CITY OF OAKLAND

AGENDA REPORT

TO: Office of the City Administrator
ATTN: Deborah A. Edgerly
FROM: Community and Economic Development Agency
DATE: November 13, 2007

RE: **A Public Hearing and Resolution Certifying The Environmental Impact Report And Adopting The Comprehensive Revision To The Bicycle Master Plan As Part Of The Land Use and Transportation Element Of The City's General Plan**

SUMMARY

Staff is requesting City Council approval of a resolution for a General Plan Amendment to adopt the update to the Bicycle Master Plan (Plan) as part of the Land Use and Transportation Element (LUTE) of the City's General Plan. The City of Oakland's current Bicycle Master Plan was adopted in 1999. The Plan serves as the official policy document addressing the development of facilities and programs to enhance the role of bicycling as a viable and appropriate transportation mode in Oakland.

To be eligible for funding from the State's Bicycle Transportation Account, local jurisdictions must complete a bicycle transportation plan and then update or reaffirm the plan every five years (Streets and Highways Code 890-894.2). In 2005, City Council reaffirmed the 1999 Bicycle Master Plan in order to maintain funding eligibility while completing the Plan update. Adoption of the Plan would implement General Plan LUTE Policy T4.5 which recommends the preparation, adoption, and implementation of a Bicycle Master Plan.

FISCAL IMPACT

Adopting the Bicycle Master Plan will have no direct fiscal impact to the City. A planning-level estimate of the cost to implement the Plan is $28 million over twenty years. Typically, on-street bikeways are bundled with roadway resurfacing or reconstruction and add little to no additional cost to the overall project. The fiscal impacts of individual projects would be reviewed by Council through the Capital Improvement Program, the identification and acceptance of grant funding, and the authorization of construction contracts. The Capital Improvement Program (FY 2007-12) includes $376,000 in the 2-Year Budget and $1,001,000 in the 5-Year Plan for "Bike Facility Design and Implementation." These resources are from Measure B Local Pedestrian and Bicycle Funds (Alameda County Transportation Improvement Authority) and are used strategically to leverage grant funds from the sources listed below.

Adoption of the Plan will ensure the City's ongoing eligibility and competitiveness for bicycle-related grant funding, including the Bicycle Transportation Account (State of California),

Measure B Countywide Discretionary Pedestrian and Bicycle Program (Alameda County Transportation Improvement Authority), Regional Bicycle and Pedestrian Program (Metropolitan Transportation Commission), Safe Routes to Transit (Metropolitan Transportation Commission), Transportation Development Act Article 3 (Metropolitan Transportation Commission), and Transportation Fund for Clean Air (Bay Area Air Quality Management District).

BACKGROUND

The Bicycle Master Plan is the citywide, long-range policy document for promoting bicycling as a viable means of transportation and recreation in Oakland. Through the recommended General Plan Amendment, the updated Bicycle Master Plan would replace the 1999 Plan as part of *Envision Oakland* (1998), the Land Use and Transportation Element (LUTE) of the Oakland General Plan, consistent with existing General Plan policies. As part of the General Plan LUTE, the Bicycle Master Plan has the comprehensive scope and jurisdictional authority required to coordinate all bicycle-related plans, programs, and projects within Oakland in a manner consistent with regional, state, and federal guidelines. The Plan includes an existing conditions analysis, policies and action items, the Proposed Bikeway Network, design guidelines for bikeways and bicycle parking, and an implementation program. In particular, the update process included a detailed analysis of the Proposed Bikeway Network. This analysis developed proposals for maximizing bicyclist safety and access throughout the city while minimizing potential adverse effects on other roadway users. This analysis is the basis for the Plan's Environmental Impact Report (EIR) that addresses transportation/circulation and air quality in detail and finds no significant and unavoidable impacts. Key elements of the update process and the Bicycle Master Plan are described in the following subsections. The Plan's "Introduction and Executive Summary" is included as Attachment A.

Community Outreach

The community process for the Plan emphasized continuous involvement by a Citizens Advisory Committee (CAC) and proactive outreach to neighborhood groups, merchants associations, and community-based organizations. The CAC was composed of representatives for each council district, representatives of community-based organizations, and interested individuals. The committee met monthly from April 2005 through November 2007 with 20 people participating. Throughout the process, the project manager gave presentations on the project to neighborhood groups and merchants associations as part of those groups' regularly scheduled meetings. Over 50 presentations were made to such groups throughout the city, reaching over 850 people. Additionally, three large format, open-invitation public meetings on the project were held: two in June 2005 at the beginning of the process and a third in April 2007 to coincide with the release of the Draft Plan. Through this outreach process, a project contact list was developed that currently includes 625 people who are interested in the update and implementation of the Plan. This list will be maintained and developed in conjunction with the "I Bike Oakland" newsletter

that was initiated in August 2007 to provide biannual updates to the public on the implementation of the Bicycle Master Plan.

This public outreach noted the following issues that were subsequently addressed through the planning process and integrated into the Plan. Many Oakland residents would like to bicycle (or bicycle more often) but they do not feel safe given the current traffic conditions on many of Oakland's streets. Merchants in the neighborhood commercial districts are concerned that bikeways on their streets could cause localized congestion that would negatively affect their businesses. Some bicyclists are seeking the most direct routes (regardless of traffic conditions) while others (including parents with children) are seeking residential streets and Bicycle Paths. Bicyclists are very interested in ensuring that Oakland's bikeways provide seamless connections to the bikeways in adjoining jurisdictions. Bus and shuttle operators are concerned that some bikeways may cause localized congestion that would adversely affect their operations. Especially at night, many cyclists ride on busier streets because of their concerns for personal security on the quieter side streets. People's priorities for improvements include developing bikeway connections to downtown, transit stations, Oakland's waterfront, and connecting Lake Merritt to the surrounding neighborhoods.

Vision, Goals, Objectives, and Policies

The Plan proposes the following vision statement: "Oakland will be a city where bicycling is fully integrated into daily life, providing transportation and recreation that are both safe and convenient." The Plan proposes the following three goals to promote this vision:

- *Goal 1: Infrastructure* – Develop the physical accommodations, including a network of bikeways and support facilities, to provide for safe and convenient access by bicycle.
- *Goal 2: Education* – Improve the safety of bicyclists and promote bicycling skills through education, encouragement, and community outreach.
- *Goal 3: Coordination* – Provide a policy framework and implementation plan for the routine accommodation of bicyclists in Oakland's projects and programs.

For each of these goals, the Plan specifies policies and actions to formulate how the goals are to be achieved. These policies address the Bikeway Network, Routine Accommodation, Safe Routes to Transit, Parking and Support Facilities, Education, Enforcement, Resources, Project Development, and Public Review. To measure progress on these goals, the Plan proposes the following objective: "Publicly strive to become a Bicycle Friendly Community by 2012, as recognized by the League of American Bicyclists." The Bicycle Friendly Community Campaign is a national program to evaluate and award local jurisdictions for actively promoting bicycling. The evaluation is based on a holistic consideration of a city's accomplishments to date as well as outstanding needs.

General Plan Analysis and Findings

The City Council finds and determines the following: Through a General Plan Amendment, the updated Bicycle Master Plan will be adopted as part of the Land Use and Transportation Element (LUTE) of the Oakland General Plan. Oakland's current Bicycle Master Plan was adopted as part of the LUTE in July 1999. Appendix D of the Draft Bicycle Master Plan defines all bicycle-related policies and actions from all elements of Oakland's General Plan, including the LUTE and the Open Space, Conservation, and Recreation Element (OSCAR) that are recommended for implementation. In particular, the project would implement LUTE Policy T4.5 which recommends the preparation, adoption, and implementation of a Bicycle Master Plan. Additionally, the Draft Bicycle Master Plan is consistent with and furthers the following General Plan policies:

- LUTE Policy T3.5, Including Bikeways and Pedestrian Walks: The City should include bikeways and pedestrian walks in the planning of new, reconstructed, or realized streets, wherever possible.
- LUTE Policy T4.1, Incorporating Design Features for Alternative Travel: The City will require new development, rebuilding, or retrofit to incorporate design features in their projects that encourage use of alternative modes of transportation such as transit, bicycling, and walking.
- LUTE Policy T4.10, Converting Underused Travel Lanes: Take advantage of existing transportation infrastructure and capacity that is underutilized. For example, where possible and desirable, convert underused travel lanes to bicycle or pedestrian paths or amenities.
- OSCAR Policy OS-7.5, Lateral Access and Links to the Flatlands: Improve lateral access along the Oakland shoreline and linkages between the shoreline and nearby neighborhoods by creating a "Bay Trail" along the length of the Oakland waterfront...
- OSCAR Policy CO-12.2, Coordinated Transportation Systems: Maintain a coordinated bus, rail, and ferry transit system which provides efficient service to major destinations and promotes alternatives to the single passenger auto.
- OSCAR Action CO-12.2.3, Improved Bicycle and Pedestrian Systems: Develop a viable bicycle and pedestrian circulation system, with routes providing safe, convenient access between residential neighborhoods and employment centers.

Thus, in consideration of these and similar policies, the proposed amendment will not cause any internal inconsistencies to the General Plan.

Proposed Bikeway Network

The Proposed Bikeway Network specifies 218 miles of bikeways in Oakland, building upon the 87 miles of existing facilities. At completion, the network would include 184 miles of on-street bikeways as part of the 836 miles (2,300 lane miles) of the City's streets. The overall goal of the network is to connect neighborhoods with downtown, transit stations, and commercial districts such that the majority of any bicycle trip in Oakland could be completed on a designated

bikeway. These streets and paths would be designed to maximize bicyclist safety and access while minimizing potential adverse affects on other roadway users. The overall magnitude of the network is based on bikeways spaced at one-half mile intervals. (This criterion results in four miles of bikeway per square mile of land area, or approximately 220 miles of bikeway throughout Oakland's 55 square miles.) By comparison, the Recommended Bikeway Network in the 1999 Bicycle Master Plan specified 207 miles of bikeway.

At completion, the Proposed Bikeway Network would include:

- 34 miles of Bicycle Paths (Class 1): Bicycle Paths provide for bicycle travel on a paved right-of-way that is completely separated from the street. They are typically shared with pedestrians and often called mixed-use paths. Examples include the Waterfront Trail and the Shepherd Canyon Path.
- 93 miles of Bicycle Lanes (Class 2): Bicycle Lanes are striped lanes on streets, designated with specific signage and stencils, for the use of bicyclists. Bicycle Lanes (Class 2) are the preferred treatment for arterial and collector streets on the Proposed Bikeway Network. Examples include the Bancroft Avenue Bicycle Lanes and the Grand Avenue Bicycle Lanes.
- 22 miles of Bicycle Routes (Class 3): Bicycle Routes identify preferred streets for bicycle travel using lanes shared with motor vehicles. Bicycle Routes are designated because they are suitable for sharing with motor vehicles and provide better connectivity than other streets. Examples include the Skyline Boulevard Bicycle Route and the Webster/Shafter Bicycle Route.
- 36 miles of Arterial Bicycle Routes (Class 3A): Bikeways may be necessary on some arterial streets where Bicycle Lanes (Class 2) are not feasible and parallel streets do not provide alternatives. Arterial Bicycle Routes would promote shared use with lower posted speed limits (preferably 25mph), shared lane bicycle stencils, wide curb lanes, and signage. The Arterial Bicycle Route is a new facility type proposed by the Plan.
- 33 miles of Bicycle Boulevards (Class 3B): Bicycle Boulevards are bikeways on residential streets that prioritize through trips for bicyclists. The route should appeal to cyclists of varied skill levels by providing direct connections on streets with low traffic volumes. The Bicycle Boulevard is a new facility type proposed by the Plan.

A map of the Proposed Bikeway Network is included as Attachment B. A map of Existing Bikeways is included as Attachment C.

Citywide Feasibility Analysis of Proposed Bikeways

To update the Proposed Bikeway Network, staff developed a Citywide Feasibility Analysis that applied criteria to all streets on the Recommended Bikeway Network from the 1999 Bicycle Master Plan plus a number of additional streets that were evaluated as potential alternatives. Approximately 700 segments of potential bikeway were analyzed. Segments were defined as lengths of roadway with uniform characteristics including curb-to-curb width, lane configuration, and parking configuration. The segments are commonly one-third mile in length although some

are as short as one block. The citywide feasibility analysis consisted of the following components:

- *Street Grade Analysis* developed guidelines for hills that are appropriate on the bikeway network. Individual streets were evaluated based on their average slope, maximum slope, and an overall difficulty factor.
- *Street Width Analysis* inventoried the curb-to-curb street width, lane configuration, and parking configuration for all bikeway segments on collector and arterial streets. The analysis then identified proposed roadway cross-sections to improve bicyclist safety and access.
- *Capacity Analysis* of existing motor vehicle volumes was completed for all segments in which the proposed cross-section would require the conversion of travel lanes to Bicycle Lanes (Class 2) or Arterial Bicycle Routes (Class 3A) with wide outer curb lanes.
- *Bicycle/Bus Analysis* compared potential bikeways to existing AC Transit bus routes (plus the Emery-Go-Round) to minimize the complications in both design and operations of having designated bikeways on heavily used transit streets. The designated bikeways were chosen to avoid the most important transit streets where alternative bikeway alignments or types were feasible.

The Proposed Bikeway Network preserves the major elements of the Recommended Bikeway Network from the 1999 Bicycle Master Plan. However, incremental modifications have been made throughout the Proposed Bikeway Network to improve bicyclist safety and access while avoiding potential adverse affects for other roadway stakeholders, namely drivers, bus riders, and merchants in the neighborhood commercial districts. Projects with the potential for adverse impacts are subject to additional study requirements as described in the following subsection.

Bikeway Feasibility Study Requirements

The following requirements for bikeway feasibility studies provide a framework for the development and implementation of segments on the Proposed Bikeway Network. These requirements provide the mechanism for the environmental clearance of the proposed bikeways in that the application of these requirements would result in the identification and mitigation of potential impacts as described in the associated EIR. For proposed projects with potential tradeoffs, the feasibility study requirements ensure that the costs and benefits of those proposals are studied and presented to the public and decision-makers in a manner that can affect the design and approval of these projects.

As detailed in Appendix G of the Plan, the following requirements apply to all bikeway projects: data collection, comparative analysis of alternatives, conceptual plans, and reporting. Additional requirements apply to projects of particular types: analysis of travel lane removal, analysis of parking space removal, and analysis of Bicycle Path alignment. Based on the results of the Citywide Feasibility Analysis, the Bicycle Master Plan specifies exactly which requirements apply to which segments of the Proposed Bikeway Network. For example, the analysis of travel lane removal applies to 14% (30 miles) of the overall network while the analysis of parking

removal applies to 1.6% (3.6 miles) of the overall network. Additionally, a transit streets analysis applies to 4.5% (10 miles) of the overall network where proposed bikeways overlap with key AC Transit bus lines. These feasibility study requirements ensure that projects involving potential tradeoffs will receive the necessary analysis and discussion for evaluating the ultimate feasibility and desirability of these proposals.

Coordination with Local, County, and Regional Planning

The update process for the Bicycle Master Plan included extensive coordination with local planning efforts, transit operators, adjoining jurisdictions, and countywide and regional agencies. Within Oakland, the Plan's proposals are coordinated with overlapping neighborhood plans and streetscape proposals. In particular, Appendix C of the Plan includes an inventory of all known planning documents with related recommendations. The Plan's Technical Advisory Committee included 29 professionals representing 19 agencies. The Plan's policy emphasis on transit led to close coordination with BART, AC Transit, and Emery-Go-Round. With respect to BART, the Plan specifies bikeway connections to every BART station from four directions surrounding the station. This effort is consistent with BART's Bicycle Access and Parking Plan, Station Access Plans, and Transit-oriented Development Policy. The Plan's proposals are also coordinated with adjoining cities to help ensure direct and intuitive bikeways across jurisdictional borders. The coordination included the Alameda County Congestion Management Agency's Alameda Countywide Bicycle Plan and the Metropolitan Transportation Commission's Regional Bicycle Plan. The in-depth planning for Oakland's Proposed Bikeway Network will inform future updates to these countywide and regional plans.

Coordination with AC Transit

At the beginning of the update process, AC Transit expressed concerns with the Recommended Bikeway Network in the 1999 Bicycle Master Plan because of proposals that could adversely affect bus operations. A key constraint in the planning and implementation of Oakland's bikeway network was the limited number of streets that connect one neighborhood to the next. This irregular street grid is attributable to topographical features, land subdivision in the streetcar era, and the construction of freeways. All transportation modes share the through streets, which can create competition between modes in the allocation of limited right-of-way and complicate the streets' operations. As a consequence, there is significant overlap between Oakland's bikeway network and AC Transit's bus network because of a shared reliance on the same streets. The update to the Bicycle Master Plan provids a key opportunity to address these concerns in a systematic manner.

As described above in the "General Plan Analysis," the City of Oakland has numerous policies promoting alternative transportation, including the use of bicycles and buses. Additionally, this direction is established by City Council's "Resolution Declaring the City of Oakland's Support of Public Transit and Other Alternatives to Single-occupant Vehicles" (Resolution No.73036 C.M.S., October 29, 1996). However, this policy guidance is less specific on how to balance the

needs of pedestrians, bicyclists, and bus-riders for projects that may involve tradeoffs between the alternative modes. The update to the Bicycle Master Plan addresses this issue for bicycles and buses through the following framework:

(1) The 1999 Recommended Bikeway Network was revised to minimize the extent of bikeways that propose the removal of motor vehicle travel lanes on key bus lines.
(2) In the development of particular projects, additional study will be conducted on the use of alternative streets so as to further minimize, where feasible, the overlap of proposed bikeways and key bus lines.
(3) Proposals that would involve the removal of motor vehicle travel lanes on key bus lines are subject to specific study criteria that address potential delays to bus operations.
(4) As adopted by City Council (Resolution No. 80566 C.M.S., May 15, 2007), the Transit Streets Cooperative Agreement defines the protocol for information-sharing between the City of Oakland and AC Transit for projects (including bikeways) on the streets listed in the Agreement.
(5) The City of Oakland is working proactively with AC Transit to develop technical tools for studying potential delays to bus operations as part of the bikeway feasibility studies that are required for projects on key bus lines.
(6) The City of Oakland is working proactively with AC Transit to develop a method for balancing the potential tradeoffs in particular projects between bicyclist safety/access and bus operations.

Items (5) and (6) are beyond the scope of the update to the Bicycle Master Plan and thus remain under development. A pilot project, the Safe Routes to Transit MacArthur BART Bicycle Access Study, is currently underway and developing a model process for coordinating the planning and design of bikeways on key transit streets like the 40th Street corridor in North Oakland. Staff will continue to work collaboratively with AC Transit to develop these technical tools and to balance potential tradeoffs in promoting both bicycling and bus-riding as viable transportation. "Framework for Addressing Potential Bus Delays Caused by Proposed Bikeways," (Attachment D) provides additional detail on how the Plan and EIR establish a mechanism for working with AC Transit on these issues.

KEY ISSUES AND IMPACTS

Plan Basis and Benefits

- *Transportation*: Bicycles are ideal transportation for trips within urban areas. In Oakland, in-fill projects and residential development in the downtown are creating land uses that are well-served by bicycle. In the San Francisco Bay Area, 43% of all trips are two miles or less in length. In Oakland, 85% of residents live within two miles of downtown or a major transit station. This two mile distance equates to a 12-minute bicycle ride. As the population of Oakland and the Bay Area continues to grow, the transportation system faces increasing demands on its crowded infrastructure. Compared to automobiles, bicycles are a very efficient use of roadway space and parking space. The Bicycle Master

Plan provides long-term vision and direction for integrating the bicycle and its associated efficiencies into Oakland's transportation network.

- *Sustainability*: Motor vehicles are responsible for 47% of Oakland's greenhouse gas emissions (City of Oakland, Baseline Emissions Greenhouse Gas Report, 2006, Page 7). Smarter land uses and fostering non-motorized transportation are key strategies for slowing human-created climate change as well as for preserving open space throughout the region. The use of bicycles for short trips reduces the number of short trips by automobile. These are high-polluting trips because of the car's cold start and the associated inefficient operation of the engine's catalytic converter. In fact, up to 70% of the pollution from a ten-mile car trip is generated by the first mile because of the cold start. Developing bicycle facilities that connect neighborhoods with downtown, commercial districts, and transit stations is a viable, local strategy for reducing greenhouse gas emissions and improving regional air quality.

- *Safety*: On average, a bicyclist-involved collision occurs every other day in Oakland. However, there was a significant decrease in the total number of collisions between 1995 to 1999 and 2000 to 2004. Of the 24 California cities with populations over 150,000, Oakland has the third highest rate of bicycling (following San Francisco, Sacramento, and tied with Anaheim). Based on the total number of collisions versus the total number of bicyclists, Oakland is the fourth safest city in California with a population over 60,000 (following Berkeley, Huntington Park, and San Francisco). Research in this field shows that more people bicycling (and walking) correlates with lower rates of collisions. A key policy implication is that increasing bicycle use will increase the relative safety of all bicyclists because of improved public awareness.

- *Public Health*: Bicycling is healthy transportation. Physical inactivity and poor nutrition are the root causes of the obesity epidemic in the United States. In the Oakland Unified School District, 20% of students are physically unfit and 36% of students are overweight or obese. Over 40% of the leading causes of death in Oakland (including heart disease, cancer, stroke, and type 2 diabetes) are related to physical inactivity. These deaths contribute to a lifespan that is 2.5 years shorter than that of Alameda County residents as a whole. Additionally, Oakland's African-American population has a lifespan that is five years shorter than the citywide average. Thirty minutes of moderate physical activity per day is an effective prevention measure against these leading causes of death. Building physical activity into people's daily lives is one of the most sustainable interventions to promote healthy lifestyles. Bicycling for transportation and/or recreation is an ideal means for integrating physical activity into daily life.

Key Challenges to Plan Implementation

- *Building Community Awareness*: Residents and merchants often have questions about how proposed bikeways could cause traffic congestion in their neighborhoods and

commercial districts. In many cases, the technical analyses show that the proposals would improve the safety and operations of the street for drivers as well as bicyclists. (In the cases where congestion would occur, the project is redesigned accordingly.) In general, there is an ongoing need to build community awareness of the benefits from such projects. The extensive outreach process for the update to the Bicycle Master Plan will serve as a model for proactively engaging neighborhood groups and merchants associations in project development.

- *Resolving Multimodal Conflicts*: While bicycle projects generally improve pedestrian safety, there is a more nuanced relationship with motor vehicle traffic, including buses. Existing or projected motor vehicle volumes can preclude the installation of proposed bikeways. As described previously in this report, bicycle projects and bus projects on key streets are sometimes in competition over limited right-of-way. The implementation of the Bicycle Master Plan is part of this ongoing balance, while promoting the policy direction of walking, bicycling, and transit-riding as viable transportation alternatives.

- *Promoting Education and Enforcement*: Historically, the City's work in implementing the Bicycle Master Plan has focused on the planning, design, and implementation of bikeways. Significant work in this area is still needed given the extensive gaps in the existing bikeway network. However, as bicycling rates increase, there is a growing need for education and enforcement to promote safe riding and driving. To realize this goal, there is a need for new and strengthened partnerships with community-based organizations and City agencies. The Plan includes recommendations for cultivating these partnerships.

- *Dedicating Resources*: The financial needs of the Bicycle Master Plan are modest in comparison, for example, to the City's Pedestrian Master Plan. Furthermore, these financial needs are significantly reduced by integrating bicycle facilities into the City's ongoing capital improvements like roadway resurfacing and streetscape projects. While cost-effective, this "routine accommodation" of bicyclists in the City's ongoing projects requires additional awareness and coordination with the limited staff time available for project development.

Environmental Review

Pursuant to the California Environmental Quality Act (CEQA), the City of Oakland conservatively determined that preparation of an environmental impact report (EIR) would be appropriate for the Bicycle Master Plan. On September 6, 2005, the City released a Notice of Preparation (NOP) and an Initial Study Checklist (IS) which conservatively indicated that the Plan may result in potentially significant impacts to transportation/traffic and air quality. All other impacts would be mitigated to a less-than-significant level. On March 14, 2007, the City released the Draft EIR and Draft Bicycle Master Plan, beginning a 45-day public comment period on these documents. The Draft EIR did not identify any significant and unavoidable

impacts. The City received 28 written comments on the Draft EIR and Bicycle Master Plan. A public hearing on the Draft EIR and Draft Plan was held at the Planning Commission on April 18, 2007 and 16 individuals commented, including six Planning Commissioners. The Final EIR and the Revised Bicycle Master Plan were released on October 3, 2007 and they respond to the comments received on the draft documents.

Pursuant to CEQA Guidelines Section 15168, the EIR presents a program-level analysis, since the individual projects that comprise the Plan would be "carried out under the same authorizing statutory or regulatory agency (City of Oakland) and have generally similar environmental effects which can be mitigated in similar ways." Consistent with Section 15168, the EIR examines the types of projects contained in the Bicycle Master Plan and establishes a framework for the study of potential environmental impacts associated with each project type. This EIR also specifies mitigation measures and/or standard conditions for those potential impacts that would be applied to reduce any significant impacts to a less-than-significant level. Given the specificity of this program-level analysis, the City does not anticipate that further project-level environmental review (beyond what is provided in the EIR) would be required in most cases. However, each project is "site specific" and could include issues that are not specifically addressed by the program EIR. Such projects would require additional environmental review to address the issues that are not included within the framework established by the program EIR. The CEQA Findings for the Bicycle Master Plan EIR is included as Attachment E. The Mitigation Monitoring and Reporting Program is included as Attachment F.

POLICY DESCRIPTION

The Bicycle Master Plan serves as the official policy document addressing the development of facilities and programs to enhance the role of bicycling as a viable and appropriate transportation mode in Oakland. The update is a comprehensive revision to the 1999 Bicycle Master Plan that preserves the general vision while providing greatly expanded detail. The Plan is based on the benefits to transportation, sustainability, safety, and public health that the City can realize through Plan implementation. In particular, the updated Plan seeks to realize these benefits while minimizing the potential for adverse affects on other roadway users as well as the surrounding neighborhoods and commercial districts. This approach is grounded in the update's extensive community outreach process, the citywide feasibility analysis of the Proposed Bikeway Network, the associated EIR, and the requirements for bikeway feasibility studies that will be applied to future project development.

The Plan prioritizes projects and programs to reconcile the outstanding needs with the available resources. The recommended policy on "routine accommodation" specifies that the needs of bicyclists be considered in the design and maintenance of all streets. Bundling bicycle facilities with ongoing capital improvements significantly reduces project costs while ensuring the ongoing implementation of the Plan's recommendations. The Plan also ensures the City's ongoing eligibility and competitiveness for the growing number of grant programs that fund bicycle-related improvements, including mixed-use paths.

SUSTAINABLE OPPORTUNITIES

Economic: The proposed projects and programs in the Bicycle Master Plan are intended to promote bicycling, one of the most cost-effective forms of transportation. Additionally, bicycle trips tend to be local trips and thus are more likely to contribute to local economic activity.

Environmental: Bicycling is the most energy efficient form of transportation and it has no emissions. By extending human-powered travel beyond walking distance, bicycles are especially effective for linking neighborhoods to downtown, transit stations, and commercial districts, thereby eliminating short, high-polluting car trips caused by cold starts.

Social Equity: Bicycling is an inexpensive and broadly accessible form of transportation. According to the American Automobile Association, the average cost of operating a car is $5,000 to $12,000 per year. According to the League of American Bicyclists, the average cost of operating a bicycle is $120 per year. Bicycle facilities provide added freedom and independence for youth and parents (who are otherwise shuttling their children) as well as for some people who cannot drive and those who have chosen not to drive. Promoting bicycling for both transportation and recreation is also a means for redressing the public health disparities associated with physical inactivity and poor nutrition.

DISABILITY AND SENIOR CITIZEN ACCESS

Bicycle improvements are mutually reinforcing with traffic calming efforts on residential streets. Bikeway projects that convert underutilized travel lanes into Bicycle Lanes improve pedestrian safety by reducing the number of conflict points between motor vehicles and pedestrians at crosswalks. Such improvements reduce vehicle speeds and the number of conflict points, thereby providing an overall benefit for senior citizens and persons with disabilities, both as pedestrians and drivers.

PLANNING COMMISSION RECOMMENDATION

The Planning Commission held a public hearing on October 17, 2007 to consider the Bicycle Master Plan and voted to recommend approval of the Plan. The Planning Commission made the following recommendations:

1. Certify the Environmental Impact Report based on the environmental findings contained in this report (Attachment E); and
2. Adopt the Mitigation Monitoring and Reporting Program as conditions of approval for the Bicycle Master Plan (Attachment F); and

3. Approve the General Plan Amendment to adopt the Bicycle Master Plan as part of the Land Use and Transportation Element.

ACTION REQUESTED OF THE CITY COUNCIL

1. Certify the Environmental Impact Report based on the environmental findings contained in this report; and
2. Adopt the Mitigation Monitoring and Reporting Program as conditions of approval for the Bicycle Master Plan; and
3. Adopt the Bicycle Master Plan as part of the Land Use and Transportation Element of the General Plan.

Respectfully submitted,

for

Claudia Cappio
Development Director
Community & Economic Development Agency

Prepared by:
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Kerry Jo Ricketts-Ferris, Project Manager
Planning Division

APPROVED AND FORWARDED TO THE
COMMUNITY AND ECONOMIC DEVELOPMENT COMMITTEE:

Office of the City Administrator

Item: _____
CED Committee
November 13, 2007

ATTACHMENTS:

A. Bicycle Master Plan, Introduction and Executive Summary
B. Bicycle Master Plan, Figure H.3: Proposed Bikeway Network
C. Bicycle Master Plan, Figure H.4: Existing Bikeways
D. Framework for Addressing Potential Bus Delays Caused by Proposed Bikeways
E. CEQA Findings
F. Mitigation Monitoring and Reporting Program

NOTE: Copies of the Bicycle Master Plan and EIR have been separately provided to the City Council, previously provided to the public and are also available (at no charge) from the Community and Economic Development Agency, Planning and Zoning Division, 250 Frank H. Ogawa Plaza, Suite 3315, Oakland, CA 94612, Monday through Friday, 8:30am to 5:00pm. Additionally, documents may be viewed on the project's web site at www.oaklandpw.com/bicycling/bikeplan.htm. The documents are available in pdf format under "Download Planning Documents." For the Plan, see the links under "Revised Draft Bicycle Master Plan (October 2007)." For the Final EIR and Notice of Availability, see the links under "Environmental Review Process." The documents are also available for review at the Oakland Main Public Library, Social Science and Documents, 125 14th Street and in The Office of The City Clerk (1st Floor, City Hall).

1. Introduction and Executive Summary

Vision Statement: *Oakland will be a city where bicycling is fully integrated into daily life, providing transportation and recreation that are both safe and convenient.*

To realize this vision of a bicycle-friendly community, the City of Oakland will promote the routine accommodation of bicyclists in its projects and programs. The ongoing development of the City's bikeway network, including Safe Routes to Transit and the associated support facilities, will provide the infrastructure for making Oakland more accessible by bicycle. Programs will educate cyclists and drivers on road safety while encouraging people to bicycle for both physical activity and utilitarian trips. The benefits of bicycling will help the city meet its policy goals regarding transportation, sustainability, public health, equity, and quality of life.

The *Bicycle Master Plan* is the citywide, long-range policy document for promoting bicycling in Oakland over the next twenty years. Policy T4.5 of *Envision Oakland* (1998), the Land Use and Transportation Element of the Oakland General Plan, recommended the creation of a *Bicycle Master Plan* to promote alternatives to the private automobile. To be eligible for funding from the State's Bicycle Transportation Account, local jurisdictions must complete bicycle transportation plans and then update or reaffirm those plans every five years (Streets and Highways Code 890-894.2). Oakland's original plan was completed in 1999 and reaffirmed by City Council in 2005. This document is the first update to Oakland's *Bicycle Master Plan* and it is adopted as part of the General Plan. Appendix A provides a summary of how this plan meets the requirements of the California Bicycle Transportation Act.

1.1 Goals and Objectives

To develop Oakland as a bicycle-friendly community, the *Bicycle Master Plan* identifies the following goals:

Goal 1: Infrastructure — Develop the physical accommodations, including a network of bikeways and support facilities, to provide for safe and convenient access by bicycle.

Goal 2: Education — Improve the safety of bicyclists and promote bicycling skills through education, encouragement, and community outreach.

Goal 3: Coordination — Provide a policy framework and implementation plan for the routine accommodation of bicyclists in Oakland's projects and programs.

To measure progress towards these goals, the *Bicycle Master Plan* specifies the following overarching objective: *Publicly strive to become a Bicycle Friendly Community by 2012, as recognized by the League of American Bicyclists.*

The Bicycle Friendly Community Campaign is a national program to evaluate and award municipalities for actively promoting bicycling.[1] The evaluation is based on a holistic consideration of a city's accomplishments to date as well as outstanding needs. It follows a five E's approach that considers the coordinated efforts of engineering, education, encouragement, evaluation and planning, and enforcement. Applications are reviewed by an independent committee that makes awards decisions and provides constructive feedback on how municipalities can better achieve their bicycle-friendly goals. To measure progress towards these goals, the City of Oakland will publicly strive to become a Bicycle Friendly Community by 2012 when this plan will again be updated or reaffirmed.

Accomplishments to Date

The City of Oakland has taken significant steps towards becoming a bicycle-friendly community and most of these steps have been accomplished in the past ten years. This Plan provides additional detail and focus for building upon the following accomplishments.

- *Bikeways*: Major bikeways include the Bancroft Bikeway (Melrose to San Leandro), the San Francisco Bay Trail (on-street component between Emeryville and Fruitvale), Grand Ave Bikeway (West Oakland to Grand Lake), Webster/Shafter Bikeway (downtown to Rockridge), Market St Bikeway (Jack London Square to Berkeley), and the bicycle routes in the Oakland Hills. In total, Oakland now has over eighty-five miles of designated bikeways.

- *Bicycle parking*: Since 1999, the City has installed 900 bike racks throughout Oakland accommodating over 2,000 bicycles. Electronic bicycle lockers are available at the downtown BART stations and the Fruitvale Bike Station at Fruitvale BART provides secure parking for over two hundred bicycles.

- *Bicycling information*: The web site for the City of Oakland's Bicycle and Pedestrian Program includes extensive information on bicycle facilities and related resources.[2]

[1] www.bicyclefriendlycommunity.org
[2] www.oaklandbikes.info

The *Walk Oakland! Map & Guide* includes detailed information on bikeways, street grades, bicyclist safety, and transit connections. Over the course of three editions, there are now 43,000 copies of the map in print and it is available at bookstores and bike shops throughout Oakland.

- *Lake Merritt and the waterfront*: With the passage of Measure DD, the City of Oakland is embarking on major capital improvements that will dramatically improve bicycling conditions along Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary.

- *Measure B*: In November 2000, Alameda County voters passed this half-cent transportation sales tax that over its twenty-year lifetime will deliver $80 million in bicycle and pedestrian improvements throughout the county.

In addition to bicycle facilities, there is a growing group of programs and organizations promoting bicyclist safety and skills.

- The City's Parks and Recreation Department offers a Bicycle Safety Helmet Program and an Earn Your Bike Program for children and youth, respectively.

- The Oakland Police Department has a highly successful Bicycle Patrol that provides community policing in the downtown and neighborhood commercial districts.

- In 2007, Oakland celebrated its fourteenth annual Bike to Work Day with over 450 bicyclists participating in the traditional pancake breakfast at City Hall.

- Community-based organizations including Cycles of Change and The Crucible provide bicycle programs and repair shops to engage and educate youth in disadvantaged neighborhoods.

- Bicycle clubs like the Oakland Yellowjackets and the Royal Ground Velo Raptors offer regular recreational rides and support for cyclists of all abilities.

- Advocacy organizations including the East Bay Bicycle Coalition and Walk Oakland Bike Oakland speak on behalf of their membership in promoting the interests of cyclists.

- Oakland's nine neighborhood-based bicycle shops provide sales and service while creating jobs and sales tax revenue.

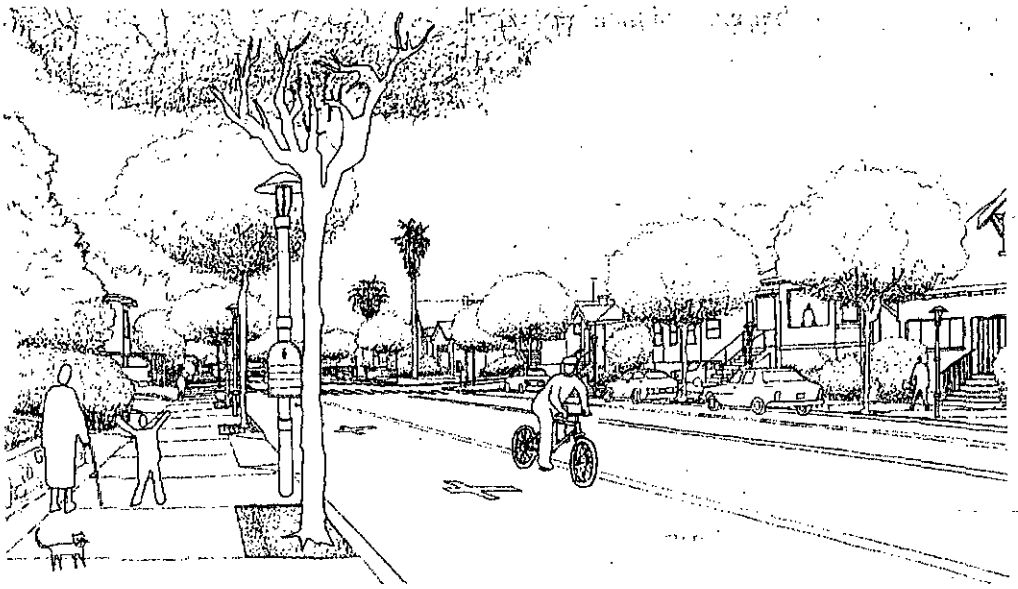


Figure 1.1: *Improving Neighborhood Quality of Life.* Bicycle improvements are mutually reinforcing with traffic calming efforts on residential streets. Bicycling helps connect residents with their communities by exposing them to sights, sounds, and social interactions that are otherwise muted by traffic. Through bicycling, children gain independence, stay active, and develop an enriched understanding of their neighborhoods. (Illustration by Amit Price Patel.)

- The City of Oakland's Bicycle and Pedestrian Advisory Committee has been meeting monthly since 1995 to ensure participation and open communication between city government, residents, and community-based organizations.

This *Bicycle Master Plan* provides the vision, goals, policies, and priorities for additional facilities and programs that will build upon these accomplishments to help Oakland become a city where bicycling is fully integrated into daily life.

1.2 Benefits of Bicycling

Bicycling is a healthy, non-polluting, low-cost, and quiet form of transportation that is ideal for many trips, including commuting and shopping. Improving safety and access for cyclists supports the City's efforts to become more environmentally, economically, and socially sustainable (Figures 1.1 to 1.3).

Transportation — Bicycles are ideal transportation for shorter trips within urban areas. In Oakland, in-fill projects and residential development in the downtown are creating land uses that are well-served by bicycle. In the San Francisco Bay Area, 43% of all trips are two miles in length or less (Federal Highway Administration 1999). In Oakland, 85% of residents live within two miles of downtown or a major transit station. This two-mile

distance equates to an easy 12-minute bicycle ride. Forty percent of American adults identified that they would sometimes commute or commute more often by bicycle if there were safe bikeways serving their trips (Parkwood Research Associates 1995). As the population of Oakland and the Bay Area continues to grow, the transportation system faces increasing demands on its crowded infrastructure. Compared to automobiles, bicycles are a very efficient use of roadway capacity and parking space.

Sustainability — Bicycling is the most energy efficient form of transportation and it has no emissions. Motor vehicles are responsible for 47% of Oakland's greenhouse gas emissions (ICLEI 2006, p. 7). Smarter land uses that foster nonmotorized transportation is a key strategy for slowing human-created climate change as well as for preserving open space throughout the region. The use of bicycles for short trips reduces the number of short trips by automobile. These are high-polluting trips because of the car's cold start and the associated inefficient operation of the engine's catalytic converter. In fact, up to 70% of the pollution from a ten-mile car trip is generated in the first mile because of the cold start.[3] By extending human-powered travel beyond walking distance, bicycles are especially effective for linking neighborhoods to major transit stations and thereby eliminating short, high-polluting car trips.

Public Health — Bicycling is healthy transportation. Physical inactivity and poor nutrition are the root causes of the obesity epidemic in the United States. In the Oakland Unified School District, 20% of students are physically unfit and 36% of students are overweight or obese (California Department of Education 2005). Over 40% of the leading causes of death in Oakland including heart disease, cancer, stroke, and type 2 diabetes are related to physical inactivity. These deaths contribute to a lifespan that is 2.5 years shorter than that of Alameda County residents as a whole. Oakland's African Americans have a lifespan that is five years shorter than the citywide average (Alameda County Public Health Department 2004). Thirty minutes of moderate physical activity per day is an effective prevention measure against these leading causes of death (US Department of Health and Human Services 2005). Building physical activity into people's daily lives is one of the most sustainable interventions to promote healthy lifestyles. Bicycling for recreation is an aerobic and low-impact form of exercise. Bicycling for transportation is an ideal means for integrating physical activity into daily life.

Equity — Bicycling is an inexpensive and broadly accessible form of transportation. The average annual cost of operating a car is $5,000 to $12,000 versus $120 per year for operating a bicycle (American Automobile Association 2006).[4] Bicycling is affordable transportation for the urban poor who—because of the correlation between wealth and race in

[3] http://www.baaqmd.gov/pio/triplinking.htm

[4] http://www.bicyclinginfo.org/pp/benefits/econoben/index.htm

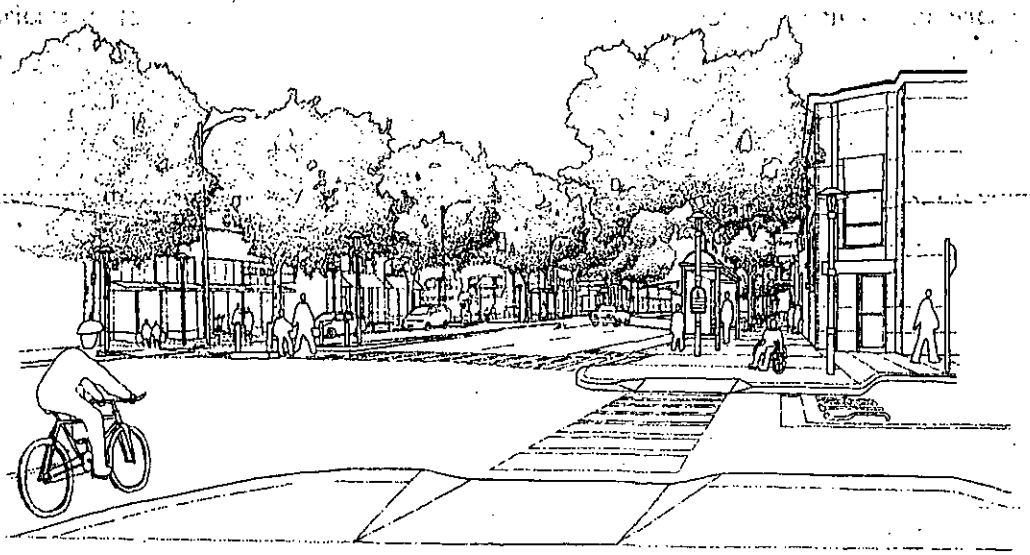


Figure 1.2: *Providing Sustainable Transportation.* Bicycles are ideal transportation for urban areas. In the San Francisco Bay Area, 43% of trips are two miles in length or less. In Oakland, 85% of residents live within two miles of the downtown or a major transit station. This two-mile distance amounts to a casual 12-minute bicycle ride. Bicycling is the most energy efficient form of transportation and it has no associated emissions. Bicycling helps Oakland reduce the 47% of its total greenhouse gas emissions that are caused by motor vehicles. (Illustration by Amit Price Patel.)

the United States—are disproportionately people of color. Bicycles provide added freedom and independence for youth and parents (who are otherwise shuttling their children) as well as for some people who cannot drive and those who have chosen not to drive.

Quality of Life — Bicycling is a means for improving the livability of Oakland's neighborhoods. Bicycle improvements are mutually reinforcing with traffic calming efforts on residential streets. Bicycling helps connect residents with their community by exposing them to sights, sounds, and social interactions that are otherwise muted by traffic. The lives of parents are simplified when their children can ride safely and confidently to school and their activities. Through bicycling, children gain independence, stay active, and develop an enriched understanding of their communities.

1.3 Executive Summary

In the following chapters, the *Bicycle Master Plan* describes existing conditions, policy recommendations, proposed bikeways, support facilities, and an implementation program. The policies were developed from the existing conditions and they in turn guide the recommendations for "Bikeways" and "Parking and Support Facilities." Taken as a whole,

the Plan provides a framework for achieving the vision, goals, and objectives by improving bicyclist safety and access. The specific recommendations reflect consensus amongst stakeholders on how best to achieve this overarching vision.

Chapter 2: Existing Conditions

Chapter 2 provides a comprehensive description of bicycling in Oakland based on available data, fieldwork, and an extensive community process. It identifies the opportunities for and constraints to bicycling, and characterizes the user groups that are common in Oakland. The chapter reviews the available data on bicyclist mode share (with an emphasis on bicycling to transit) and bicyclist-involved collisions. It also summarizes bicycle-related programs in Oakland and provides an overview of the community process through which the *Bicycle Master Plan* was developed. In assessing the existing conditions, these quantitative data were complemented by a community outreach process that included meetings with neighborhood groups and merchants associations throughout Oakland.

Oakland's mild climate and varied topography are highly suited for both commuter and recreational cycling. In fact, Oakland has the third highest cycling rate of all California cities with populations over 150,000 (US Census 2000). However, busy streets and high motor vehicle speeds create real and perceived barriers to more people cycling. On average, a bicyclist-involved collision occurs every other day in Oakland. Ninety-seven percent of these collisions involve motor vehicles and youth cyclists are disproportionately represented in these collisions (based on their share of the population). However, considering both the number of cyclists and number of collisions, Oakland is a comparatively safe place for bicycling: the fourth safest city in California with a population over 60,000 (Jacobsen 2003).

Chapter 3: Policy Recommendations

Based on the existing conditions, Chapter 3 provides policy recommendations for each of the Plan's three goals: Infrastructure, Education, and Coordination. These policies address the Bikeway Network, Routine Accommodation, Safe Routes to Transit, Parking and Support Facilities, Education, Enforcement, Resources, Project Development, and Public Review. In particular, the policy on routine accommodation states that bicycle safety and access be addressed, as a matter of course, in the design and maintenance of all streets. The chapter contextualizes these recommendations with related policies at the federal, state, regional, and municipal levels. An inventory of all related Oakland General Plan policies and actions are compiled in Appendix D.

The United States Department of Transportation's Policy Statement on Walking and Bicycling specifies that "bicycling and walking facilities will be incorporated into all transportation projects unless exceptional circumstances exist." Similarly, the California Department of Transportation's Deputy Directive 64 requires that Caltrans fully consider the needs of bicyclists in all of its activities. California Assembly Concurrent Resolution No. 211 encourages all cities to implement these USDOT and Caltrans policies. The Metropolitan Transportation Commission's policy on routine accommodation requires that all projects using regional funds consider bicyclist access. Oakland's *Bicycle Master Plan* follows this guidance through the policy on Routine Accommodation: that bicycle safety and access be addressed in the design and maintenance of all streets. Another key policy direction, Safe Routes to Transit, promotes bicycle facilities serving major transit hubs, thereby extending the reach of bicyclists while simultaneously increasing transit ridership. These policy recommendations are applied in Chapter 4, "Bikeways," and Chapter 5, "Parking and Support Facilities."

Chapter 4: Bikeways

Chapter 4 describes the various bikeway types and explains the rationales for the proposed bikeway network. It also applies the Safe Routes to Transit policy to the bikeway network by specifying bikeways to each of the major transit stations. The chapter concludes with bikeway design guidelines to help project managers, consultants, and the public understand the basic design issues for accommodating bicyclists.

Oakland's proposed bikeway network consists of bicycle paths (Class 1), bicycle lanes (Class 2), bicycle routes (Class 3), arterial bicycle routes (Class 3A), and bicycle boulevards (Class 3B). The network reflects incremental modifications and improvements to the network identified in the 1999 *Bicycle Master Plan*. All proposals were evaluated through a citywide feasibility analysis that considered street grades, available right-of-way, street capacity, and bicycle/bus interactions. The network emphasizes Safe Routes to Transit by including bikeways from four directions to each transit station. The bikeway design guidelines summarize the basic parameters required by the Caltrans Highway Design Manual and the Manual on Uniform Traffic Control Devices. This section also explains additional treatments that address issues commonly found in Oakland.

Chapter 5: Parking and Support Facilities

The bicycle is a viable means of transportation when physical accommodations ensure that people's trips are safe and convenient and that their property is secure. These facilities in-

clude various types of bicycle parking as well as restrooms, showers, and lockers. Chapter 5 explains the basic types of bicycle parking and identifies the existing and proposed facilities for each type. The chapter describes Oakland's bicycle parking ordinance and provides design guidelines for selecting and locating bicycle parking facilities. The provision of high-quality bicycle parking is critical because people's decisions to bicycle are affected by security concerns over their property.

Chapter 6: Implementation

Chapter 6 prioritizes projects and programs for implementing the Plan's recommendations. In particular, priority bikeways were identified based on evaluation criteria to determine and rank their relative benefit. The chapter discusses the process for project implementation, including the need for further study. It then describes the relationship between proposed bikeways and other roadway and development projects that may affect the network. Most bikeway projects are implemented with some form of grant funding and the chapter provides a brief summary of the most common grant sources. Lastly, the chapter addresses staffing and public participation, with an emphasis on Oakland's Bicycle and Pedestrian Advisory Committee.

Appendices

The following appendices provide greater detail and additional documentation to augment the preceding chapters. Appendix A, "Caltrans BTA Requirements," is a quick reference guide on how this document meets the state requirements for a bicycle transportation plan. Appendix B, "Building on the 1999 Bicycle Master Plan," provides a policy-level discussion of how bicycle planning and engineering in Oakland have developed over the past eight years. Appendix C, "Local and Regional Coordination," documents the community outreach process for this Plan and summarizes other plans at the local, county, and regional levels that intersect with Oakland's *Bicycle Master Plan*. Appendix D, "Oakland General Plan Policies," inventories the bicycle-related policies and actions in all elements of Oakland's General Plan. Similarly, Appendix E, "Oakland Municipal Code," documents all references to bicycles in this code. Appendix F, "Bikeway Descriptions," provides descriptions of priority projects, bicycle paths and bridges, major on-street projects, bridges and freeway crossings, at-grade railroad crossings, and proposed changes to existing bikeways. Appendix G, "Requirements for Bikeway Feasibility Studies," specifies the additional analysis that will be necessary prior to implementing proposed bikeways. Lastly, Appendix H, "Supplementary Documentation," includes the data and evaluation for the approximately

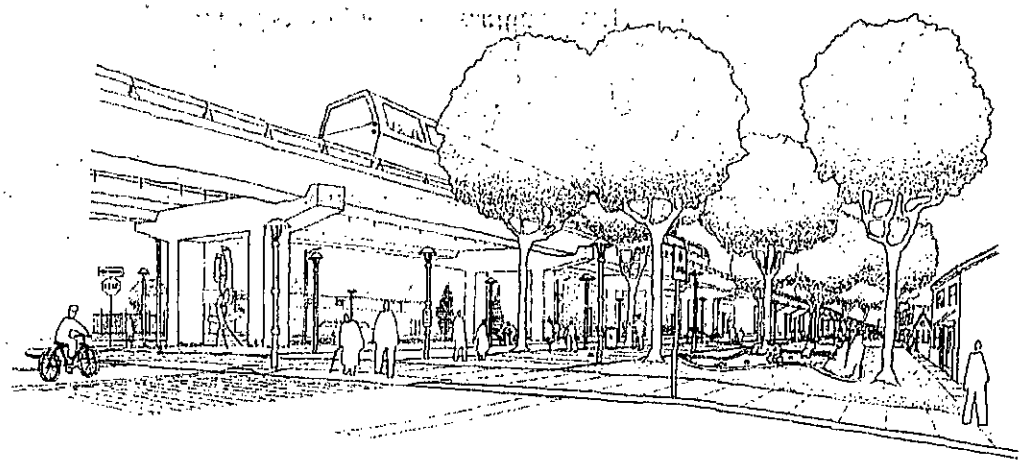
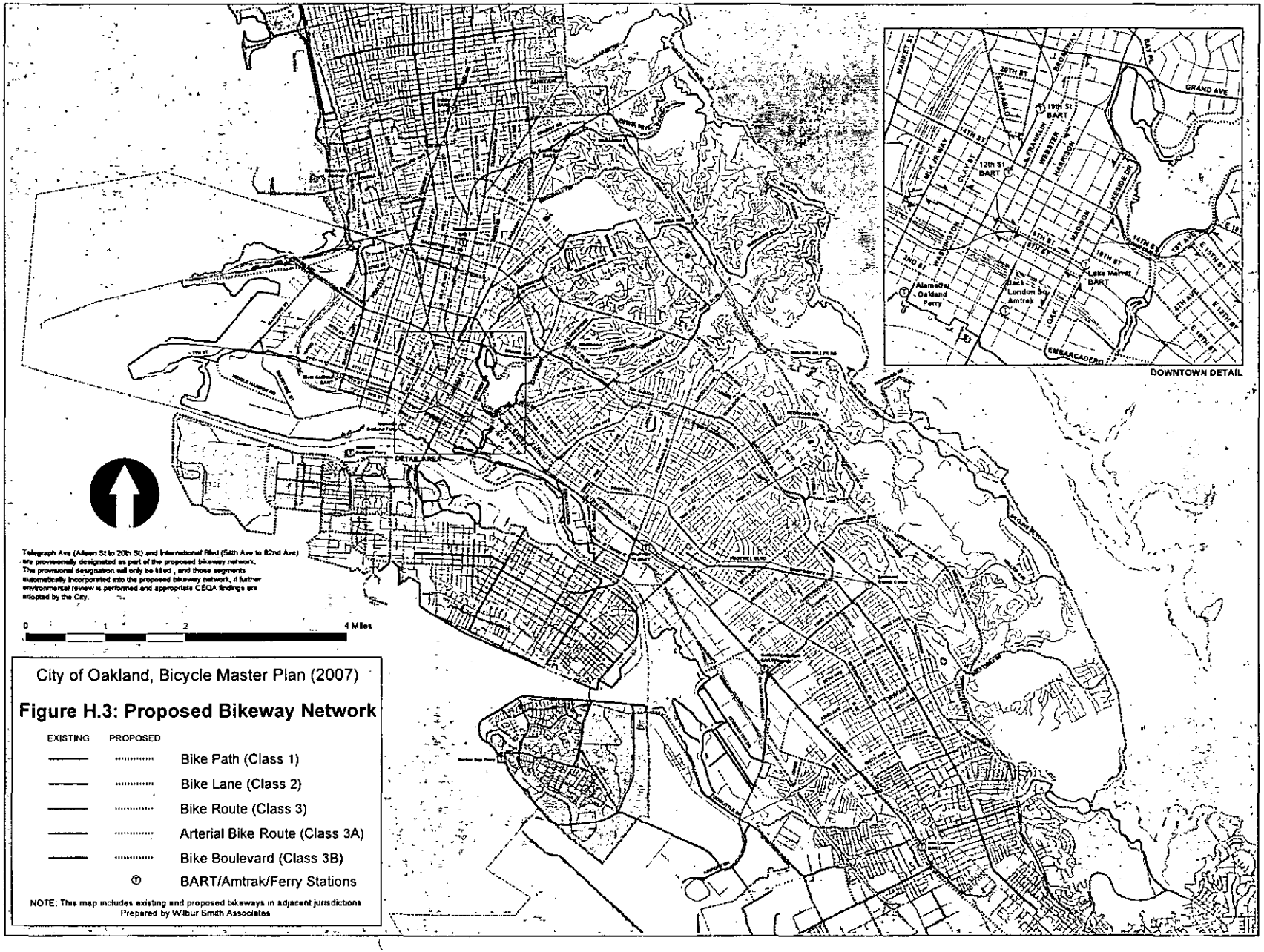


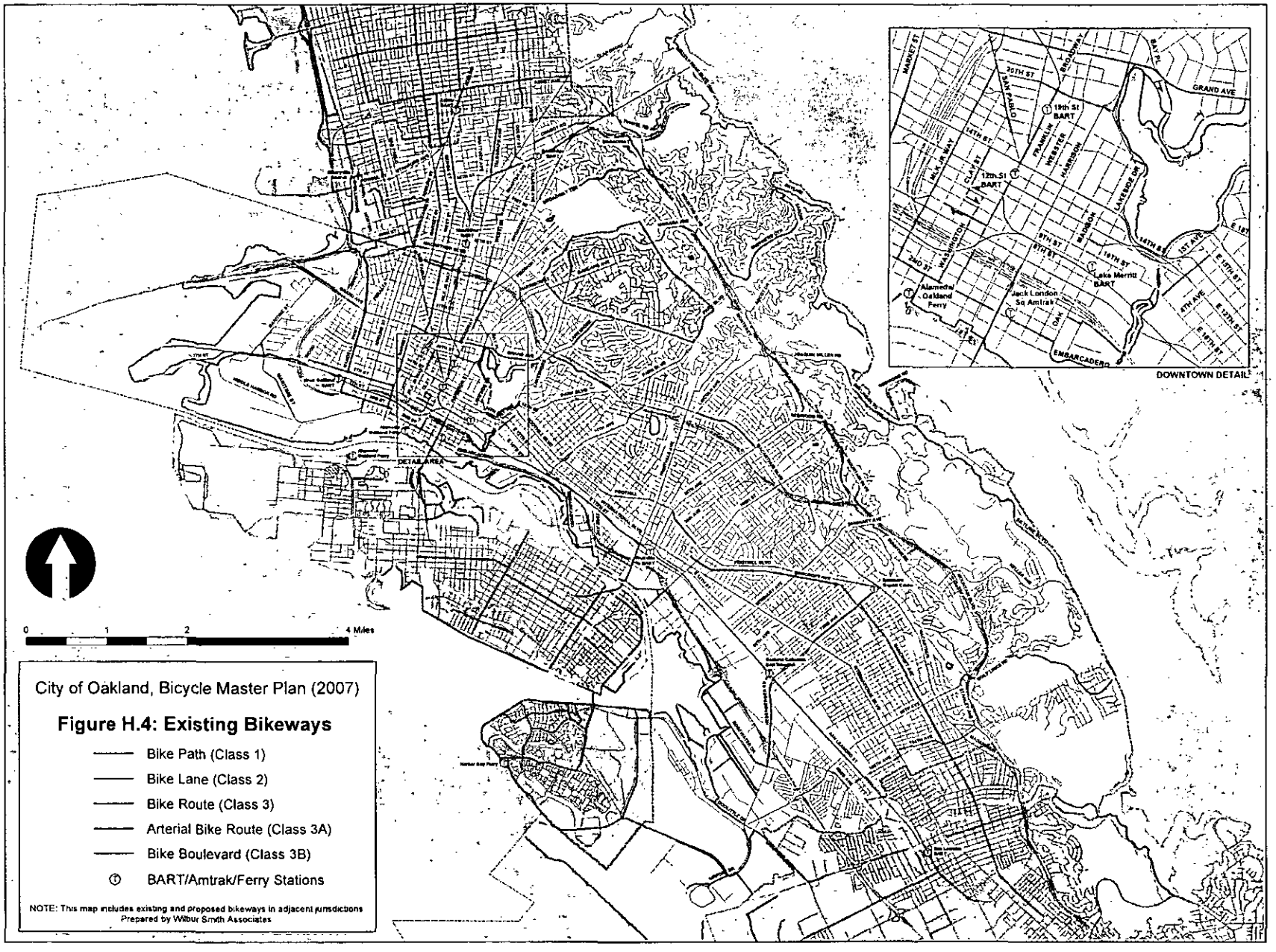
Figure 1.3: *Promoting Equity and Public Health.* Bicycling is an inexpensive and broadly accessible form of transportation and recreation. Bicycle improvements are one aspect of improving Oakland's streets and open spaces to make them accessible and inclusive. Building physical activity into people's daily lives is a sustainable intervention for promoting healthy lifestyles. Bicycling for transportation and recreation is an ideal means for integrating physical activity into daily life. (Illustration by Amit Price Patel.)

700 bikeway segments that were evaluated in the development of the proposed bikeway network. Key maps are included as 11"x17" color pages and collected at the end of this document.

ATTACHMENT B



ATTACHMENT C



ATTACHMENT D

Framework for Addressing Potential Bus Delays Caused by Proposed Bikeways: City of Oakland's Approach in the Bicycle Master Plan (2007)[1]

A. The 1999 Recommended Bikeway Network was revised to minimize the extent of bikeways that propose the removal of motor vehicle travel lanes on rapid, trunk, and major bus lines.

References: [BMP, p. 75 (Bicycle/Bus Interactions)]
[DEIR, p. 3-7 (Bicycle/Bus Interactions)]
[FEIR, p. 4-19 to 4-21, (Response to Comments 1-b and 1-c)]
[FEIR, p. 4-78 (Response to Comment 16-a)]

B. Proposed bikeways are subject to explicit feasibility study requirements. Proposals that would involve the removal of motor vehicle travel lanes on rapid, trunk, and major bus lines are subject to specific study criteria that address potential delays to bus operations. These study criteria will include the analysis of alternatives for the routing of proposed bikeways.

References: [BMP, pp. 110-111 (Project Feasibility)]
[BMP, pp. 111-113 (Transit Streets and Multimodal Corridors)]
[BMP, pp. 161-165 (Requirements for Bikeway Feasibility Studies)]
[DEIR, p. 4.A-6 to 4.A-7 (Feasibility Study Requirements)]
[DEIR, p. 4.A-18 (Impacts on Transit Service)]
[DEIR, pp. 4.A-23 to 4.A-24 (Evaluation of Transit Facilities)]
[FEIR, p. 4-22 (Response to Comment 1-f)]

C. The Transit Streets Cooperative Agreement defines the protocol for information-sharing between the City of Oakland and AC Transit for bikeway projects on the streets listed in the Agreement.

References: [BMP, p. 113 (Transit Streets and Multimodal Corridors)]
[FEIR, p. 2-1 (Revisions to the DEIR)]

D. Proposed bikeway projects will have environmental clearance under the Environmental Impact Report (EIR) for the Bicycle Master Plan if (1) the project's technical analysis conforms to the feasibility study requirements established by the Bicycle Master Plan; (2) the project is evaluated against the potential impacts identified by the EIR; and (3) the mitigation measures specified by the EIR are applied to the project such that any impacts are reduced to a less-than-significant level.

References: [BMP, p. 161 (Requirements for Bikeway Feasibility Studies)]
[DEIR, pp. 1-1 to 1-2 (Environmental Review)]
[DEIR, pp. 4.A-6 to 4.A-7 (Feasibility Study Requirements)]
[FEIR, p. 4-22 (Response to Comment 1-f)]

[1] 3-Oct-07: Prepared by Jason Patton, Bicycle and Pedestrian Program Manager, Transportation Services Division.

E. Proposed bikeway projects that have significant impacts that were not foreseen and addressed by the EIR would require additional, project-level environmental review to address those impacts, in full compliance with CEQA.

References: [DEIR, p. 1-2 (Environmental Review)]
[DEIR, pp. 4.A-5 to 4.A-6 (Approach to the Analysis of Impacts)]
[FEIR, p. 4-22 (Response to Comment 1-f)]

F. The City of Oakland is proactively developing bikeways projects, in collaboration with AC Transit, to establish an expectation and a protocol for how this framework will be implemented. The Broadway Feasibility Study was included in the EIR to show how the feasibility study requirements would be applied to a particular project for identifying potential impacts and applying the mitigation measures specified by the EIR. Similarly, as a separate project, the MacArthur BART Bicycle Access Study for the 40th St corridor is applying this framework, including the study of alternate routes. Through these and other projects, the City of Oakland will continue working with AC Transit to develop the technical tools for quantifying potential bus delays that may be caused by the conversion of motor vehicle travel lanes to bicycle lanes. The City of Oakland will also continue working with AC Transit to develop methods for balancing the potential tradeoffs in particular projects between bicyclist safety/access and bus operations.

References: [BMP, p. 112 (Transit Streets as Multimodal Corridors)]
[DEIR, Appendix E (Illustrative Example of Plan Implementation)]
[FEIR, p. 2-4 (Consistency with Bikeway Feasibility Study Requirements)]

References

[BMP] Draft Bicycle Master Plan (October 2007)
[DEIR] Draft Environmental Impact Report (March 2007)
[FEIR] Final Environmental Impact Report (September 2007)

CEQA Findings for the Approval of the City of Oakland Bicycle Master Plan

I. INTRODUCTION

1. These findings are made pursuant to the California Environmental Quality Act (Pub. Res. Code section 21000 et seq; "CEQA") and the CEQA Guidelines (Cal. Code Regs. title 14, section 15000 et seq.) by the City of Oakland Planning Commission in connection with the EIR prepared for the City of Oakland Bicycle Master Plan ("the Project"), EIR SCH # 2005092011.

2. These findings are attached and incorporated by reference into the October 17, 2007 Planning Commission staff report prepared for the approval of the Project. These findings are based on substantial evidence in the entire administrative record and references to specific reports and specific pages of documents are not intended to identify those sources as the exclusive basis for the findings.

II. PROJECT DESCRIPTION

3. The Project, which is the subject of the EIR, is a citywide plan that will be adopted as part of the Land Use and Transportation Element of the Oakland General Plan. The Project serves as the official policy document addressing the development of facilities and programs to enhance the role of bicycling as a viable and appropriate transportation mode in Oakland.

4. The Project contains the following key components that are relevant to the environmental review: vision, goals, objectives, and policies; Proposed Bikeway Network; citywide feasibility analysis of proposed bikeways; and coordination with local, county, and regional planning.

5. The Project includes a Proposed Bikeway Network of 218 miles of bikeways in Oakland, primarily on-street bikeways to be constructed within the curb-to-curb width of existing streets. The Network also includes 19 miles of proposed Bicycle Paths (Class 1).

6. The Project provides a 20-year planning vision that may need to be updated or reaffirmed in five years to comply with State requirements for grant eligibility.

III. ENVIRONMENTAL REVIEW OF THE PROJECT

7. Pursuant to CEQA and the CEQA Guidelines, the City conservatively determined that an EIR would be appropriate for the Project. On September 6, 2005, the City issued a Notice of Preparation (NOP) for the EIR and an Initial Study (IS), which was circulated to responsible agencies and interested groups and individuals for review and comment. Copies of the NOP and IS are included in Appendix A of the Draft EIR. Comments on the NOP are included in Appendix B of the Draft EIR.

8. A Draft EIR was prepared for the Project to analyze its environmental impacts. The Draft EIR was properly circulated for a 45-day public review period from March 14, 2007 to April 27, 2007. The Planning Commission held a hearing on the Draft EIR on April 18, 2007.

9. The City received written and oral comments on the Draft EIR. The City prepared responses to comments on environmental issues and made changes to the Draft EIR. The responses to comments, changes to the Draft EIR and additional information were published in a Final EIR on October 3, 2007. The Draft EIR, the Final EIR and all appendices thereto constitute the "EIR" referenced in these findings.

IV. THE ADMINISTRATIVE RECORD

10. The record, upon which all findings and determinations related to the approval of the Project are based, includes the following:

a. The EIR and all documents referenced in or relied upon by the EIR.

b. All final information (including written evidence and testimony) provided by City staff to the Planning Commission and City Council relating to the EIR, the approvals, and the Project.

c. All final letters, testimony, exhibits, and presentations presented by the consultants to the City in connection with the Project.

d. All final information (including written evidence and testimony) presented at any City public hearing or City workshop related to the Project and the EIR.

e. For documentary and information purposes, all City-adopted plans and ordinances, including without limitation general plans, specific plans and ordinances, together with environmental review documents, findings, mitigation monitoring programs and other documentation relevant to the Project.

f. The Mitigation Monitoring and Reporting Program for the Project.

g. All other documents composing the record pursuant to Public Resources Code section 21167.6(e).

11. The custodian of the documents and other materials that constitute the record of the proceedings upon which the City's decisions are based is Claudia Cappio, Development Director, Community and Economic Development Agency, or her designee. Such documents and other materials are located at Frank H. Ogawa Plaza, Suite 3315, Oakland, California, 94612.

V. CERTIFICATION OF THE EIR

12. In accordance with CEQA, the Planning Commission certifies that the EIR has been completed in compliance with CEQA. The Planning Commission has independently reviewed the record and the EIR prior to certifying the EIR and recommending that City Council approve the Project. By these findings, the Planning Commission confirms, ratifies, and adopts the findings and conclusions of the EIR as supplemented and modified by these findings. The EIR and these findings represent the independent judgment and analysis of the City and the Planning Commission.

13. The Planning Commission recognizes that the EIR may contain clerical errors. The Planning Commission reviewed the entirety of the EIR and bases its determination on the substance of the information it contains.

14. The Planning Commission certifies that the EIR is adequate to support the approval of the General Plan Amendment, an Oakland Planning Code Amendment to adopt a bicycle parking ordinance (if developed), Plan Implementation, and taking all other actions and recommendations that is the subject of the staff report to which these CEQA findings are attached. The Planning Commission certifies that the EIR is adequate to support approval of the Project described in the EIR, each component of the Project described in the EIR, any variant of the Project described in the EIR, any minor modifications to the Project or variants described in the EIR and the components of the Project.

VI. ABSENCE OF SIGNIFICANT NEW INFORMATION

15. The Planning Commission recognizes that the Final EIR incorporates information obtained and produced after the Draft EIR was completed, and that the EIR contains additions, clarifications, and modifications. The Planning Commission has reviewed and considered the Final EIR and all of this information. The Final EIR does not add significant new information to the Draft EIR that would require recirculation of the EIR under CEQA. The new information added to the EIR does not involve a new significant environmental impact, a substantial increase in the severity of an environmental impact, or a feasible mitigation measure or alternative considerably different from others previously analyzed that the City declines to adopt and that would clearly lessen the significant environmental impacts of the Project. No information indicates that the Draft EIR was inadequate or conclusory or that the public was deprived of a meaningful opportunity to review and comment on the Draft EIR. Thus, recirculation of the EIR is not required.

16. The Planning Commission finds that the changes and modifications made to the EIR after the Draft EIR was circulated for public review and comment do not individually or collectively constitute significant new information within the meaning of Public Resources Code section 21092.1 or the CEQA Guidelines section 15088.5.

VII. MITIGATION MEASURES, CONDITIONS OF APPROVAL, AND MITIGATION MONITORING AND REPORTING PROGRAM

17. Public Resources Code section 21081.6 and CEQA Guidelines section 15097 require the City to adopt a monitoring or reporting program to ensure that the mitigation

measures and revisions to the Project identified in the EIR are implemented. The Mitigation Monitoring and Reporting Program ("MMRP") is attached and incorporated by reference into the October 17, 2007 staff report prepared for the certification of the EIR, is included in the conditions of approval for the Project, and is adopted by the Planning Commission. The MMRP satisfies the requirements of CEQA.

18. The mitigation measures set forth in the MMRP are specific and enforceable and are capable of being fully implemented by the efforts of the City of Oakland and/or other identified public agencies of responsibility. As appropriate, some mitigation measures define performance standards to ensure no significant environmental impacts will result. The MMRP adequately describes implementation procedures, monitoring responsibility, reporting actions, compliance schedule, non-compliance sanctions, and verification of compliance in order to ensure that the Project complies with the adopted mitigation measures.

19. The Planning Commission will adopt and impose the feasible mitigation measures as set forth in the MMRP as enforceable conditions of approval. The City has adopted measures to substantially lessen or eliminate all significant effects where feasible.

20. The mitigation measures incorporated into and imposed upon the Project approval will not have new significant environmental impacts that were not analyzed in the EIR. In the event a mitigation measure recommended in the EIR has been inadvertently omitted from the conditions of approval or the MMRP, that mitigation measure is adopted and incorporated from the EIR into the MMRP by reference and adopted as a condition of approval.

VIII. FINDINGS REGARDING IMPACTS

21. In accordance with Public Resources Code section 21081 and CEQA Guidelines sections 15091 and 15092, the Planning Commission adopts the findings and conclusions regarding impacts and mitigation measures that are set forth in the EIR and summarized in the MMRP. These findings do not repeat the full discussions of environmental impacts contained in the EIR. The Planning Commission ratifies, adopts, and incorporates the *analysis, explanation, findings, responses to comments and conclusions of the EIR.* The Planning Commission adopts the reasoning of the EIR, staff reports, and presentations provided by the staff as may be modified by these findings.

22. The Planning Commission recognizes that the environmental analysis of the Project raises controversial environmental issues, and that a range of technical and scientific opinion exists with respect to those issues. The Planning Commission acknowledges that there are differing and potentially conflicting expert and other opinions regarding the Project. The Planning Commission has, through review of the evidence and analysis presented in the record, acquired a better understanding of the breadth of this technical and scientific opinion and of the full scope of the environmental issues presented. In turn, this understanding has enabled the Planning Commission to make fully informed, thoroughly considered decisions after taking account of the various viewpoints on these important issues and reviewing the record. These findings are based on a full appraisal of all viewpoints expressed in the EIR and in the record, as well as other relevant information in the record of the proceedings for the Project.

POTENTIALLY SIGNIFICANT BUT MITIGABLE IMPACTS

23. Under Public Resources Code section 21081(a)(1) and CEQA Guidelines sections 15091(a)(1) and 15092(b), and to the extent reflected in the EIR and the MMRP, the Planning Commission finds that changes or alterations have been required in, or incorporated into, the components of the Project that mitigate or avoid potentially significant effects on the environment. The following potentially significant impacts will be reduced to a less than significant level through the implementation of Project mitigation measures, or where indicated through the implementation of standard conditions of approval (which are treated as mitigation measures and an integral part of the MMRP):

a. Air Quality: The Draft EIR found the Project could generate short-term emissions of criteria pollutants through construction activities associated with the implementation of individual projects included in the Plan. This potential impact will be reduced to a less than significant level through the implementation of Standard Condition B.1. Standard Condition B.1 also requires that the construction contractor implement measures required as part of BAAQMD's basic and enhanced dust control procedures.

b. Biological Resources: Bicycle Paths (Class 1) are envisioned throughout the city, including areas that may be near wetlands, riparian habitats, or other sensitive natural areas with special status species (vegetation and/or wildlife). The majority of the Proposed Bikeway Network consists of on-street bikeways within the curb-to-curb width of existing streets that would not affect biological resources. Nevertheless, the Project will be required to implement Standard Condition A.1 in order to reduce the potential for impacts associated with biological resources to a less than significant level.

c. Cultural Resources: While it is unlikely that construction of Bicycle Paths (Class 1) would involve extensive excavation or grading, all earthmoving activities have the potential to adversely affect archaeological resources, paleontological resources, or human remains. While it is unlikely that an historical resource would be altered or demolished to accommodate new Bicycle Paths (Class 1), the setting of an historical resource may be affected by introducing new facilities in proximity to the resource and thereby result in a potential significant impact. These potential impacts will be reduced to a less than significant level through the implementation of Standard Condition A.1 which imposes requirements for procedures to be followed, including certain halting of construction activities and consultation with a cultural resources professional or a qualified paleontologist, should an archaeological artifact or paleontological resource be discovered on-site during construction, and specific procedures and protocols to be followed in the event that human skeletal remains are uncovered on-site during construction.

d. Geology, Soils and Seismicity: While it is unlikely that the construction of bikeways would involve structures or extensive grading, such activities have the potential for significant impacts to geology, soils, and seismicity. These potential impacts will be reduced to a less than significant level through the implementation of Standard Condition A.1, which imposes specific requirements for the preparation, review and approval of a site-specific, design level geotechnical investigation for projects involving extensive grading or structures.

e. Hazards and Hazardous Materials: Bicycle Paths (Class 1) may occur on or near areas with contaminated soils. While it is unlikely that construction of Bicycle Paths (Class 1) would involve excavation or grading to existing groundwater levels, even minimal grading or other site preparation can disturb existing contaminated soils, thereby posing potential hazards to construction workers, the public, and the environment. Potential significant impacts involving hazardous materials would be reduced to less than significant with implementation of Standard Condition A.1 that specifies measures for identifying the status of onsite contaminants and, if required, implementation of appropriate clean-up activities.

f. Hydrology and Water Quality: Development of Bicycle Paths (Class 1) could affect the quality of water resources during and after construction. Development of paths would involve construction activities that could involve grading and/or use of heavy equipment. These activities could result in erosion or disturb contaminated soils that, if not properly controlled, could adversely affect water quality. Standard Condition A.1 ensures compliance with all local and regional requirements and programs that address water quality (i.e., Oakland Grading Permit, Alameda Countywide Clean Water Program [ACCWP], and National Pollution Discharge Elimination System [NPDES] permits issued by the San Francisco Regional Water Quality Control Board [RWQCB]). Implementation of Standard Condition A-1 would reduce potentially significant water resources to less than significant.

g. Noise: The Project may result in construction activities in specific locations for limited durations, and thus there is the potential for temporary noise impacts. However, the Project is not expected to require any construction activity that would result in excessive noise. Standard Condition A.1 will ensure that the City of Oakland Noise Ordinance standards for construction noise are not violated. The standard condition places specific requirements for demolition, grading, and/or construction, including days/hours of construction operation, noise control for equipment, and noise complaint procedures.

h. Transportation, Circulation, and Parking: The Draft EIR found the Project could cause potential environmental impacts within the Plan area including traffic congestion on local roadways, traffic congestion on CMP MTS segments, traffic congestion affecting transit service, construction impacts, and cumulative impacts. These potential impacts will be reduced to a less than significant level through the implementation of Standard Conditions A.1, A.3b, A.4b, A.7c, A.8, A.12b and Mitigation Measures A.3a, A.4a, A.7a, A.7b, and A.12a. These Standard Conditions and Mitigation Measures impose requirements for procedures to be followed, including modifications to the design of individual projects and construction staging so as to ensure acceptable traffic operations.

i. Utilities and Services Systems: While it is unlikely that the Project's proposals would require a demolition, grading, or building permit, such proposals have the possibility of a potentially significant impact through the creation of solid waste. Standard Condition A.1 requires such proposals to complete a demolition/construction waste diversion plan and operational waste reduction plan to reduce any such potential impacts to a less than significant level.

NO SIGNIFICANT AND UNAVOIDABLE IMPACTS

24. Because there are no significant unavoidable impacts, there is no legal requirement to adopt a Statement of Overriding Considerations or to reject alternatives as being infeasible. Nevertheless, reasons for rejecting alternatives are provided below.

IX. FINDINGS REGARDING ALTERNATIVES

25. The Planning Commission finds that specific economic, social, environmental, technological, legal or other considerations make infeasible the alternatives to the Project as described in the EIR, and as set forth below.

26. The EIR evaluated a reasonable range of alternatives to the original project that was described in the Draft EIR. The DEIR identified four potentially feasible alternatives to the proposed project.

27. The EIR considered two additional project alternatives but rejected them for further analysis. The Draft EIR considered but rejected a Preliminary Proposed Bikeway Network Alternative and the Final EIR considered but rejected a Transit Station Access Alternative.

28. The four potentially feasible alternatives analyzed in the DEIR represent a reasonable range of potentially feasible alternatives that reduce one or more significant impacts of the Project. These alternatives include the (1) No Project Alternative, which consists of two different scenarios: Alternative 1a: No Project / Existing Conditions, Alternative 1b: No Project / Implement 1999 Bicycle Master Plan; (2) Alternative 2: Fewer Bikeways; (3) Alternative 3: No Lane Conversions. As presented in the DEIR and FEIR, the alternatives were described and compared with each other and with the proposed project. The No Project Alternative 1a (No Project / Existing Conditions) was identified as the environmentally superior alternative. Under CEQA Guidelines section 15126.6(e)(2), if the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative among the other alternatives. Alternative 3 (No Lane Conversions) is the second environmentally superior alternative as it would result in the fewest environmental effects.

29. The Planning Commission certifies that it has independently reviewed and considered the information on alternatives provided in the EIR and in the record. The EIR reflects the Planning Commission's independent judgment as to alternatives. The Planning Commission finds that the Project provides the best balance between the Project's vision and goals, the City's goals and objectives, the Project's benefits, and mitigation of environmental impacts to the extent feasible. The other alternatives proposed and evaluated in the EIR are rejected for the reasons stated in the EIR and for the following reasons. Each individual reason presented below constitutes a separate and independent basis to reject the project alternative as being infeasible, and, when the reasons are viewed collectively, provide an overall basis for rejecting the alternative as being infeasible.

30. **Under Alternative 1a: No Project / Existing Conditions**, the Project would maintain the bicycle network in Oakland under its current conditions; no improvements or additions would be made. This Alternative would avoid or substantially reduce all project-related

(but mitigable) impacts identified with the Proposed Bikeway Network. This alternative would not meet the Bicycle Master Plan goals and objectives, including the development of a citywide bikeway network and support facilities that provide for safe and convenient access throughout Oakland. In their current form, many arterial and collector streets do not provide adequate accommodation for bicyclists. This alternative would not address the existing barriers that keep bicycling from becoming a viable means of transportation and recreation in Oakland. Therefore, this alternative does not meet the goals and objectives of the proposed Bicycle Master Plan.

31. **Under Alternative 1b: No Project / Implement the 1999 Bicycle Master Plan**, the Project would continue implementation of the adopted 1999 Bicycle Master Plan. The No Project / 1999 Plan Alternative would have significant transportation impacts because the 1999 Plan would alter the roadway network to accommodate on-street bikeways with little consideration for the existing roadway characteristics. When compared to the Proposed Bikeway Network, the No Project / 1999 Plan Alternative would have more or greater impacts than the proposed project as it doesn't account for roadway characteristics, including traffic patterns and topography. By proposing bikeways that are infeasible, the 1999 Plan Alternative would not provide for a citywide bikeway network that provides for safe and convenient access by bicycle. Further, this alternative would not attain the potential beneficial air quality effects to the extent identified for the proposed Plan. This alternative would thereby not meet the proposed Bicycle Master Plan goals and objectives.

32. **Under Alternative 2: Fewer Bikeways**, the Proposed Bikeway Network would be reduced to include only the primary bikeways, which would result in fewer proposed bikeways. Primary bikeways are defined in the Bicycle Master Plan as the portion of the network that provides basic connectivity throughout Oakland. The primary bikeways would provide a skeletal citywide network with bikeways spaced at greater intervals and serving fewer destinations. The impacts would remain essentially the same as with the Proposed Bikeway Network. However, they would only be applicable to the primary bikeways, and thus the potential (but mitigable) impacts would occur in fewer locations. This alternative would not meet the proposed Bicycle Master Plan goals and objectives. It would not address many of the arterial and collector streets where proposed bikeways could significantly improve safety and access for bicyclists. By leaving these gaps in the network, this alternative would cause a greater proportion of any given bicycling trip to be on roadways that, in their current form, create barriers to bicycling. This alternative would thus not meet the General Plan goals that call for the promotion of bicycling as a viable means of transportation and recreation.

33. **Under Alternative 3: No Lane Conversions**, the Project would include proposed bikeways in the same locations as identified for the Proposed Bikeway Network. However, this alternative modifies the proposed bikeway types so as not to include projects that would require the removal of travel lanes. This would include bikeways on streets where the existing lane configuration cannot accommodate a Bicycle Lane (Class 2) or a wide outer travel lane for an Arterial Bicycle Route (Class 3A). Under the No Lane Conversion Alternative, bicyclists and drivers would share travel lanes of standard width on designated Bicycle Routes (Class 3). This alternative would avoid or reduce the significant but mitigable transportation impacts associated with the Project since it would not convert travel lanes to accommodate on-street bikeways. This alternative would not meet the Bicycle Master Plan goals and objectives because it would not create a bikeway network that would provide for safe and convenient access

throughout the city. In particular, providing this safety and access on key streets requires the conversion of travel lanes to Bicycle Lanes (Class 2) or wide outer curb lanes for Arterial Bicycle Routes (Class 3A). These modifications create the necessary space for drivers and bicyclists to safely share the road. This alternative would not support the General Plan LUTE Policy T4.10 which calls for the conversion of underused travel lanes to improve conditions for pedestrians and bicyclists. Compared to the proposed Project, this No Lane Conversion Alternative would not provide adequate bikeways on many arterial and collector streets. The network would not serve as many potential riders because the extra width provided by Bicycle Lanes (Class 2) and Arterial Bicycle Routes (Class 3A) is important to less experienced riders. By not reaching as many riders, this alternative would not meet the goals of the Bicycle Master Plan and the General Plan LUTE.

34. The EIR considered two additional project alternatives but rejected them for further analysis. The Draft EIR considered but rejected a Preliminary Proposed Bikeway Network Alternative. In developing the Proposed Bikeway Network, the City considered and evaluated 140 potential bikeway segments on alignments that were included in the Notice of Preparation (NOP) but ultimately not included in the proposed Project. Subsequent to the publication of the NOP, the City conducted a citywide feasibility analysis to evaluate the Preliminary Proposed Bikeway Network and potential alternatives. The result of that analysis supported the elimination of a number of the preliminary bikeways from the Project, finding them unsuitable given the Project's goals and objectives. The Final EIR considered but rejected a Transit Station Access Alternative where the primary purpose of the Proposed Bikeway Network would be providing a feeder system to major transit stations. This alternative was rejected for further study because transit access is addressed by the Safe Routes to Transit policy that is already included in the Project. Limiting the Proposed Bikeway Network to within two miles of major transit stations would not significantly change the network, except for in the Oakland Hills where bikeways are primarily designated for recreational use and thus cannot be replaced by transit. Additionally, bicycle trip times are comparable to transit trip times, especially when accounting for door-to-door travel for trips under five miles in length. Thus these alternatives were considered as part of the planning process but rejected from the environmental review for not contributing additional and distinct alternatives.

OAKLAND BICYCLE MASTER PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Environmental Impact	Mitigation Measures or Standard Conditions	Condition of Approval Nos.	Resulting Level of Significance[1]	Monitoring Responsibility[2]	Monitoring Timeframe
A. Transportation, Circulation, and Parking					
A.1: Implementation and use of new off-street bikeways, as proposed in the Bicycle Master Plan, could cause potential environmental impacts within the Plan area.	**Standard Condition A.1:** The project shall incorporate all of the City's uniformly-applied Standard Conditions (provided as Attachment F and incorporated in this Standard Condition by reference).		Less than Significant	City of Oakland Transportation Services Division and Planning and Zoning Division	Prior to project completion
A.2: Adding bikeway signage and striping to existing roadways in the Plan area, as proposed in the Bicycle Master Plan, could affect traffic operations.	None required.		Beneficial		
A.3: Removing a travel lane within the Plan area to accommodate on-street bikeways, as proposed in the Bicycle Master Plan, could increase traffic congestion on local roadways.	**Mitigation Measure A.3a:** If the removal of a travel lane would cause an intersection on a proposed bikeway to operate at an unacceptable level of service, the project shall be redesigned to maintain the operating conditions at an acceptable level of service on the affected intersection approach. Otherwise, the City shall prepare further environmental review that identifies significant and unavoidable impacts for which the City must adopt a statement of overriding considerations.		Less than Significant	City of Oakland Transportation Services Division and Planning and Zoning Division	Prior to project completion

1 This column describes the Level of Significance resulting from the implementation of the Plan, together with imposition of all reasonably feasible mitigation measures. For purposes of this Mitigation Monitoring and Reporting Program, Mitigated to Less than Significant means that, under Public Resources Code section 21081(a)(1) and CEQA Guidelines sections 15091(a)(1) and 15092(b)(2)(A), changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment. Mitigated to Less than Significant Other Agency means that, under Public Resources Code section 21081(a)(2) and CEQA Guidelines section 15091(a)(2) and 15092(b)(2)(A), all or part of the mitigation measures are within the responsibility and jurisdiction of another public agency (including situations which require the cooperation of another public agency), and such changes either have been adopted by the other agency or can and should be adopted by such other agency. Significant and Unavoidable means that, under Public Resources Code section 21081(a)(3) and (b), and CEQA Guidelines section 15091(a)(3) and 15092(b)(2)(B) and 15093, no mitigation measures are available.

2 Compliance date, and inspection or field survey dates to be noted in this column by the responsible agency.

OAKLAND BICYCLE MASTER PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Environmental Impact	Mitigation Measures or Standard Conditions	*Condition of* Approval Nos.	Resulting Level of Significance[1]	Monitoring Responsibility[2]	Monitoring Timeframe
	Standard Condition A.3b: Implementation of Standard Condition A.1 (Incorporation of all uniformly-applied Standard Conditions).		Less than Significant		
A.4: Removing a travel lane within the Plan area to accommodate on-street bikeways, as proposed in the Bicycle Master Plan, could increase traffic congestion on CMP MTS segments.	**Mitigation Measure A.4a:** If the removal of a travel lane would cause a roadway segment on the Metropolitan Transportation System to operate at an unacceptable volume-to-capacity ratio, the project shall be redesigned to maintain the operating conditions at an acceptable volume-to-capacity ratio on the affected roadway segment. Otherwise, the City shall prepare further environmental review that identifies significant and unavoidable impacts for which the City must adopt a statement of overriding considerations.		Less than Significant	City of Oakland Transportation Services Division and Planning and Zoning Division, Alameda Congestion Management Agency	Prior to project completion
	Standard Condition A.4b: Implementation of Standard Condition A.1 (Incorporation of all uniformly-applied Standard Conditions).		Less than Significant		
A.5: Altering existing roadway configurations in the Plan area to accommodate the Proposed Bikeway Network and support facilities, as proposed in the Bicycle Master Plan, could affect pedestrian facilities.	None required.		Beneficial		
A.6: Altering existing roadway configurations in the Plan area to accommodate the Proposed Bikeway Network, as proposed in the Bicycle Master Plan, could affect existing bikeways.	None required.		Beneficial		
A.7: Altering existing roadway configurations in the Plan area to	**Mitigation Measure A.7a:** Implement Mitigation Measure A.3a (Redesign to		Less Than Significant	City of Oakland Transportation Services Division and Planning	Prior to project completion

OAKLAND BICYCLE MASTER PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Environmental Impact	Mitigation Measures or Standard Conditions	Condition of Approval Nos.	Resulting Level of Significance[1]	Monitoring Responsibility[2]	Monitoring Timeframe
accommodate the Proposed Bikeway Network, as proposed in the Bicycle Master Plan, could affect transit service.	*maintain acceptable levels of service).*			*and Zoning Division*	
	Mitigation Measure A.7b: Implement Mitigation Measure A.4a (Redesign to maintain acceptable volume-to-capacity ratios).		Less than Significant	City of Oakland Transportation Services Division and Planning and Zoning Division, Alameda Congestion Management Agency	Prior to project completion
	Standard Condition A.7c: Implementation of Standard Condition A.1 (Incorporation of all uniformly-applied Standard Conditions).		Less than Significant		
A.8: Altering existing roadway configurations in the Plan area to accommodate the Proposed Bikeway Network, as proposed in the Bicycle Master Plan, would cause construction impacts.	**Standard Condition A.8:** Prior to commencing any construction or alterations related to the project, the construction contractor shall meet with the Transportation Services Division and other appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion that may result during construction of this project and other nearby projects that could be simultaneously under construction. Specifically: • The construction contractor shall not block roadways or sidewalks so that adjacent residents or occupants would be adversely affected from getting to and from their respective property. Notify adjacent property owners and *public safety personnel regarding* when major (temporary) detours and or lane closures will occur due to construction activities. Notification shall occur not less than 48 hours before commencing		Less than Significant		

OAKLAND BICYCLE MASTER PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Environmental Impact	Mitigation Measures or Standard Conditions	Condition of Approval Nos.	Resulting Level of Significance[1]	Monitoring Responsibility[2]	Monitoring Timeframe
	such activities. • The construction contractor shall locate construction staging areas for materials, equipment, and vehicles in areas as to not impede safe pedestrian and vehicular traffic. • The construction contractor shall identify haul routes for movement of construction vehicles that would minimize impacts on vehicular and pedestrian traffic, circulation and safety. • The construction contractor shall remove trash generated by project construction activity. • The construction contractor shall clearly display contractor contact information pertaining to construction activity, including identification of an on-site complaint manager, for the purpose of tracking any complaints regarding construction activity impacts.				
A.9: Requiring and erecting bicycle parking and support facilities in the Plan area, as proposed in the Bicycle Master Plan, could affect bicycle ridership.	None required.		Beneficial		
A.10: Implementing bicycle education programs, as proposed in the Bicycle Master Plan, could increase bicycle awareness.	None required.		Beneficial		
A.11: Implementing policies, as proposed in the Bicycle Master Plan, could increase bicycling in the City of Oakland.	None required.		Beneficial		

OAKLAND BICYCLE MASTER PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Environmental Impact	Mitigation Measures or Standard Conditions	Condition of Approval Nos.	Resulting Level of Significance[1]	Monitoring Responsibility[2]	Monitoring Timeframe
***A.12**: Implementing the Proposed* Bikeway Network, as proposed in the Bicycle Master Plan, could cause cumulative impacts.	***Mitigation Measure A.12a:** The City shall integrate proposed bikeway* projects into overlapping and concurrent roadway projects such that the construction staging occurs as a single project. Where the integration of such projects is not feasible, the City shall schedule the implementation of the projects to avoid any cumulative impacts to transportation that would be caused by the simultaneous staging of multiple projects.		Less than *Significant*	*City of Oakland Transportation Services Division and Planning* and Zoning Division	*During construction phase of project*
	Standard Condition A.12b: Implementation of Standard Condition A.1 (Incorporation of all uniformly-applied Standard Conditions).		Less than Significant		
B. Air Quality					
B.1: Construction activities associated with the implementation of the Bicycle Master Plan could generate short-term emissions of criteria pollutants.	**Standard Condition B.1:** Dust Control Measures – During all construction activities, applicable dust control measures shall be instituted and maintained during construction to minimize air quality impacts. The measures are consistent with, but are not limited to, the BAAQMD Basic and Enhanced dust control measures recommended for sites larger than 4 acres and include: • Watering all active construction areas at least twice daily to control dust; • Covering stockpiles of debris, soils, or other material if blown by the wind; • Sweeping adjacent public rights		Less than Significant	City of Oakland Building Services Division	During construction phase of project

OAKLAND BICYCLE MASTER PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Environmental Impact	Mitigation Measures or Standard Conditions	Condition of Approval Nos.	Resulting Level of Significance[1]	Monitoring Responsibility[2]	Monitoring Timeframe
	of way and streets daily if visible soil material or debris is carried onto these areas; • Sweeping daily all paved access roads, parking areas, and staging areas at the construction site; • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard; • Hydroseed or apply non-toxic soil stabilizers to inactive construction areas; • Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.); • Install sandbags or other erosion control measures to prevent silt runoff onto public roadways; • Replant vegetation in disturbed areas as quickly as possible; • Limit traffic speeds on unpaved roads/driveways to 15 miles per hour; • Install wheel washers for all exiting trucks or wash off the tires or tracks of all trucks and equipment leaving the construction site; • Install wind breaks at the windward sides of the construction areas; and • Suspend excavation and grading activities when wind (as				

OAKLAND BICYCLE MASTER PLAN
MITIGATION MONITORING AND REPORTING PROGRAM

Environmental Impact	Mitigation Measures or Standard Conditions	Condition of Approval Nos.	Resulting Level of Significance[1]	Monitoring Responsibility[2]	Monitoring Timeframe
	instantaneous gusts) exceed 25 miles per hour. • Perform low- NOx tune-ups on all diesel-powered construction equipment greater than 50 horsepower (no more than 30 days prior to the start of use of that equipment). Periodic tune-ups (every 90 days) should be performed for such equipment used continuously during the construction period.				
B.2: The implementation of proposed bikeways within the Plan area, as proposed in the Bicycle Master Plan, could affect traffic operations and thereby affect emissions at sensitive receptor locations.	None required.		Beneficial		
B.3: Implementing the Proposed Bikeway Network, as proposed in the Bicycle Master Plan, could cause cumulative impacts.	None required.		Less than Significant		

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OAKLAND

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Approved as to Form and Legality
Mark P. Wald
Oakland City Attorney's Office

OAKLAND CITY COUNCIL

Resolution No. _____ C.M.S.

RESOLUTION CERTIFYING THE ENVIRONMENTAL IMPACT REPORT AND ADOPTING THE COMPREHENSIVE REVISION TO THE BICYCLE MASTER PLAN AS PART OF THE LAND USE AND TRANSPORTATION ELEMENT OF THE CITY'S GENERAL PLAN

WHEREAS, California Government Code Section 65300 requires that every planning agency prepare, and every legislative body of every county and city adopt, a comprehensive, long-term general plan for the physical development of the county or city; and

WHEREAS, California Government Code Section 65302 requires that the general plan include a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, any military airports and ports, and other local public utilities and facilities, all correlated with the land use element of the plan; and

WHEREAS, The State of California's "General Plan Guidelines" recommends that the general plan be revised as new information becomes available and as community needs and values change; and is of the opinion that a general plan based on outdated information and projections is not a sound basis for day-to-day decision making; and

WHEREAS, the City of Oakland adopted a Bicycle Master Plan in 1999, as part of the Land Use and Transportation Element of the General Plan, which serves as the official policy document addressing the development of facilities and programs to enhance the role of bicycling as a viable and appropriate transportation mode in Oakland; and

WHEREAS, the City of Oakland has prepared, with input of City staff, the public and other interested public agencies, a draft of a comprehensive revision to the Bicycle Master Plan (Revised Bicycle Master Plan); and

WHEREAS, based on an Environmental Impact Report (EIR) prepared under the California Environmental Quality Act ("CEQA") for Revised Bicycle Master Plan, it was determined that the Revised Bicycle Master Plan does not have any significant and unavoidable impacts; and

WHEREAS, the Revised Bicycle Master Plan and the EIR were circulated for public review and comment for the requisite periods of time, including among the general public and among relevant government entities, as required by state law and regulations, and including a public hearing before the City Planning Commission on April 18, 2007; and

WHEREAS, the City Planning Commission at a duly noticed public hearing on October 17, 2007, considered the Revised Bicycle Master Plan and the EIR, and recommended certification of the EIR and adoption of the Revised Bicycle Master Plan; and

WHEREAS, the Community and Economic Development Committee, at a duly noticed meeting on November 13, 2007, considered the Revised Bicycle Master Plan and the EIR, and recommended certification of the EIR and adoption of the Revised Bicycle Master Plan; and

WHEREAS, the City Council held a duly noticed public hearing on December 4, 2007 to consider the Revised Bicycle Master Plan and the EIR; now, therefore, be it

RESOLVED: That, the City Council, exercising its independent judgment, has reviewed and considered the EIR and certifies the EIR for the Revised Bicycle Master Plan, confirms, adopts and incorporates into this resolution by reference, as its findings and determinations, the CEQA findings made by the Planning Commission, and determines that this resolution complies with CEQA..

FURTHER RESOLVED: That the City Council hereby adopts the Revised Bicycle Master Plan as a component of the Land Use and Transportation Element of the City's General Plan and also adopts the Mitigation Monitoring and Reporting Program (Exhibit A); and be it

FURTHER RESOLVED: That in support of the City Council's decision to certify the EIR and adopt the Revised Bicycle Master Plan, the City Council affirms and adopts, as its findings and determinations, (1) the October 17, 2007 City Planning Commission Report and (2) the November 13, 2007 City Council Agenda Report, hereby incorporated by reference; and be it

FURTHER RESOLVED: That the City Administrator is directed to file a Notice of Determination with the Alameda County Clerk within five (5) working days of this approval; and be it

FURTHER RESOLVED: That, the record before this Council relating to this resolution includes, without limitation, the following:

1. the Revised Bicycle Master Plan, including all accompanying maps and papers;

2. all final staff reports, final decision letters and other final documentation and information produced by or on behalf of the City, including without limitation the EIR and supporting final technical studies and appendices, and all related/supporting final hearing materials, and all final notices relating to the General Plan Amendment and attendant hearings; and

3. all oral and written evidence received by the City Planning Commission and City Council during the public hearings on the General Plan Amendment; and all written evidence received by relevant City Staff before and during the public hearings on the General Plan Amendment and EIR; and

4. all matters of common knowledge and all official enactments and acts of the City, such as (a) the General Plan; (b) Oakland Municipal Code, including, without limitation, the Oakland real estate regulations and Oakland Fire Code; (c) Oakland Planning Code; (d) other applicable City policies and regulations; and (e) all applicable state and federal laws, rules and regulations; and be it

FURTHER RESOLVED: That the custodians and locations of the documents or other materials which constitute the record of proceedings upon which the City Council's decision is based are: (a) Community and Economic Development Agency, Planning and Zoning Division, 250 Frank Ogawa Plaza, Suite 3315, Oakland, California; and (b) Office of the City Clerk, 1 Frank H. Ogawa Plaza, 1st Floor, Oakland, California

IN COUNCIL, OAKLAND, CALIFORNIA,

PASSED BY THE FOLLOWING VOTE:

AYES - BRUNNER, KERNIGHAN, NADEL, QUAN, BROOKS, REID, CHANG, AND PRESIDENT DE LA FUENTE

NOES –
ABSENT –
ABSTENTION –

ATTEST:

LATONDA SIMMONS
City Clerk and Clerk of the Council of
the City of Oakland, California

1. Introduction and Executive Summary

Vision Statement: *Oakland will be a city where bicycling is fully integrated into daily life, providing transportation and recreation that are both safe and convenient.*

To realize this vision of a bicycle-friendly community, the City of Oakland will promote the routine accommodation of bicyclists in its projects and programs. The ongoing development of the City's bikeway network, including Safe Routes to Transit and the associated support facilities, will provide the infrastructure for making Oakland more accessible by bicycle. Programs will educate cyclists and drivers on road safety while encouraging people to bicycle for both physical activity and utilitarian trips. The benefits of bicycling will help the city meet its policy goals regarding transportation, sustainability, public health, equity, and quality of life.

The *Bicycle Master Plan* is the citywide, long-range policy document for promoting bicycling in Oakland over the next twenty years. Policy T4.5 of *Envision Oakland* (1998), the Land Use and Transportation Element of the Oakland General Plan, recommended the creation of a *Bicycle Master Plan* to promote alternatives to the private automobile. To be eligible for funding from the State's Bicycle Transportation Account, local jurisdictions must complete bicycle transportation plans and then update or reaffirm those plans every five years (Streets and Highways Code 890-894.2). Oakland's original plan was completed in 1999 and reaffirmed by City Council in 2005. This document is the first update to Oakland's *Bicycle Master Plan* and it is adopted as part of the General Plan. Appendix A provides a summary of how this plan meets the requirements of the California Bicycle Transportation Act.

1.1 Goals and Objectives

To develop Oakland as a bicycle-friendly community, the *Bicycle Master Plan* identifies the following goals:

Goal 1: Infrastructure — Develop the physical accommodations, including a network of bikeways and support facilities, to provide for safe and convenient access by bicycle.

Goal 2: Education — Improve the safety of bicyclists and promote bicycling skills through education, encouragement, and community outreach.

Goal 3: Coordination — Provide a policy framework and implementation plan for the routine accommodation of bicyclists in Oakland's projects and programs.

To measure progress towards these goals, the *Bicycle Master Plan* specifies the following overarching objective: *Publicly strive to become a Bicycle Friendly Community by 2012, as recognized by the League of American Bicyclists.*

The Bicycle Friendly Community Campaign is a national program to evaluate and award municipalities for actively promoting bicycling.[1] The evaluation is based on a holistic consideration of a city's accomplishments to date as well as outstanding needs. It follows a five E's approach that considers the coordinated efforts of engineering, education, encouragement, evaluation and planning, and enforcement. Applications are reviewed by an independent committee that makes awards decisions and provides constructive feedback on how municipalities can better achieve their bicycle-friendly goals. To measure progress towards these goals, the City of Oakland will publicly strive to become a Bicycle Friendly Community by 2012 when this plan will again be updated or reaffirmed.

Accomplishments to Date

The City of Oakland has taken significant steps towards becoming a bicycle-friendly community and most of these steps have been accomplished in the past ten years. This Plan provides additional detail and focus for building upon the following accomplishments.

- *Bikeways*: Major bikeways include the Bancroft Bikeway (Melrose to San Leandro), the San Francisco Bay Trail (on-street component between Emeryville and Fruitvale), Grand Ave Bikeway (West Oakland to Grand Lake), Webster/Shafter Bikeway (downtown to Rockridge), Market St Bikeway (Jack London Square to Berkeley), and the bicycle routes in the Oakland Hills. In total, Oakland now has over eighty-five miles of designated bikeways.

- *Bicycle parking*: Since 1999, the City has installed 900 bike racks throughout Oakland accommodating over 2,000 bicycles. Electronic bicycle lockers are available at the downtown BART stations and the Fruitvale Bike Station at Fruitvale BART provides secure parking for over two hundred bicycles.

- *Bicycling information*: The web site for the City of Oakland's Bicycle and Pedestrian Program includes extensive information on bicycle facilities and related resources.[2]

[1] www.bicyclefriendlycommunity.org
[2] www.oaklandbikes.info

The *Walk Oakland! Map & Guide* includes detailed information on bikeways, street grades, bicyclist safety, and transit connections. Over the course of three editions, there are now 43,000 copies of the map in print and it is available at bookstores and bike shops throughout Oakland.

- *Lake Merritt and the waterfront*: With the passage of Measure DD, the City of Oakland is embarking on major capital improvements that will dramatically improve bicycling conditions along Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary.

- *Measure B*: In November 2000, Alameda County voters passed this half-cent transportation sales tax that over its twenty-year lifetime will deliver $80 million in bicycle and pedestrian improvements throughout the county.

In addition to bicycle facilities, there is a growing group of programs and organizations promoting bicyclist safety and skills.

- The City's Parks and Recreation Department offers a Bicycle Safety Helmet Program and an Earn Your Bike Program for children and youth, respectively.

- The Oakland Police Department has a highly successful Bicycle Patrol that provides community policing in the downtown and neighborhood commercial districts.

- In 2007, Oakland celebrated its fourteenth annual Bike to Work Day with over 450 bicyclists participating in the traditional pancake breakfast at City Hall.

- Community-based organizations including Cycles of Change and The Crucible provide bicycle programs and repair shops to engage and educate youth in disadvantaged neighborhoods.

- Bicycle clubs like the Oakland Yellowjackets and the Royal Ground Velo Raptors offer regular recreational rides and support for cyclists of all abilities.

- Advocacy organizations including the East Bay Bicycle Coalition and Walk Oakland Bike Oakland speak on behalf of their membership in promoting the interests of cyclists.

- Oakland's nine neighborhood-based bicycle shops provide sales and service while creating jobs and sales tax revenue.

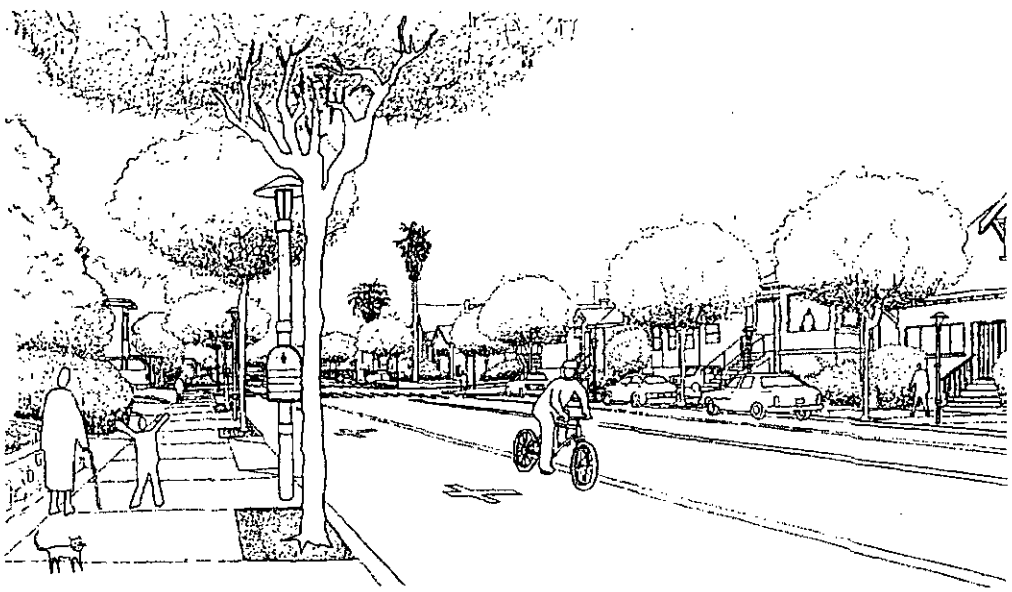

Figure 1.1: *Improving Neighborhood Quality of Life.* Bicycle improvements are mutually reinforcing with traffic calming efforts on residential streets. Bicycling helps connect residents with their communities by exposing them to sights, sounds, and social interactions that are otherwise muted by traffic. Through bicycling, children gain independence, stay active, and develop an enriched understanding of their neighborhoods. (Illustration by Amit Price Patel.)

- The City of Oakland's Bicycle and Pedestrian Advisory Committee has been meeting monthly since 1995 to ensure participation and open communication between city government, residents, and community-based organizations.

This *Bicycle Master Plan* provides the vision, goals, policies, and priorities for additional facilities and programs that will build upon these accomplishments to help Oakland become a city where bicycling is fully integrated into daily life.

1.2 Benefits of Bicycling

Bicycling is a healthy, non-polluting, low-cost, and quiet form of transportation that is ideal for many trips, including commuting and shopping. Improving safety and access for cyclists supports the City's efforts to become more environmentally, economically, and socially sustainable (Figures 1.1 to 1.3).

Transportation — Bicycles are ideal transportation for shorter trips within urban areas. In Oakland, in-fill projects and residential development in the downtown are creating land uses that are well-served by bicycle. In the San Francisco Bay Area, 43% of all trips are two miles in length or less (Federal Highway Administration 1999). In Oakland, 85% of residents live within two miles of downtown or a major transit station. This two-mile

distance equates to an easy 12-minute bicycle ride. Forty percent of American adults identified that they would sometimes commute or commute more often by bicycle if there were safe bikeways serving their trips (Parkwood Research Associates 1995). As the population of Oakland and the Bay Area continues to grow, the transportation system faces increasing demands on its crowded infrastructure. Compared to automobiles, bicycles are a very efficient use of roadway capacity and parking space.

Sustainability — Bicycling is the most energy efficient form of transportation and it has no emissions. Motor vehicles are responsible for 47% of Oakland's greenhouse gas emissions (ICLEI 2006, p. 7). Smarter land uses that foster nonmotorized transportation is a key strategy for slowing human-created climate change as well as for preserving open space throughout the region. The use of bicycles for short trips reduces the number of short trips by automobile. These are high-polluting trips because of the car's cold start and the associated inefficient operation of the engine's catalytic converter. In fact, up to 70% of the pollution from a ten-mile car trip is generated in the first mile because of the cold start.[3] By extending human-powered travel beyond walking distance, bicycles are especially effective for linking neighborhoods to major transit stations and thereby eliminating short, high-polluting car trips.

Public Health — Bicycling is healthy transportation. Physical inactivity and poor nutrition are the root causes of the obesity epidemic in the United States. In the Oakland Unified School District, 20% of students are physically unfit and 36% of students are overweight or obese (California Department of Education 2005). Over 40% of the leading causes of death in Oakland including heart disease, cancer, stroke, and type 2 diabetes are related to physical inactivity. These deaths contribute to a lifespan that is 2.5 years shorter than that of Alameda County residents as a whole. Oakland's African Americans have a lifespan that is five years shorter than the citywide average (Alameda County Public Health Department 2004). Thirty minutes of moderate physical activity per day is an effective prevention measure against these leading causes of death (US Department of Health and Human Services 2005). Building physical activity into people's daily lives is one of the most sustainable interventions to promote healthy lifestyles. Bicycling for recreation is an aerobic and low-impact form of exercise. Bicycling for transportation is an ideal means for integrating physical activity into daily life.

Equity — Bicycling is an inexpensive and broadly accessible form of transportation. The average annual cost of operating a car is $5,000 to $12,000 versus $120 per year for operating a bicycle (American Automobile Association 2006).[4] Bicycling is affordable transportation for the urban poor who—because of the correlation between wealth and race in

[3] http://www.baaqmd.gov/pio/triplinking.htm

[4] http://www.bicyclinginfo.org/pp/benefits/econoben/index.htm

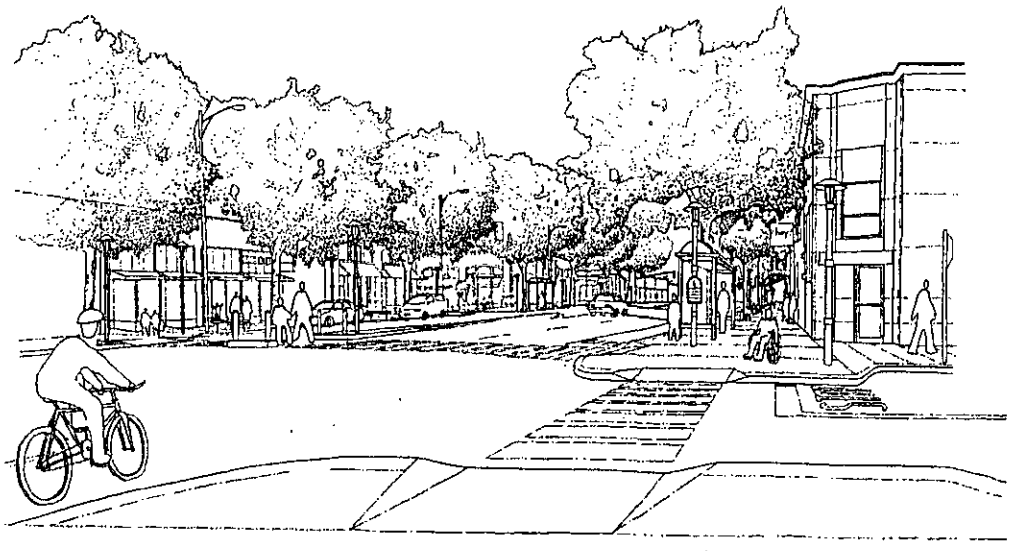

Figure 1.2: *Providing Sustainable Transportation.* Bicycles are ideal transportation for urban areas. In the San Francisco Bay Area, 43% of trips are two miles in length or less. In Oakland, 85% of residents live within two miles of the downtown or a major transit station. This two-mile distance amounts to a casual 12-minute bicycle ride. Bicycling is the most energy efficient form of transportation and it has no associated emissions. Bicycling helps Oakland reduce the 47% of its total greenhouse gas emissions that are caused by motor vehicles. (Illustration by Amit Price Patel.)

the United States—are disproportionately people of color. Bicycles provide added freedom and independence for youth and parents (who are otherwise shuttling their children) as well as for some people who cannot drive and those who have chosen not to drive.

Quality of Life — Bicycling is a means for improving the livability of Oakland's neighborhoods. Bicycle improvements are mutually reinforcing with traffic calming efforts on residential streets. Bicycling helps connect residents with their community by exposing them to sights, sounds, and social interactions that are otherwise muted by traffic. The lives of parents are simplified when their children can ride safely and confidently to school and their activities. Through bicycling, children gain independence, stay active, and develop an enriched understanding of their communities.

1.3 Executive Summary

In the following chapters, the *Bicycle Master Plan* describes existing conditions, policy recommendations, proposed bikeways, support facilities, and an implementation program. The policies were developed from the existing conditions and they in turn guide the recommendations for "Bikeways" and "Parking and Support Facilities." Taken as a whole,

the Plan provides a framework for achieving the vision, goals, and objectives by improving bicyclist safety and access. The specific recommendations reflect consensus amongst stakeholders on how best to achieve this overarching vision.

Chapter 2: Existing Conditions

Chapter 2 provides a comprehensive description of bicycling in Oakland based on available data, fieldwork, and an extensive community process. It identifies the opportunities for and constraints to bicycling, and characterizes the user groups that are common in Oakland. The chapter reviews the available data on bicyclist mode share (with an emphasis on bicycling to transit) and bicyclist-involved collisions. It also summarizes bicycle-related programs in Oakland and provides an overview of the community process through which the *Bicycle Master Plan* was developed. In assessing the existing conditions, these quantitative data were complemented by a community outreach process that included meetings with neighborhood groups and merchants associations throughout Oakland.

Oakland's mild climate and varied topography are highly suited for both commuter and recreational cycling. In fact, Oakland has the third highest cycling rate of all California cities with populations over 150,000 (US Census 2000). However, busy streets and high motor vehicle speeds create real and perceived barriers to more people cycling. On average, a bicyclist-involved collision occurs every other day in Oakland. Ninety-seven percent of these collisions involve motor vehicles and youth cyclists are disproportionately represented in these collisions (based on their share of the population). However, considering both the number of cyclists and number of collisions, Oakland is a comparatively safe place for bicycling: the fourth safest city in California with a population over 60,000 (Jacobsen 2003).

Chapter 3: Policy Recommendations

Based on the existing conditions, Chapter 3 provides policy recommendations for each of the Plan's three goals: *Infrastructure, Education, and Coordination.* These policies address the Bikeway Network, Routine Accommodation, Safe Routes to Transit, Parking and Support Facilities, Education, Enforcement, Resources, Project Development, and Public Review. In particular, the policy on routine accommodation states that bicycle safety and access be addressed, as a matter of course, in the design and maintenance of all streets. The chapter contextualizes these recommendations with related policies at the federal, state, regional, and municipal levels. An inventory of all related Oakland General Plan policies and actions are compiled in Appendix D.

The United States Department of Transportation's Policy Statement on Walking and Bicycling specifies that "bicycling and walking facilities will be incorporated into all transportation projects unless exceptional circumstances exist." Similarly, the California Department of Transportation's Deputy Directive 64 requires that Caltrans fully consider the needs of bicyclists in all of its activities. California Assembly Concurrent Resolution No. 211 encourages all cities to implement these USDOT and Caltrans policies. The Metropolitan Transportation Commission's policy on routine accommodation requires that all projects using regional funds consider bicyclist access. Oakland's *Bicycle Master Plan* follows this guidance through the policy on Routine Accommodation: that bicycle safety and access be addressed in the design and maintenance of all streets. Another key policy direction, Safe Routes to Transit, promotes bicycle facilities serving major transit hubs, thereby extending the reach of bicyclists while simultaneously increasing transit ridership. These policy recommendations are applied in Chapter 4, "Bikeways," and Chapter 5, "Parking and Support Facilities."

Chapter 4: Bikeways

Chapter 4 describes the various bikeway types and explains the rationales for the proposed bikeway network. It also applies the Safe Routes to Transit policy to the bikeway network by specifying bikeways to each of the major transit stations. The chapter concludes with bikeway design guidelines to help project managers, consultants, and the public understand the basic design issues for accommodating bicyclists.

Oakland's proposed bikeway network consists of bicycle paths (Class 1), bicycle lanes (Class 2), bicycle routes (Class 3), arterial bicycle routes (Class 3A), and bicycle boulevards (Class 3B). The network reflects incremental modifications and improvements to the network identified in the 1999 *Bicycle Master Plan.* All proposals were evaluated through a citywide feasibility analysis that considered street grades, available right-of-way, street capacity, and bicycle/bus interactions. The network emphasizes Safe Routes to Transit by including bikeways from four directions to each transit station. The bikeway design guidelines summarize the basic parameters required by the Caltrans Highway Design Manual and the Manual on Uniform Traffic Control Devices. This section also explains additional treatments that address issues commonly found in Oakland.

Chapter 5: Parking and Support Facilities

The bicycle is a viable means of transportation when physical accommodations ensure that people's trips are safe and convenient and that their property is secure. These facilities in-

clude various types of bicycle parking as well as restrooms, showers, and lockers. Chapter 5 explains the basic types of bicycle parking and identifies the existing and proposed facilities for each type. The chapter describes Oakland's bicycle parking ordinance and provides design guidelines for selecting and locating bicycle parking facilities. The provision of high-quality bicycle parking is critical because people's decisions to bicycle are affected by security concerns over their property.

Chapter 6: Implementation

Chapter 6 prioritizes projects and programs for implementing the Plan's recommendations. In particular, priority bikeways were identified based on evaluation criteria to determine and rank their relative benefit. The chapter discusses the process for project implementation, including the need for further study. It then describes the relationship between proposed bikeways and other roadway and development projects that may affect the network. Most bikeway projects are implemented with some form of grant funding and the chapter provides a brief summary of the most common grant sources. Lastly, the chapter addresses staffing and public participation, with an emphasis on Oakland's Bicycle and Pedestrian Advisory Committee.

Appendices

The following appendices provide greater detail and additional documentation to augment the preceding chapters. Appendix A, "Caltrans BTA Requirements," is a quick reference guide on how this document meets the state requirements for a bicycle transportation plan. Appendix B, "Building on the *1999 Bicycle Master Plan*," provides a policy-level discussion of how bicycle planning and engineering in Oakland have developed over the past eight years. Appendix C, "Local and Regional Coordination," documents the community outreach process for this Plan and summarizes other plans at the local, county, and regional levels that intersect with Oakland's *Bicycle Master Plan.* Appendix D, "Oakland General Plan Policies," inventories the bicycle-related policies and actions in all elements of Oakland's General Plan. Similarly, Appendix E, "Oakland Municipal Code," documents all references to bicycles in this code. Appendix F, "Bikeway Descriptions," provides descriptions of priority projects, bicycle paths and bridges, major on-street projects, bridges and freeway crossings, at-grade railroad crossings, and proposed changes to existing bikeways. Appendix G, "Requirements for Bikeway Feasibility Studies," specifies the additional analysis that will be necessary prior to implementing proposed bikeways. Lastly, Appendix H, "Supplementary Documentation" includes the data and evaluation for the approximately

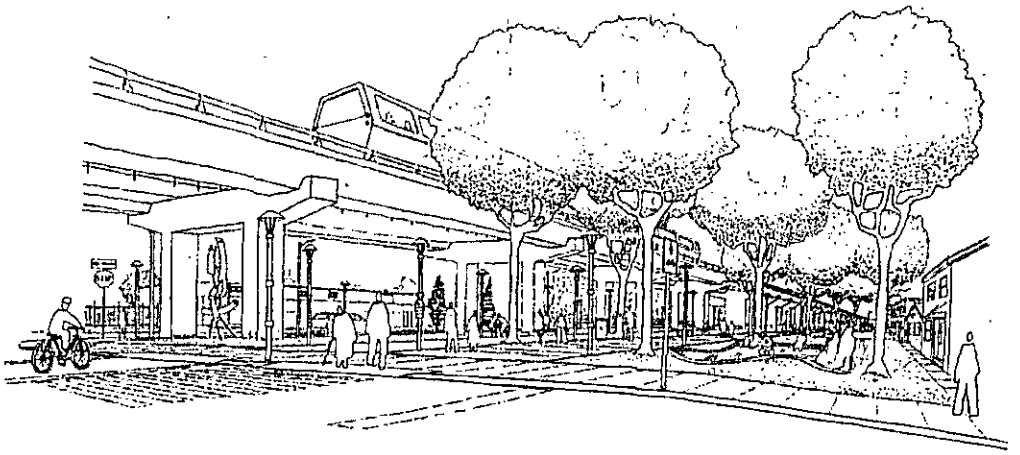

Figure 1.3: *Promoting Equity and Public Health.* Bicycling is an inexpensive and broadly accessible form of transportation and recreation. Bicycle improvements are one aspect of improving Oakland's streets and open spaces to make them accessible and inclusive. Building physical activity into people's daily lives is a sustainable intervention for promoting healthy lifestyles. Bicycling for transportation and recreation is an ideal means for integrating physical activity into daily life. (Illustration by Amit Price Patel.)

700 bikeway segments that were evaluated in the development of the proposed bikeway network. Key maps are included as 11"x17" color pages and collected at the end of this document.