



Chapter 4 Policy Recommendations

The City should prepare, adopt, and implement a Bicycle and Pedestrian Master Plan as a part of the Transportation Element of this General Plan.

City of Oakland General Plan, Policy T4.5, p. 58

The Land Use and Transportation Element (LUTE) of the Oakland General Plan recommends the preparation, adoption, and implementation of a comprehensive pedestrian plan for the City (LUTE T4.5, p. 58, above). Oakland's General Plan has many clear policy directives related to the promotion of a walkable City. Other policy directives from the LUTE are listed below with the specific goals of the Pedestrian Master Plan. Through these goals, policies, and action items, the Pedestrian Master Plan places a greater emphasis on pedestrians in the City's ongoing work of shaping streets and managing traffic.

This emphasis on pedestrian considerations parallels new policies within the California Department of Transportation (Caltrans) and the

U.S. Department of Transportation (USDOT). The Caltrans Deputy Directive 64 explains, "The Department fully considers the needs of non-motorized travelers (including pedestrians, bicyclists, and persons with disabilities) in all programming, planning, maintenance, construction, operations and project development activities and products. This includes incorporation of the best available standards in all of the Department's practices" (Caltrans 2001). The Caltrans policy is based on a federal policy statement on better integrating walking and bicycling into the nation's transportation infrastructure (FHWA 2001).

The following policies and action items were prepared in consultation with source documentation including

the Open Space, Conservation, and Recreation (OSCAR) Element, Oakland Bicycle Master Plan, and Pedestrian Master Plans from other cities. The Citizens Pedestrian Advisory Committee (CPAC) and the Technical Advisory Committee (TAC) reviewed existing City policies with respect to pedestrians and formulated the policies listed below. (Policies relating to implementation are listed in the Implementation Plan chapter.)

For implementation, the proposed projects would require additional review by traffic engineering and under the California Environmental Quality Act (CEQA). Furthermore, engineering judgment is necessary to determine the specific locations and features of each project.

A Policy Response to Existing Conditions

This section reiterates the goals of the Pedestrian Master Plan and summarizes key points identified in the Existing Conditions chapter. It links the policies of the Pedestrian Master Plan to the existing conditions by tying both to the Plan's goals. The remainder of this chapter on Policy Recommendations presents the Plan's policies in terms of the Plan's goals.

1 Pedestrian Safety

Create a street environment that strives to ensure pedestrian safety.

- On average, a pedestrian/vehicle collision occurs each day in Oakland.
- Most pedestrian/vehicle collisions occur in downtown, in Chinatown, and along arterial streets.
- Children are at greatest risk of pedestrian injury and seniors are at greatest risk of pedestrian fatality.
- Half of pedestrian/vehicle collisions occur when the pedestrian is in a crosswalk.

2 Pedestrian Access

Develop an environment throughout the City – prioritizing routes to school and transit – that enables pedestrians to travel safely and freely.

- Walking rates in Oakland are amongst the highest of all cities in the San Francisco Bay Region.
- An estimated 53,000 weekday pedestrian trips are to and from elementary schools of the Oakland Unified School District.
- Approximately 148,000 weekday pedestrian trips are to and from AC Transit bus lines in the City of Oakland.
- An estimated 57,000 weekday pedestrian trips are to and from BART stations in the City of Oakland.

3 Streetscaping and Land Use

Provide pedestrian amenities and promote land uses that enhance

public spaces and neighborhood commercial districts.

- Many Oakland neighborhoods are walkable because they contain a mixture of homes, businesses, and public resources within easy walking distance of each other.
- Newer areas of the City including parts of the Oakland Hills and East Oakland do not always have sidewalks, crosswalks, short blocks, and numerous destinations within easy walking distance.
- Many Oakland streets lack benches, bus shelters, trees, and other street furniture that are important ingredients of a walkable city.



4 Education

Educate citizens, community groups, business associations, and developers on the safety, health, and civic benefits of walkable communities.

- Vehicle drivers are responsible for approximately 51% of pedestrian/motor vehicle collisions.
- Pedestrians are responsible for approximately 31% of pedestrian/motor vehicle collisions.
- In collisions where the pedestrian is at fault, 56% of the pedestrians are ages 17 and under even though they comprise 25% of the population.

The following sections identify policies and actions for each goal.

Goal 1: Pedestrian Safety

Create a street environment that strives to ensure pedestrian safety.

General Plan Policies

→ **Objective T6, Safety.** Make streets safe, pedestrian accessible, and attractive. “In the past few years, public hearings have been held throughout the city on reducing traffic in the neighborhoods by slowing it down or redirecting it to arterial streets. Measures that have been suggested include speed bumps, traffic diverters, traffic circles, stop signs, and retiming of signals. Some of these have been implemented, but funding is insufficient to meet all of the public’s requests...Measures to reduce traffic impacts need to be prioritized and coordinated with overall circulation planning” (LUTE, p. 60).

→ **Policy T6.1, Posting Maximum Speeds.** “Collector streets shall be posted at the lowest possible speed (usually a maximum speed of 25 miles per hour), except where a

lower speed is dictated by safety and allowable by law” (LUTE, p. 60).

Policies and Action Items

PMP Policy 1.1. Crossing Safety: Improve pedestrian crossings in areas of high pedestrian activity where safety is an issue.

Action 1.1.1. Consider the full range of design elements – including bulb-outs and refuge islands – to improve pedestrian safety.

Action 1.1.2. Update crossing treatment policy guidelines for all types of crossings based on current federal research (FHWA 2002a, FHWA 2002b).

Action 1.1.3. Conduct a test of the FHWA-based crosswalk policy (FHWA 2002a) in the Fruitvale District.

Action 1.1.4. Use pedestrian safety, bicyclist safety, and residential and business densities to establish lower speed limits in areas with a high level of pedestrian activity or a history of

pedestrian/motor vehicle collisions (California Vehicle Code Section 627).

Action 1.1.5. Evaluate whether to update the City’s current lighting policy to ensure that crosswalks are properly lit at night.

Action 1.1.6. Analyze pedestrian/motor vehicle collisions to reduce the incidences of pedestrian/motor vehicle conflict.

PMP Policy 1.2. Traffic Signals: Use traffic signals and their associated features to improve pedestrian safety at dangerous intersections.

Action 1.2.1. Review the guidelines for signal need prioritization to ensure that pedestrian considerations are given due consideration.

Action 1.2.2. Create guidelines, priorities and a schedule for the installation of pedestrian signal heads at locations with significant pedestrian crossing volumes.

Action 1.2.3. Seek additional funds to pay for the retrofitting of traffic

signals with pedestrian signal heads and the maintenance costs that such additions may incur.

Action 1.2.4. Review the signal-timing program to ensure that it incorporates the needs of pedestrians by providing adequate crossing times.

Action 1.2.5. Seek funds to address the backlog of traffic signals with special attention to signals in front of schools, senior centers, and other high-pedestrian activity centers.

Action 1.2.6. Continue the City's programs to install audible pedestrian signals at all new and retrofitted traffic signals. Continue the on-demand program to install such signals at additional locations based on requests from persons with visual impairments.

Action 1.2.7. Consider using crossing enhancement technologies like countdown pedestrian signals (a device not yet approved by State or Federal agencies) at the highest pedestrian volume locations.

PMP Policy 1.3. Sidewalk Safety: Strive to maintain a complete sidewalk network free of broken or missing sidewalks or curb ramps.

Action 1.3.1. Conduct a survey of areas lacking sidewalks and estimate the cost and feasibility of filling sidewalk gaps in areas with pedestrian traffic.

Action 1.3.2. Assign responsibility for sidewalk additions to ensure that sidewalk gaps are filled.

Action 1.3.3. Create a program to enforce the responsibility of adjacent property owners for the addition of sidewalks to close gaps and accompany new development.

Action 1.3.4. Aid in the finance of sidewalk improvements through the creation of assessment districts.

Action 1.3.5. Budget funds for additional sidewalks to fill in gaps in the sidewalk network in areas identified as high priority for safety reasons.

Action 1.3.6. Implement pedestrian-



scale lighting at regular intervals in areas of high pedestrian activity to promote pedestrian safety and discourage criminal activity.

Action 1.3.7. Conduct a survey of all street intersections to identify corners with missing, damaged, or non-compliant curb ramps and create a plan for completing their installation.

Action 1.3.8. Continue the City's in-fill and on-call curb ramp programs to fulfill the federal mandate for curb ramps at every pedestrian crossing.

Action 1.3.9. Continue and expand the City's program of on-demand sidewalk repairs.

Goal 2: Pedestrian Access

Develop an environment throughout the City – prioritizing routes to school and transit – that enables pedestrians to travel safely and freely.

General Plan Policies

→ **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, p. 57).

→ **Policy T4.6, Making Transportation Accessible for Everyone.** “Alternative modes of transportation should be accessible for all of Oakland’s population. Including the elderly, disabled, and disadvantaged” (LUTE, p. 58).

→ **Policy T4.7, Reusing Abandoned Rail Lines.** “Where rail lines (including siding and spurs) are to be abandoned, first consideration should be given to acquiring the line for transportation and recreational uses, such as bikeways,

footpaths, or public transit” (LUTE, p. 59).

→ **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” (LUTE, p. 59).

Policies and Action Items

PMP Policy 2.1. Route Network: Create and maintain a pedestrian route network that provides direct connections between activity centers.

Action 2.1.1. Improve existing connections across/under freeways to activity centers using lighting, acoustics, and other design features.

Action 2.1.2. Develop a system of signage for pedestrian facilities including walkways and trails.

Action 2.1.3. Create trails, identified in the Open Space, Conservation, and Recreation (OSCAR) Element



that follow creeks and help promote the restoration of those creeks.

Action 2.1.4. Avoid the use of pedestrian overpasses and underpasses for pedestrian crossings on surface streets (FHWA 2002b, p. 49).

Action 2.1.5. Install signage to discourage drivers from using local streets as through routes.

Action 2.1.6. Conduct a study to identify streets with underused travel lanes for potential traffic calming projects including restriping, lane reduction, and sidewalk widening.

Action 2.1.7. Strive to maintain the existing walkways to ensure that they are safe and free of debris and vegetation.

Action 2.1.8. To the maximum extent possible, make walkways accessible to people with physical disabilities.



PMP Policy 2.2. Safe Routes to School: Develop projects and programs to improve pedestrian safety around schools.

Action 2.2.1. Using the Pedestrian Route Network as a base, work with schools having the highest walking rates to designate, improve, and publicize safe routes to school.

Action 2.2.2. Implement a seamless school safety program that coordinates adult crossing guards, student safety patrols, and parent volunteers to ensure that all schools have adequate traffic safety programs.

Action 2.2.3. Prioritize crossing and sidewalk improvements around schools with the greatest number of child pedestrian/vehicle collisions.

Action 2.2.4. Work with schools having inadequate pick-up and drop-off facilities to develop compensatory programs.

Action 2.2.5. All new schools in Oakland should consider vehicle

pick-up and drop-off areas to accommodate child pedestrian safety.

PMP Policy 2.3. Safe Routes to Transit: Implement pedestrian improvements along major AC Transit lines and at BART stations to strengthen connections to transit.

Action 2.3.1. Develop and implement street designs (like bus bulb-outs) that improve pedestrian/bus connections.

Action 2.3.2. Prioritize pedestrian improvements at transit locations with the highest pedestrian volumes and the most pedestrian/vehicle collisions.

Action 2.3.3. Prioritize the implementation of street furniture (including bus shelters) at the most heavily used transit stops.

Action 2.3.4. Improve pedestrian wayfinding by providing local area maps and directional signage at major AC Transit stops and BART stations.

Goal 3: Streetscaping and Land Use

Provide pedestrian amenities and promote land uses that enhance public spaces and neighborhood commercial districts.

General Plan Policies

→ **Policy T6.2, Improving Streetscapes.** “The City should make major efforts to improve the visual quality of streetscapes. Design of the streetscape, particularly in neighborhoods and commercial centers, should be pedestrian-oriented and include lighting, directional signs, trees, benches, and other support facilities” (LUTE, p. 60).

→ **Policy T2.2, Guiding Transit-Oriented Development.** “Transit-oriented developments should be pedestrian oriented, encourage night and day time use, provide the neighborhood with needed goods and services, contain a mix of land uses, and be designed to be compatible with the character of surrounding neighborhoods” (LUTE, p. 56).



Policies and Action Items

PMP Policy 3.1. Streetscaping: Encourage the inclusion of street furniture, landscaping, and art in pedestrian improvement projects.

Action 3.1.1. Identify pedestrian routes in neighborhood commercial districts and in the downtown to prioritize streetscaping improvements.

Action 3.1.2. Budget funds for the concrete cutting of tree pits to facilitate the City’s street tree program.

Action 3.1.3. Prioritize the replacement of dead or missing trees at locations with existing tree pits.

Action 3.1.4. Include pedestrian-scale lighting in streetscaping projects.

Action 3.1.5. Use part of the City’s 1.5% Public Art Ordinance and seek additional funding sources to incorporate public art into the Pedestrian Route Network.

Action 3.1.6. Work with community groups to install signs, artwork, and landscaping that highlight historical and community landmarks.

PMP Policy 3.2. Land Use: Promote land uses and site designs that make walking convenient and enjoyable.

Action 3.2.1. Use building and zoning codes to encourage a mix of uses, connect entrances and exits to sidewalks, and eliminate “blank walls” to promote street level activity.

Action 3.2.2. Promote parking and development policies that encourage multiple destinations within an area to be connected by pedestrian trips.

Action 3.2.3. Consider implementing “pedestrian only” areas in locations with the largest pedestrian volumes.

Action 3.2.4. Require contractors to provide safe, convenient, and accessible pedestrian rights-of-way along construction sites that require sidewalk closure.

Action 3.2.5. Continue the programs to clean up trash and blighted buildings at the street level and expand the use of business associations in this regard.

Action 3.2.6. Encourage the inclusion of public walkways or trails in large, private developments.

Action 3.2.7. Encourage the development of pocket parks and plazas that are along the Pedestrian Route Network.

Action 3.2.8. Discourage motor vehicle parking facilities that create blank walls, unscreened edges along sidewalks, and/or gaps between sidewalks and building entrances.

Goal 4: Education

Educate citizens, community groups, business associations, and developers on the safety, health, and civic benefits of walkable communities.

General Plan Policies

→ **Objective T4, Alternative Modes of Transportation.** “Increase use of alternative modes of transportation” (LUTE, p. 58).

→ **Policy T4.2, Creating Transportation Incentives.** “Through cooperation with other agencies, the City should create incentives to encourage travelers to use alternative transportation options” (LUTE, p.58).

Policies and Action Items

PMP Policy 4.1. Education. Promote safe and courteous walking and driving and the benefits of walking through targeted outreach programs.

Action 4.1.1. Sponsor Walk to School Day as an annual, city-wide event that encourages people to

walk and promotes both pedestrian and driver safety around schools.

Action 4.1.2. Sponsor Pedestrian Safety Week as an annual, city-wide educational event to promote pedestrian and driver safety.

Action 4.1.3. Continue the use of Safe Moves Town in public schools as an educational tool for pedestrian safety.

Action 4.1.4. Publicize the Pedestrian Route Network through the internet and other means.

Action 4.1.5. Publicize the network of walkways in brochures that explain their history and describe suggested walking tours.

Action 4.1.6. Work with residents and community groups to expand the network of walkways on existing City rights-of-way.

Action 4.1.7. Publicize the City’s audible pedestrian signal network and provide wayfinding orientation for persons with visual impairments through the Mayor’s Commission

on Persons with Disabilities and local organizations.

PMP Policy 4.2. Enforcement: Prioritize the enforcement of traffic laws that protect the lives of pedestrians.

Action 4.2.1. Develop a fine structure that discourages walking and driving behaviors that threaten the safety or access of pedestrians.

Action 4.2.2. Continue the program of radar trailer deployment in high speed areas.

Action 4.2.3. Continue the program of targeted enforcement of the pedestrian’s right-of-way at unsignalized crosswalks.

Action 4.2.4. Continue the “Stop” program that takes unqualified drivers off the road.

Action 4.2.5. As part of the city budget process, consider if an adequate number of officers are assigned to traffic enforcement and if additional officers could be funded through additional citation revenue.

Issues for Further Discussion

This chapter concludes with a section identifying marked crosswalks, speed humps, and pedestrian auto-detection as issues for further discussion. These issues require ongoing debate because they lack consensus for establishing policy positions in the Pedestrian Master Plan. The differing viewpoints on these issues are presented here to facilitate further discussion on how best to promote pedestrian safety and access in the City of Oakland.



Marked Crosswalks

Marked crosswalks are a basic design treatment for pedestrian crossings. In Oakland, they are common at signalized and unsignalized intersections and comparatively rare at mid-block locations. The California Vehicle Code recognizes crosswalks at all locations where streets with sidewalks meet at approximately right angles (CVC Section 275). This definition applies for both marked and unmarked crosswalks except at those locations where a local authority has placed signs that prohibit crossing. In the United States, marked crosswalks have been controversial because of a complicated history of research on crosswalk safety and differing approaches for ensuring pedestrian safety.

The City of Oakland's current crosswalk policy is that new crosswalks will be installed only at signalized or stop-controlled intersections. Additionally, some signalized intersections in Oakland have recently had crosswalks removed that were recog-

nized as especially dangerous for pedestrians. These intersections include Webster Street at 10th Street and Lakeshore Avenue at E. 18th Street. In these instances, pedestrian safety has been promoted by eliminating dangerous crossings.

This policy follows a study by Herms (1972) that found a greater incidence of pedestrian collisions in marked crosswalks than in unmarked crosswalks at 400 uncontrolled intersections in San Diego, California. A recent study in the City of Los Angeles found that marked crosswalks at uncontrolled intersections negatively impacted pedestrian safety (Jones and Tomcheck 2000). To enhance pedestrian safety, the City of Los Angeles is removing many crosswalks citywide.

With this approach, the primary purpose of a marked crosswalk is to direct pedestrians to a designated location to cross the street. The installation of crosswalks beyond this basic purpose is seen as giving the pedestrian a false sense of security and diluting the effect of crosswalks on drivers.

Issues for Further Discussion

To promote the goals of pedestrian safety and access, the Pedestrian Master Plan recognizes that safe and convenient crossings are a necessary component of a walkable city. The California Vehicle Code explains, “[I]t is the intent of the Legislature that all levels of government in the state, particularly the Department of Transportation, work to provide convenient and safe passage for pedestrians on and across all streets and highways...” (CVC 21949).

The importance of pedestrian access suggests that the City of Oakland’s crosswalk policy may benefit from reconsideration. Marked crosswalks demonstrate that under state law pedestrians are legitimate users of the roadway at designated locations. Unfortunately, many pedestrians and drivers are unaware that unmarked crosswalks are legally recognized in the State of California. This issue is of particular importance because State law specifies that pedestrians have the right-of-way in all legally recognized

crosswalks. Furthermore, the contrasting colors of marked crosswalks provide an important resource for persons with visual impairments when navigating city streets.

The Pedestrian Master Plan proposes the reconsideration of Oakland’s existing crosswalk policy in light of research published in 2002 by the Federal Highway Administration (FHWA 2002a, 2002b) that emphasizes the importance of both pedestrian safety and access at crossings. This research recognizes that the marked crosswalk is only one of many contemporary design treatments for ensuring safe pedestrian crossings. Where safety considerations permit, crosswalks should be installed to promote pedestrian access. When safe crosswalks cannot be installed on their own, additional design treatments should be evaluated and implemented to ensure that those crossings are in fact safe. Chapter 5 titled “Design Elements” identifies treatments that may be combined with



marked crosswalks to ensure safe and accessible crossings.

Speed Humps

Oakland’s current speed hump program installed approximately 1,600 speed humps on residential streets from March 1, 1995 through March 1, 2000. Installation requires a petition with signatures representing 67% of the addresses on the block in question. A recent evaluation of speed humps in Oakland shows that children who have a speed hump on their block are 50% less likely to be injured by a motor vehicle collision (Tester 2001). Speed humps may have brought down average speeds to the point where some collisions are being

avoided altogether and the severity of injuries is being moderated by slower motor vehicle speeds.

However, speed humps have two notable drawbacks. First, they create delays in emergency vehicle response times. Second, they may cause discomfort and possible injury for people with disabilities when driving over them. The City of Oakland is currently evaluating chicanes and slow points (also known as chokers) as alternatives to speed humps for slowing motor vehicle traffic on neighborhood streets. (See Chapter 5 on Design Elements for further discussion of these treatments.) At this time, the speed hump program remains in effect and no alternative has been identified with comparable efficacy and cost-effectiveness.

Pedestrian Auto-Detection

Pedestrian auto-detection is a concept for the automatic detection of pedestrians at intersections. At traffic signals that do not include pedestrian phases with every signal cycle, pedes-

trians must press buttons to request signal phases. At traffic signals that are not on timers, the presence of motor vehicles is commonly recognized by a loop detector embedded in the street that triggers the signal phase for those waiting vehicles. New types of detectors based on electromagnetic sensors are creating additional possibilities for serving intersection users. However, two significant issues indicate that pedestrian auto-detection remains an unresolved issue for the City of Oakland. First, the technology remains unproven because it is characterized by an unacceptable rate of false triggers. Second, the concept of pedestrian auto-detection is arguable because the act of pushing a button may be a reminder to the pedestrian to be careful when crossing the street.

While the technology remains unproven, the Pedestrian Master Plan recognizes that it could develop to the point where the auto-detection of pedestrians is technically reliable.

If such systems emerge, they would have three significant advantages. First, people with visual impairments would not need to find pedestrian call buttons. Pedestrian auto-detection would also eliminate the need of retrofitting push buttons with audible call buttons. Second, such detectors could dynamically set the length of the pedestrian phase by recognizing when people have not cleared the intersection in the allotted time. By using real-time sensing, the system could provide additional crossing time for those who need it. Third, pedestrian auto-detection would provide equal treatment for pedestrians at intersections where motor vehicles are currently auto-detected. These systems could also be used at crosswalks where push buttons would otherwise be located in inconvenient locations.