sides of the bridge.

This Plan urges Alameda to take measurable steps toward the goal of improving every Alameda citizen's **Quality of Life**, creating a more sustainable environment, reducing traffic congestion, vehicle exhaust emissions, noise, and energy consumption. The importance of developing a bicycle system that is attractive and inviting is a key element in preserving Alameda as a city where people want to live, work, and visit. The attractiveness of the environment not only invites bicyclists to explore Alameda, but more importantly, a beautiful environment helps to improve everyone's positive feelings about the quality of life in Alameda.



Education, enforcement, engineering, and funding are the basic components of an **Effective Implementation** Program for this Master Plan. Education must be targeted to the bicyclist as well as to the motorist regarding the rights and responsibilities of the bicyclist, and automobile driver. Comprehensive enforcement of existing traffic and parking laws, coupled with the implementation of sound design and engineering principles for bike corridors is also critical. This plan also proposes systematic review of all new development projects, including public works efforts, to assure compliance with planning and building codes and the principles of this Master Plan. Finally, this plan proposes an aggressive strategy for obtaining grants and competing for other funding sources in order to realize the physical improvements identified as the highest priorities.

Expected Benefits of the Bicycle Master Plan

Save lives. Reduce the accident and fatality rate for bicyclists through design standards and guidelines, education, and enforcement.

Provide needed facilities and services. Meet the demand for increased use of bicycles as a means of travel around the city. With a goal of doubling bicycling by 2010, the bicycle commute share would increase from 661 commuters to 1,322 commuters--which at 1.5% of the total commuting population is 50% higher than the national average.

Improve the quality of life in Alameda. Design and build pedestrian and bicycle friendly streets, paths, trails, and activity centers available to everyone, and support sustainable community development. Reduce traffic congestion, vehicle exhaust emissions, noise and energy consumption by encouraging a healthier and more active form of travel. Encourage visitors to enjoy Alameda on bicycle.

Maximize funding sources for implementation. Equip Alameda to successfully compete for state and federal funding, by meeting the requirements of the California Bicycle Transportation Act and the Transportation Efficiency Act for the 21st Century (TEA-21).

Major Recommendations of the Bicycle Master Plan

The Bicycle Master Plan recommends the completion of a comprehensive bikeway network and implementation of new educational and promotional programs to be implemented over the 20-year life of the Plan. Specific short-to-mid-term projects in general order of preference that are detailed later in this report include:

1. Webster/Posey Tubes, Oakland Connection
2. Central Avenue Bike Lanes
3. Bicycle Support Facilities
4. Shoreline Trail Enhancements
5. Bay Farm Island Bike Bridge Access

6. Northern Bikeway Corridor and Park/Fruitvale Bridges Bicycle Access
7. San Jose-Sherman Bikeway Corridor
8. Commercial Area Bicycle Corridors
9. Fifth Street Corridor
10. Atlantic Avenue Bikeway
11. Bay Farm Island Bikeways
12. Alameda Point and FISC Bikeway Systems

Numerous programs and smaller projects are also included in the short and mid-term list of recommended projects, and are detailed later in this report, as are specific actions that are needed to implement these projects in the next five (5) to ten (10) years.

1.0 Goals and Objectives

The Bicycle Master Plan has been created through the diligent efforts of the City and citizens interested in improving the Alameda bicycling environment. Without the sustained efforts of these people, this Plan would not have been conceived and written.

1.1 Relationship between this Plan and other Planning Efforts in Alameda

As an Element of the General Plan, the Bicycle Master Plan has the comprehensive scope and jurisdictional authority required to coordinate and guide the provision of all bicycle-related plans, programs, and projects. Many current planning efforts provide recommendations regarding one element or aspect of the bicycle network; the task of the Alameda Bicycle Master Plan is to ensure compatibility of all of these blueprints, while attending to planning for areas of the City not already targeted by other studies. The studies or planning efforts listed below have been reviewed and consulted, studied for consistency, and where appropriate, folded into Alameda's Bicycle Master Plan:

Alameda General Plan (Final Land Use and Circulation Elements)

The Alameda General Plan Land Use and Transportation Elements are the most recent policy

documents that deal directly with bicycle issues. The *Land Use Element* primarily focuses on maintaining Alameda's small-city feel. The Land Use Element recognizes the benefits of having a jobs/housing balance within the city and the potential to reduce travel demand. The subsequent reduction of commute distances for locally employed residents resulting from a jobs/housing balance would provide increased opportunities for commuting by bicycle. Finally, the Land Use Element states a policy to limit the size of stores in neighborhood business districts (Y) to avoid transforming pedestrian-scale business districts into auto-oriented shopping centers (Y). The attributes of pedestrian scale business districts tend to also coincide with those of bicycle friendly environments.

The *Transportation Element* has a goal of providing a system of bike paths, bike lanes, and bike routes that will encourage both commute and recreational cycling, with objectives to de-emphasize the dependence on single occupant automobile travel by providing a high level of transit, pedestrian and bicycle opportunities. Plan recommendations include many items that would benefit bicyclists, including a traffic management system that minimizes the intrusion of traffic onto residential streets, opposes increasing through traffic capacity on the Main Island, encourages through traffic to the Harbor Bay Business Park to utilize alternative connections to I-880, and utilizes general traffic calming measures (stop signs, speed limits, narrowing of roads) on residential streets. The Recreation and Parks, Shoreline Access, Schools and Cultural Facilities Element supports completion of the Bay Trail, a Class I path, that follows the shoreline as closely as possible and circles Alameda's portion of Bay Farm Island and the Main Island.

Descriptions of Class I, II, and III facilities are provided in the Transportation Element, along with a map of the existing and proposed bikeways system. The plan contains a brief section stating the guiding and implementing bikeway policies but these are lacking the implementation detail necessary to support and carry out a thorough plan which allows for the fullest development and utilization of the city's bikeway system. In addition, in order to help achieve the city's bikeway system goals and visions, the plan needs to present a well thought-out set of recommendations, accompanied by a feasibility analysis, financial estimates and funding information.

Alameda County Bikeway Plan (1996/7)

The Alameda County Bikeways Plan contains a detailed map of existing and proposed bikeways and will be updated in 1999.

NAS Alameda Community Reuse Plan (1996)

The NAS Alameda Reuse Plan recognizes the need to provide adequate bicycling facilities that are conducive to the efficient and safe circulation between the various land uses on the base. The plan calls for providing a system of bicycle paths, lanes and routes that encourage both commute and

recreational bicycling. @ This includes establishing Class I bicycle paths on Main Street, Atlantic Avenue, Tinker Avenue, and Mitchell-Mosely, requiring employers to provide ample and safe storage areas for bicycles, and encouraging bike transport on board transit systems throughout the base. Additionally, the plan calls for the creation and distribution of a map showing existing and proposed bikeways in NAS Alameda as well as a bikeway implementation program with schedules and priorities.

NAS Alameda Street Improvement Plan (1997)

The NAS Street Improvement Plan is a proposal for transportation improvements at the Alameda Point. The bikeways section of the plan proposes to provide a network of bikeways to sustain and promote bicycling as a viable transportation mode on the base.

Standards for bikeways classifications are defined using CalTrans guidelines along with guidelines for their placement in the bikeway system. The plan makes several proposals for bike paths, lanes and routes throughout the base as well as along routes connecting the base to Alameda. This includes a Class I bikepath along the entire perimeter of the base, connecting to the existing Class I bikeway south of Central Avenue and to the bike path to the Main Street Ferry Terminal.

1.2 Goals of the Bicycle Master Plan

Goals provide the context for the specific policies and recommendations discussed in the Bicycle Master Plan. The goals provide the long-term vision and serve as the foundation of the plan. The goals are broad statements of purpose that do not provide details, but show the plan's direction and give overall guidance. Objectives provide more specific descriptions of the goal, while policy actions provide a bridge between general goals and actual implementation guidelines, which are provided in the Implementation chapters.

The following Goals and Objectives are intended to guide bicycle planning, design, and implementation. Note that each policy action that is addressed in this Plan is noted with a [P].

Objective 1.0 Planning

Plan for the development of bicycle facilities and programs as a viable alternative to the automobile.

Policy 1.0 Develop a tool to plan, design, implement, and maintain bicycle infrastructure in Alameda.

Actions:

- 1.1 Develop and adopt a Bicycle Master Plan which identifies existing and future needs, and provides specific recommendations for facilities and programs over the next 20 years.[P]
- 1.2 Update the Plan on a regular basis (consistent with Caltrans/General Plan standards) as

- required by funding agencies. [P]
- 1.3 Ensure that the Plan is consistent with all existing City, regional, state, and federal policy documents, including all General Plan elements.[P]
 - 1.4 Encourage development concepts (such as mixed use projects) that have as a goal the reduction of the dependency on the automobile for short commute, shopping, and recreational trips.[Land Use Element]
 - 1.5 Maximize coordination between Alameda and neighboring jurisdictions using a Bicycle Coordinator as a means to review and comment on issues of mutual concern.[P]

Objective 2.0 Community Involvement

Involve the Community in the Planning and Implementation of the Bicycle System.

Policy 2.0 Encourage public participation through local coordination with City staff.

Actions:

- 2.1 Identify a part time bicycle coordinator whose responsibility it is to (a) provide support to the public, (b) act as a liaison to the City, (c) act as a liaison to local bicyclists, the media, and the community in general, (d) review and/or complete funding applications, and (e) provide inter-departmental coordination.[P]
- 2.2 Public Hearings are required for any project that involves the removal of vehicle parking or vehicle travel lanes to accommodate bicycle facilities. Affected neighborhoods shall be noticed of the public hearing. Additionally, public involvement in the planning process should be maximized through workshops, surveys and other means.[P]
- 2.3 Build coalitions with businesses and other organizations the bicycle system serves as well as local clubs and organizations.[P]
- 2.4 Establish a city Bicycle Advisory Committee (BAC) to provide continuous input and support for bicycle facility and bikeway plan developments and revisions.

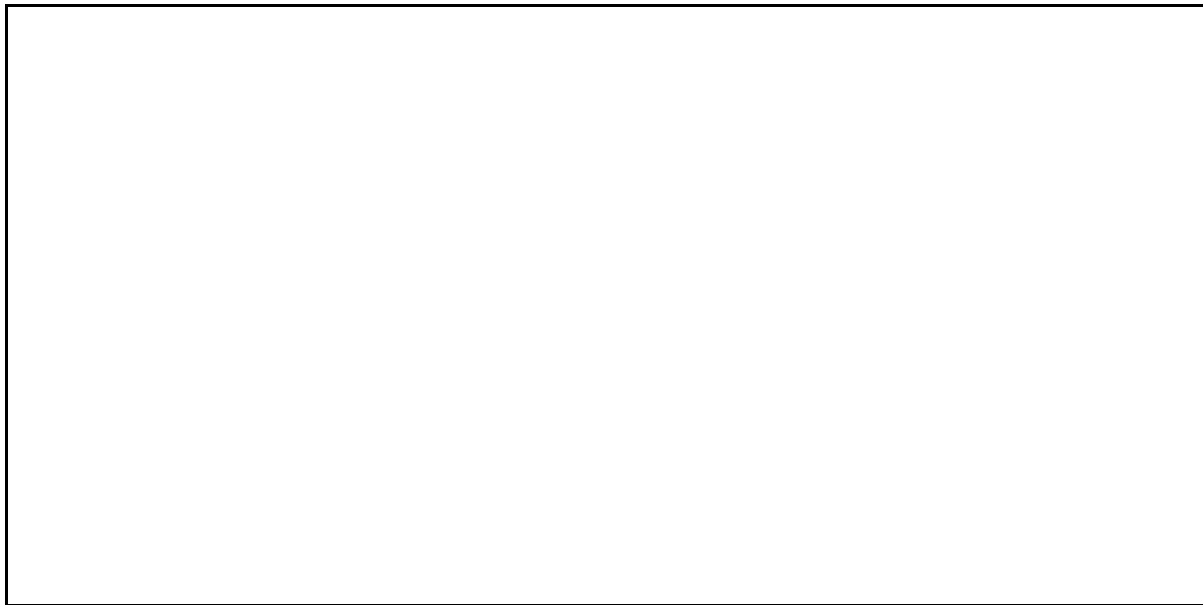
Objective 3.0 Opportunities

Utilize existing resources in Alameda.

Policy 3.0 Build upon the existing bikeway system and programs in Alameda.

Actions:

- 3.1 Identify existing and proposed bike paths, lanes, and routes, sidewalks, walkways, and develop a city-wide system to maximize use to the extent feasible.[P]
- 3.2 Identify deficiencies, gaps, or areas that need improvement.
- 3.3 Explore the feasibility of multi-use pathways (bike paths) along the Alameda Beltline Railway system and the Alameda shoreline where paths do not currently exist. [P]
- 3.4 Identify existing bicycle education programs and target future expansion as need warrants.[P]
- 3.5 Develop an integrated bikeway system as part of the Alameda Point and FISC redevelopment



projects, in order to make these truly bicycle-friendly communities.

Objective 4.0: Facility Design

Provide high quality and safe opportunities for all people in Alameda to bike to work, school, or play.

Policy 4.0 Develop a city-wide bicycle system which meets the needs of commuter and recreational users, helps reduce vehicle trips, and links residential neighborhoods with local and regional destinations.

Actions:

- 4.1 Develop a commuter system which provides direct routes between residential neighborhoods and regional employment centers, commercial centers, transit/ferry stops, and schools.[P]
- 4.2 Develop a recreational system which uses lower traffic volume streets, off-street bike paths,

- and serves regional historic and natural destinations as well as community facilities.[P]
- 4.3 Develop a city-wide system that is no further than one half (1/2) mile from any residential neighborhood in Alameda, and provides opportunities for local connections to the city-wide system.[P]
- 4.4 Develop a bicycle network which balances the need for directness with concerns for safety and user convenience. Where needed, develop a dual system which serves both the experienced and inexperienced bicyclist, and separates bicyclists, pedestrians, and other recreational users.[P]
- 4.5 Consider opportunities for including bicycle lanes on collectors where width of the street, traffic volumes, and service to major activity centers are appropriate.[P]
- 4.6 Use and supplement design guidelines to outline development standards for bike lanes and paths to encourage a safe and inviting environment.[P]
- 4.7 Create connections between bike lanes and other transportation modes.[P]
- 4.8 In order to encourage cycling throughout the city, the City should develop criteria for installing traffic calming devices. These devices may include; traffic roundabouts, channelization, neck-downs, T-intersections, modified designs for travel lanes, and reduction in street widths where significant through traffic impacts low density residential areas. These devices should only be installed where desired by residents, impacted businesses, and where a demonstrated need exists and where they are compatible with the access needs of emergency vehicles. Installation design and priority should consider equity between different neighborhoods.
- 4.9 Refine the design guidelines in the Transportation Element to be consistent with established standards, and develop a feasibility study of proposed pathway and bike lanes/routes. [P]
- 4.10 Add bicycle parking in new developments.

Objective 5.0: Multi-Modal Integration

Integrate Bicycle Mode into other Alternative Modes

Policy 5.0 Maximize multi-modal connections to the bicycle system.

Actions:

- 5.1 Ensure that the city-wide system is integrated into existing transit and ferry stops and services in Alameda.[P]
- 5.2 Work with local and regional transit agencies to install bike lockers and racks where possible,

and to maintain bike racks on buses.[P]

Objective 6.0 Safety and Education

Maximize bicycle safety in Alameda.

Policy 6.0 Improve bicycle safety conditions in Alameda.

Actions:

- 6.1 Monitor bicycle-related accident levels regularly, and target a 40 - 50% reduction on a per capita basis over the next twenty (20) years.[P]
- 6.2 Develop a comprehensive bicycle education and safety program that is taught to all school children in Alameda.[P]
- 6.3 Develop a system for identifying, evaluating, reporting and funding maintenance of paths, lanes and signage and responding to safety problems on the existing bikeway system.[P]
- 6.4 Incorporate bicycle safety curriculum into existing motorist education and training.[P]
- 6.5 Coordinate with the Alameda Police Department to determine strategies of education and enforcement.[P]
- 6.6 Evaluate existing traffic controls (Stop signs, crosswalks, traffic signals) to ensure that facilities adequate for bicycle use are being provided in Alameda. [P]
- 6.7 Utilize local police bike patrol units to monitor bikeways and enforce bicycle-related laws and educate the community on safe and proper bicycle use.

Objective 7.0 Phasing

Target Improvements for those Areas with the Highest Need and Benefit

Policy 7.0 Develop detailed and ranked improvements in the Bicycle Master Plan.

Actions:

- 7.1 Identify the top bicycle improvements to be completed in the short to mid term (Primary System) based on a variety of objective and subjective criteria, including number of activity centers served, closure of critical gaps, immediate safety concerns, existing bicycle use, and input from the public and staff.[P]
- 7.2 Develop detailed implementation information on each recommended segment, including length, classification, adjacent traffic volumes and speeds, environmental impact, activity centers served, cost, and overall feasibility.[P]

- 7.3 Develop prototype cross sections and plans for the design of bikeways facilities that meet state and federal standards.[P]
- 7.4 Complete needed design and feasibility work on all proposed bicycle facilities in order to determine the accurate cost and other implementation information.
- 7.5 Develop education and maintenance programs which may be adopted by local jurisdictions.[P]

Objective 8.0 Support Facilities and Programs

Maximize bicycling as a transportation mode in Alameda.

Policy 8.0 Develop a coordinated strategy to develop support facilities and programs in Alameda.

Actions:

- 8.1 Develop and update a bikeway map for public distribution that shows existing and recommended bicycle routes.[P]
- 8.2 Sponsor annual bicycle events such as Bike to Work Day and adult safety courses in conjunction with regional efforts.[P]
- 8.3 Promote use of bicycles as a safe and convenient alternative mode of transportation.[P]
- 8.4 Amend parking ordinance to require adequate and appropriately located bicycle parking to meet demand.[P]
- 8.5 Develop a unique and distinctive logo for the Alameda Bikeway System to locate on city wide system along with appropriate directional and warning signs. Improve existing and future citywide bicycle signage.
- 8.6 Implement a bicycle rack program in commercial districts and at public facilities.

Objective 9.0 Funding

Maximize the amount of funding to implement the proposed bicycle system within a prudent budgetary plan.

Policy 9.0 Maximize the amount of state and federal funding for bicycle improvements that can be received by Alameda.

Actions:

- 9.1 Identify current regional, state, and federal funding programs, along with specific funding requirements and deadlines.[P]
- 9.2 Encourage multi-jurisdictional funding applications.[P]
- 9.3 Develop a prioritized list of improvements along with detailed cost estimates, and identify appropriate funding sources for each proposal.[P]
- 9.4 Include bicycle improvements in the City's Capital Improvement Plans.[P]
- 9.5 Identify funding that provides a path along the shoreline, rail and other alignments and supports the connections to the pathway from the surrounding neighborhoods.[P]
- 9.6 Develop mitigation standards for all major residential and community commercial development projects to provide bike improvements or a contribution into a transportation improvement fund.[P]
- 9.7 Encourage private and corporate donations and grants that may be used to support bicycle facilities and programs.

Objective 10.0 Implementation and Maintenance*Implement the Proposed Bicycle System***Policy 10.0 Anticipate impacts of future developments along existing and proposed bicycle improvements.**

Actions:

- 10.1 Review development projects for existing and proposed bicycle corridors, and require dedication of land and development of project when feasible. Encourage development of the Bay Trail along the waterfront to provide for public access as required by Bay Conservation Development Commission (BCDC) and the San Francisco Bay Trail (Bay Trail). [P]
- 10.2 Develop policies for new developments which ensure that bicycle user's needs are incorporated into new neighborhoods and with new/modified roadways, including providing access points to existing and proposed bicycle facilities, on-street bicycle facilities for bicyclists, and proper roadway crossings where new streets will cross existing and proposed bikeways.[P]
- 10.3 Encourage Caltrans to provide bicycle crossings at appropriate locations across S.R. 61, which includes Webster, Central, Encinal, Broadway, Otis and Doolittle Streets. In cases where new development would benefit from such crossings, the private development may

be requested/required to participate in the cost of the crossing.[P]

- 10.4 As part of the site development review process, bicycle facilities should be required to be included in all Travel Demand Management (TDM) programs for employment sites of more than 50 employees.
- 10.5 Consider requirements to have new developments to provide bicycle facilities as designated in this Plan.

Objective 11.0 The Commercial Districts

Enhance Alameda Commercial Districts for Bicyclists

Policy 11.0 Target Commercial Districts (Park and Webster Streets) and community commercial areas for adequate bicycle parking and access points to shopping areas and adjacent neighborhoods

Actions:

- 11.1 Bicycle access connecting Park and Webster Streets to adjacent residential neighborhoods should be enhanced, where feasible.[P]
- 11.2 Utilize traffic calming devices to enhance the safety, accessibility and internal movement for bicyclists.[P]
- 11.3 Implement bike rack facility program for employees and shoppers.
- 11.4 Provide for high quality, durable, sheltered and secure bike parking facilities to encourage additional bicycle use by employees and customers of local businesses.