







Lake Merritt Station Area Plan

Draft Preferred Plan

November 2011

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1 Preferred Plan Framework

This Chapter provides an introduction to the Lake Merritt Station Area Plan, the scope of the Plan, an overview of the Study Area, the Vision and Goals that guide the Preferred Plan, an overview of key Preferred Plan concepts, and a detailed summary of the planning process and community participation.

1.1 Introduction

The City of Oakland, community members, BART, and the Peralta Community College District have worked over the past year to develop an exciting plan framework for the Lake Merritt Planning Area. A series of community meetings have been held to sort through a wide range of suggestions, and put together the basic plan ideas. It is a 25-year plan, looking to add between 3,700 and 5,600 new housing units, up to 5,755 new jobs, and up to 412,000 square feet of additional retail; as well as make near-term improvements related to public safety and lighting. The next steps will include extensive public review, development of the plan specifics, and drafting of the full plan. The Preferred Plan has been developed in order to achieve the vision and goals outlined in section 1-2.

The Preferred Plan builds on community feedback, local and regional transit oriented development goals, and work completed over the past several years in the Planning Area, including the 2006 Lake Merritt BART Station Final Summary Report, the 2004 Revive Chinatown Community Transportation Plan, and the Measure DD funded Lake Merritt and Lake Merritt Channel Improvements, among others.

The next steps will include extensive public review of the Preferred Plan, followed by development of the Area Plan specifics based on feedback received during that review period, and drafting of the full Area Plan. Key elements that will be incorporated in the next planning stage include detailed policies for each topic, more specific building and streetscape design standards and guidelines, an infrastructure financing and phasing plan, and prioritization and implementation recommendations. In addition, a full Environmental Impact Report (EIR) will be completed for the Plan.

The overall project schedule is shown in Figure 1-1. There will be several opportunities for community input through the remaining planning process, as shown in Figure 1-1. Community participation to date is described in greater detail in section 1.3. Check the project website http://www.business2oakland.com/lakemerrittsap for updates regarding the dates and times of upcoming meetings.

Work Completed to Date



Current and Future Work

PREFERRED PLAN	DRAFT PLAN & EIR		FINAL PLAN & EIR	
Review by Boards, Commissions and City Council	Community Workshop	Review by Boards, Commissions and City Council	Review by Board and Commissions, Adoption by City Council	
Dec. 2011 - March 2012	June 2012	June - Aug. 2012	OctDec. 2012	

SCOPE OF THE LAKE MERRITT STATION AREA PLAN

A station area plan is a set of policies and programs about future development within one half mile of a transit station. The plan will address land use, buildings, housing, design, circulation, BART and AC Transit improvements, streetscape improvements, parks and public spaces. It will identify actions the City and the other public agencies should take to improve the area and increase transit ridership, and it will establish regulations for development projects on private property. It is a long-term document consisting of written text and diagrams that expresses how a community should develop, and is a key tool for influencing the quality of life. The plan is a basis for development project review and other decision-making by policymakers such as the Planning Commission and the City Council.

Specific plans cover land use, development density, circulation and infrastructure, and have legal authority as a regulatory document. The Lake Merritt Station Area Plan will combine a detailed specific plan approach for some areas with a more conceptual approach to others, depending on the key issues for each part of the Planning Area and community feedback. Specific Plans have certain requirements according to State law. California Government Code (Section 65450) states that planning agencies may prepare specific plans for the systematic implementation of the general plan for all or part of the area covered by the general plan. "A specific plan shall include a text and a diagram or diagrams which specify all of the following in detail:

- The distribution, location, and extent of the uses of land, including open space, within the area covered by the plan.
- The proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan.
- Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable.
- A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out paragraphs (1), (2), and (3)."

STUDY AREA OVERVIEW

The Planning Area is located in the heart of Oakland, part of the urban center of the San Francisco Bay Area. The Planning Area includes the Lake Merritt BART Station, Oakland Chinatown, Laney College, the Oakland Museum of California, and the County of Alameda offices and courthouse. Adjacent neighborhoods and destinations include Downtown Oakland, Lake Merritt, the Jack London District, the Lakeside Apartment District, Old Oakland, and Uptown. The Planning Area's strategic location within this context is shown in Figure 1-2. Figures 1-3 and 1-4 provide overviews of the Planning Area.

Figure 1.2: PLANNING AREA CONTEXT



Figure 1.3: EXISTING AREA VIEW LOOKING EAST



Figure 1.4: EXISTING AREA VIEW LOOKING SOUTHEAST



1.2 Vision and Goals

VISION

The shared vision is described below for the Lake Merritt Station Area. It is a reflection of the initial community engagement and visioning process, which was initiated in November 2008 through a partnership between the City of Oakland, Asian Health Services, the Oakland Chinatown Chamber of Commerce, and the Asian Pacific Environmental Network to begin community outreach for the Lake Merritt Station Area Plan. The Engagement process included four well-attended community meetings from 2008 to 2009 and a 19 question survey which garnered 1,100 responses in March and April 2009. The shared vision further incorporates refinements recommended by the Community Stakeholder Group, an appointed group of local stakeholders that provide ongoing guidance for the planning process (described in greater detail in section 1.4). These vision statements provide an important framework for guiding development of a plan for the future of the Lake Merritt Station Area.

- Create a financially feasible, implementable plan that is the result of an authentic community engagement process and is inclusionary of all community voices.
- Create a more active, vibrant, and safe district to serve and attract residents, businesses, students, and visitors.
- Provide for community development that is equitable, sustainable, and healthy.
- Increase use of non-automobile modes of transportation.
- Increase the housing supply to accommodate a diverse community, especially affordable housing and housing around the BART station.
- Increase jobs and improve access to jobs along the transit corridor.
- Provide services and retail options in the station area.
- Identify additional recreation and open space opportunities.
- Celebrate and enhance the heritage of Chinatown as a cultural asset and a regional community destination.
- Establish the Lake Merritt Station Area as a model with innovations in community development, transportation, housing, jobs, and businesses and environmental, social, and economic sustainability, and greenhouse gas reductions.

GOALS

The following goals for the Lake Merritt Station Area Plan include all the major goals within the Nine Guiding Principles identified in the 2009 Community Engagement process, which have in some cases been condensed, or expanded to include additional community comments. In addition, two major goals that came out of additional community input have been added.

1. Community Engagement

• Ensure opportunities for effective community participation by all stakeholders, including residents, businesses, students, employees, and organizations in the further development and implementation of the Plan.

2. Public Safety

- Create safe public spaces by increasing foot traffic, improving lighting, and strengthening linkages.
- Promote safer streets with traffic calming, improved lighting, improved signage, improvements that address the needs of non-English speaking residents and visitors, and improved sidewalks and intersections.
- Improve community police services.

3. Business

- Strengthen and expand businesses in Chinatown, through City zoning, permits, marketing, redevelopment, infrastructure improvements, and other City tools.
- Attract and promote a variety of new businesses, including small businesses and start-ups, larger businesses that provide professional-level jobs (e.g., engineers, attorneys, accountants, etc.), and businesses that serve the local community (such as grocery stores, farmers markets, restaurants, pharmacies, banks, and bookstores).
- Promote more businesses near the Lake Merritt BART Station to activate the streets, serve Chinatown, Laney College, and the Oakland Museum of California, and increase the number of jobs.

4. Jobs

- Attract development of new office and business space that provide jobs and promote economic development for both large and small businesses.
- Increase job and career opportunities, including permanent, well-paying, and green jobs; ensure that these jobs provide work for local residents.
- Support the provision of job training opportunities. Ensure that local training opportunities (including vocational English as a second language opportunities) exist for jobs being developed both in the planning area and the region, particularly those accessible via the transit network.

• Employ local and/or targeted hiring for contracting and construction jobs for implementation of the plan (i.e., construction of infrastructure).

5. Housing

- Accommodate and promote new rental and for sale housing within the project area for individuals and families of all sizes and all income levels (from extremely low to above moderate).
- Prevent involuntary displacement of residents.
- Maintain, preserve, and improve existing housing in the project area and prevent loss
 of housing that is affordable to residents (subsidized and unsubsidized), and senior
 housing. Promote healthful homes that are environmentally friendly and that incorporate green building methods.

6. Community Facilities and Open Space

- Improve existing parks and recreation centers, including improving access to existing
 parks; and add new parks and recreation centers to serve higher housing density and
 increased number of jobs.
- Ensure all parks are safe, accessible to all age groups, clean, well maintained, and provide public restrooms and trash containers.
- Create a multi-use, multi-generational recreational facility, either in addition to or including a youth center.
- Provide space for community and cultural programs and activities, such as multi-use neighborhood parks, athletic fields, areas for cultural activities such as tai chi, community gardens, and expanded library programs for youth, families, and seniors.
- Work with the Oakland Unified School District to ensure adequate capacity of school and children's recreation facilities.

7. Transportation

- Expand, preserve, and strengthen the neighborhood's access to public transit, walkability, and bicycle access.
- Ensure safety and compatibility of pedestrians, cyclists, and autos through improvements that calm traffic, improve sidewalks, improve intersection crossings, and improve traffic flow and pattern, including reevaluating one-way streets, considering narrowing streets, and reducing speeds. In particular address the flow of traffic using the Posey and Webster tubes.
- Improve connections between existing assets and destinations, including between Chinatown; the Lake Merritt, 12th Street and 19th Street BART stations; Alameda County facilities; and Laney College and between the BART Stations and the Jack London District, including improving the I-880 undercrossings.

- Develop a parking strategy that includes shared parking and allows access to the area, and particularly to local retail, while also promoting non-auto modes of transportation and makes best use of available land.
- Increase walk and bike trips.
- Preserve and reinvest in transit services and facilities to make sure operators can continue to provide reliable services.

8. Community and Cultural Anchor and Regional Destination

- Establish a sense of place and clear identity for the area as a cultural and community anchor and a regional destination, building on existing assets such as Chinatown, the Oakland Museum of California, Laney College, the Kaiser Convention Center, Jack London Square, and Lake Merritt and the Lake Merritt Channel.
- Preserve, celebrate, and enhance the historic cultural resources and heritage of Chinatown as a regional anchor for businesses, housing, and community services, and highlight cultural and historic resources in the planning area through signage (both wayfinding signage and by developing sign regulations that allow the display of items in store windows), historic walks, and reuse of historic buildings. Ensure that public services and spaces proposed preserve and reflect the cultural history and aspects of Chinatown's historic geography.
- Promote a more diverse mix of uses near the BART Station, such as cafes, restaurants, music venues, retail stores, nightlife, etc., that activate the area as a lively and vibrant district
- Encourage restoration of designated historic structures that would achieve priority Chinatown and/or City goals.
- Consider a cultural heritage district or related tools for preserving, enhancing, and strengthening Chinatown.
- Make connections to the Historic Jack London Warehouse District as a key asset in the Planning Area.

9. Health

- Establish the area as a healthier place to live and work, through a range of strategies including:
 - Promoting health awareness and education;
 - Improving environmental quality, including improving air quality as a public health measure;
 - Ensuring access to healthy food and housing;
 - Increasing health and medical services available to the community;
 - Cleaning up air, soil, and water contamination (including trash on the streets);
 - Reducing noise levels where permitted noise levels are exceeded;

 Providing clean and well-maintained public outdoor places that provide public restrooms and trash containers.

10. Redevelopment of Key Publicly-Owned Blocks Near BART

- Establish a long-term plan for redevelopment of key publicly owned blocks near the Lake Merritt BART station to meet identified plan goals, including accommodating improved open spaces, new housing development, more jobs, more retail, and improved BART access.
- Recognize, incorporate, and reflect Chinatown's historic role in the redevelopment of key publicly owned blocks near the Lake Merritt BART station.

11. Green and Sustainable Urban Design

- Establish high-quality, distinctive, and green urban design proposals, standards, and/or guidelines for new private development and public infrastructure, that are place-based and include building design, street design, and park design.
- Build on the existing urban fabric and further promote high density and mixed-use building design that promotes active and safe spaces.
- Promote green and sustainable design in concert with the City's Emerald City initiative.¹
- Identify landmarks and views at key locations, such as the Lake Merritt BART station plaza, promote improvements such as lights and public art, etc., and consider preservation of key views as new development is proposed (i.e., along 14th Street to Lake Merritt).
- Promote active and safe public spaces and streets by ensuring that design activates the public realm and increases the safety of streets and pedestrian crossings.
- Identify and enhance gateways between the planning area and other neighborhoods, such as on 12th/14th Street, which connects the planning area to the East Lake neighborhood.

¹ The Emerald Cities Collaborative is a consortium of businesses, unions, government representatives, community organizations, research and technical assistance providers, development intermediaries, and social justice advocates, united around the goal of "greening" our metropolitan areas in ways that advance equal opportunity, shared wealth, and democracy. http://www.emeraldcities.org/

1.3 Preferred Plan Concepts

OVERALL CONCEPT

The Lake Merritt Station Area Plan seeks to link the existing unique destinations located within the Plan Area into a series of distinct hubs of activity: the Chinatown hub, the BART Station/Laney College/Oakland Museum (educational/cultural/entertainment) hub and the East Lake Gateway hub. Future improvements will enhance both the existing destinations within each hub, as well as the connections between hubs. The hubs will be linked together and to adjacent neighborhoods and the rest of the city and region by east/west and north/south corridors and the Lake Merritt BART Station. This overall concept is illustrated in Figure 1-5.

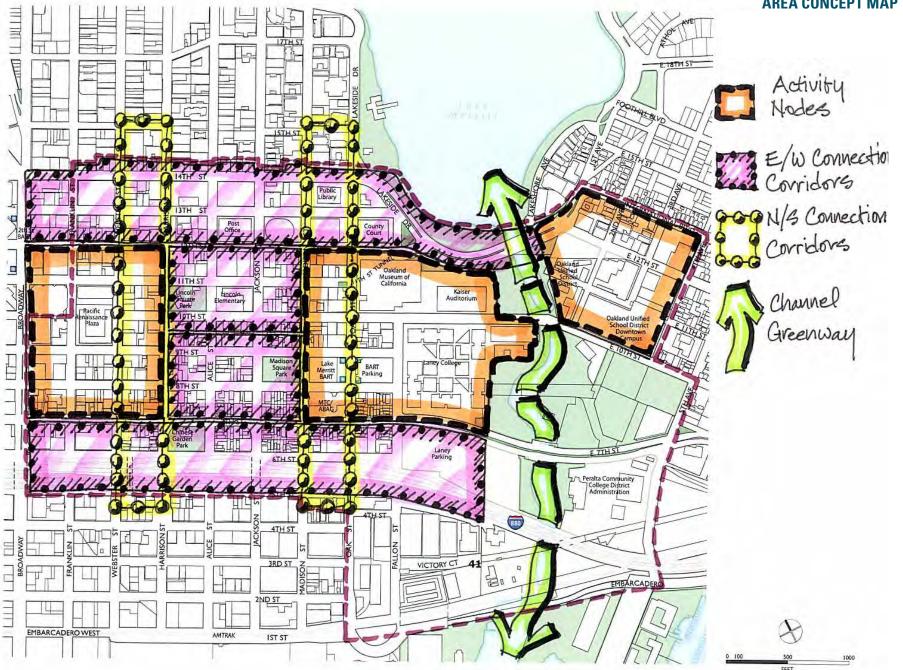
AREA-WIDE CONCEPTS

Three key area-wide concepts – land use character, active ground floor uses, and the circulation improvement strategies – reflect the vision and goals of the Lake Merritt Station Area Plan. These concepts are presented briefly here and then further elaborated in later chapters.

Land Use

The land use character concept includes a range of flexible mixed-use areas intended to encourage vibrant pedestrian corridors which are complemented by high-density housing and commercial uses that contribute to activating the area, and new public spaces that ensure a high quality urban space. Additional detail on land use character is included in Chapter 4.

Figure 1.5: LAKE MERRITT STATION AREA CONCEPT MAP



Active Ground Floor Uses

Active ground floor commercial uses – those that attract walk-in visitors – are important because they add vibrancy to streets and increase pedestrian traffic, which results in safer streets and more customers for local businesses. Examples of active ground floor commercial uses include: retail stores, restaurants, cafés, markets, bars, theaters, recreational spaces, health clinics, tourism offices, banks, personal services, libraries, museums, and galleries.

In order to expand the vibrancy and activity that already exists in some areas, like the core of the Chinatown commercial district, guidelines could be implemented that would *require* active uses in *new* buildings along key corridors. In areas where active uses would not be required, and the ground floor might include residential uses or offices that don't have walk-in visitors, guidelines could direct the design of new buildings to create welcoming frontages. Additional detail on active commercial ground floor uses is included in Chapter 4.

Circulation Improvement Strategies

The circulation improvement strategies focus on establishing interconnected and safe travel for people walking, riding bicycles or taking transit. Chapter 7 identifies key streets for improvements to promote access between activity hubs within the planning area, as well as access to the larger regional circulation network. Further detail on these strategies is included in Chapter 7.

STUDY AREAS

To best respond to the nuanced character differences throughout the Planning Area, it is divided into seven study areas, as shown in Figure 1-6. Each study area has a distinct existing character as well as a "big idea" and vision that defines future development in the area and that helps to support the overall vision statements and goals for the Planning Area. Chapter 2 describes each of the study areas in more detail.

OPPORTUNITY SITES

Opportunity sites are shown in Figure 1-7; these show sites that are vacant or underutilized, and may have potential for land use or intensity change over the long-term (25 years). Identification of potential opportunity sites is a way to advance and test the concepts put forth, to understand the potential for future development, to understand patterns of where new development may occur, and how new development could relate with areas less likely to change. An initial analysis of potential opportunity sites was conducted for the Existing Conditions report in 2010, and identified sites that meet one or more of the following criteria:

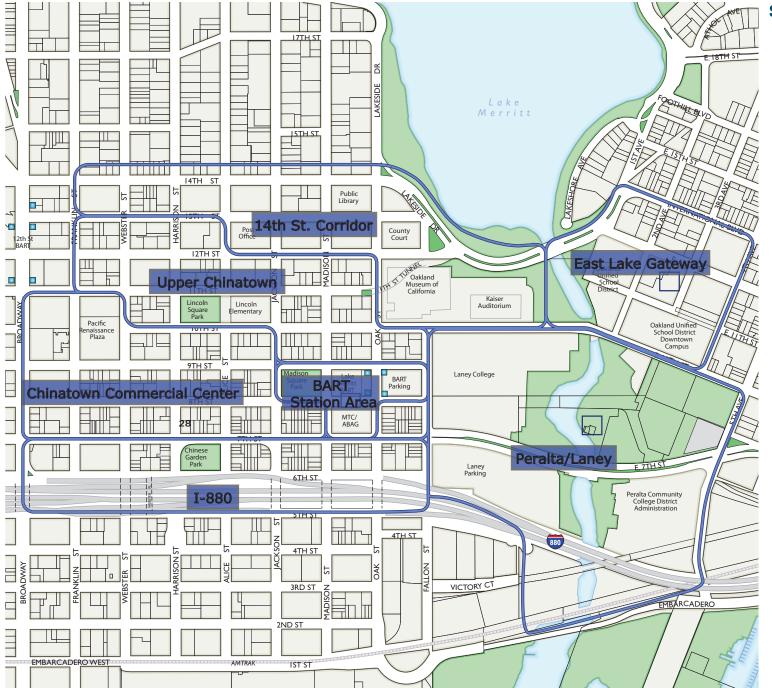
- Have a low value of improvements relative to land value;
- Have a very low existing building height (one or two stories) relative to allowable height under the zoning;
- Are currently vacant;
- Are currently parking lots;

- Have applications submitted with the City either under review or approved for development;
- Have otherwise been identified as sites for development (i.e. County offices per the Real Estate Master Plan); and/or
- Are adjacent to opportunity sites.

Sites with identified Historic Resources (see Chapter 8) are excluded.

Opportunity sites were further refined through community workshops and feedback from the Community Stakeholders Group, and are now primarily vacant sites or parking lots. While the identified opportunity sites are the best guess for sites that will change, it is likely that some of the sites identified as opportunity sites may remain in their current state, while others that are not identified as opportunity sites will undergo change.

Figure 1.6: STUDY AREAS





SITES 17TH ST F FOOTHINTON Lake Merritt 15TH ST [3] I4TH ST Public Library 6 5 I3TH ST County 12TH ST Oakland Museum of California Oakland 13 15 TITH ST Kaiser Auditorium **20** BROADWAY Lincoln Square Park Pacific Oakland Unified School District Downtown Campus IOTH ST naissance Plaza 9TH ST Lake Merritt BART Laney College BART Parking MTC/ ABAG 7TH ST 37 39 Laney 6TH ST Peralta Community College District Administration 21H 21 4TH ST VICTORY CT 3RD ST Z EMBARCADERD 2ND ST **EMBARCADERO WEST** IST ST

Figure 1.7:
POTENTIAL DEVELOPMENT
SITES



1.4 Planning Process

COMMUNITY PARTICIPATION

Many diverse residents, merchants, workers, and students make up the community of the Planning Area, and Chinatown functions as a citywide center for the Asian community. Feedback from the community is an essential component of the planning process and has been taken in variety of forms. Key elements of the community participation strategy are outlined in this section

Advisory Groups

A key element of community participation is the involvement of advisory groups that act to guide the planning process. These groups serve various purposes and include:

Community Stakeholder Group. The Community Stakeholder Group (CSG) aims to represent all vested interests from within the ½ mile Planning Area, and is comprised of about 50 members. The forum is designed to focus on policy development and direction in response to community input. CSG members are expected to provide feedback on documents throughout the planning process. CSG members additionally serve as conduits to expand the role of public participation by providing advice regarding potential methods to effectively communicate and solicit general public input. They also serve as conduits to their respective constituencies: informing them about the planning process and how the public can participate, distributing information about the planning program and workshop flyers, and encouraging participation in the involvement programs.

Ongoing participation by the Community Stakeholders Group (CSG) has been, and will continue to be, a crucial component of the development of the Plan. The CSG has driven the development of the Preferred Plan through participation in a series of working meetings, three hours each, over the summer of 2011. These meetings started with community feedback from public workshops and developed the framework for the Preferred Plan through an iterative process between CSG members, City staff, and consultant work. To date, eleven meetings of the CSG have been held.

Executive Committee of the Community Stakeholder Group. An executive committee of the CSG (ExCSG) acts as a sounding board regarding comments received from the Technical Advisory Committee and the CSG, addresses specific issues of concern, and develops recommendations and/or compromise solutions in the event that the CSG cannot reach consensus on important issues. Composition of the ExCSG includes a Peralta Community College District/Laney College representative, a BART representative, representatives from Oakland City Council Districts 2 and 3, and two representatives from the Chinatown Coalition. Participants are expected to provide input that balances the various interest groups represented in the larger CSG, and have an interest and understanding of development issues in Oakland. Five meetings of the ExCSG have been held to date.

Technical Advisory Committee. The Technical Advisory Committee (TAC is made up of City staff and representatives from other agencies with technical knowledge about the Plan-

ning Area. Three TAC meetings have been held to date, and TAC members are invited to CSG meetings as appropriate.

Community Outreach

In addition to meetings of the groups noted above, a variety of strategies have been employed to engage and involve the community in the planning process. Language accessibility has been a central component of all community outreach, including meeting materials translated into Chinese and Vietnamese and bi-lingual meeting facilitators and interpreters (Mandarin, Cantonese, Vietnamese). To date, strategies have included:

- An initial Community Engagement Process, 2008-2009. For this process the City of Oakland partnered with Asian Health Services (AHS), the Oakland Chinatown Chamber of Commerce, and the Asian Pacific Environmental Network (APEN) to begin community outreach for the Lake Merritt Station Area Plan. Four well-attended community meetings were conducted from 2008 to 2009 and a 19-question survey which garnered 1,100 results was conducted in March and April 2009.
- Establishing partnerships with local community-based organizations (including, but not limited to, Chinatown Chamber of Commerce, Asian Health Services, East Bay Asian Local Development Corporation, Transform, East Bay Housing Organizations, Walk Oakland Bike Oakland, East Bay Bicycle Coalition, Oakland Asian Cultural Center, Asian Pacific Environmental Network).
- Conducting Stakeholder interviews. A total of 50 stakeholders, including 18 City staff, were interviewed individually or in groups, in sessions generally lasting about one hour.
- Hosting four ccommunity workshops to solicit feedback on a variety of topics as the
 plan emerges. The first workshop focused on identifying issues and goals, the second
 and third workshops (divided by subareas) focused on specific improvements community members felt were important, and the fourth workshop presented the Emerging Plan concepts for feedback.
- Hosting a series of focus groups/neighborhood teas. These meetings sought to assess goals and concerns of local residents who typically do not attend large public meetings, small meetings will be held to assess goals and concerns in a more intimate and informal setting. These meetings specifically engaged brokers and property owners, merchants, families, Laney College students and faculty, and youth).
- Business surveys (administered to participants of Merchant's Tea).
- Other meetings to engage institutions and community groups, such as the Peralta Board meeting, Lake Merritt Station Area Plan Institutions meeting, Jack London District Association meeting, Mayor's Cantonese Town Hall meeting, and Oakland Bicycle and Pedestrian Advisory Committee meeting.

Summary of Feedback

Feedback from these meetings is summarized in the following documents, all of which can be accessed on the project website http://www.business2oakland.com/lakemerrittsap in the Workshops and Meetings, and Report sections.

- Lake Merritt BART Station Area Community Engagement Final Report, completed by Asian Health Services, Oakland Chinatown Chamber of Commerce, and the City of Oakland in June 2009
- Stakeholder Interviews Report, completed by Dyett & Bhatia and the City of Oakland in May, 2010.
- Community Workshop #1 Report, completed by Dyett & Bhatia and the City of Oakland in May, 2010.
- Summary of Community Feedback, completed by Dyett & Bhatia and the City of Oakland in April, 2011.

FORMAL PUBLIC REVIEW OF THE PREFERRED PLAN

This Preferred Plan will be reviewed by several advisory and decision-making bodies at public meetings. These meetings include:

- City Council.
- Community and Economic Development (CED) Committee.
- Planning Commission.
- Parks and Recreation Advisory Commission (PRAC).
- Landmark Preservation Advisory Board (LPAB).
- Bicycle and Pedestrian Advisory Committee (BPAC).

Based on the guidance of these decision-makers, the Preferred Plan will then be further developed and refined, with continued input from community members, the Community Stakeholders Group, and Technical Advisory Committee, into the Draft Plan. There will be several future opportunities for participation, as shown in the overall project timeline, shown in Figure 1-1 at the start of this chapter. Interested community members may also make comments at any public meeting, by email (Lake_merritt_plan@oaklandnet.com), or by phone (510.238.7904).

2 Overall Vision by Study Area

As described earlier in Chapter 1, in order to expand on the overall vision, the Planning Area is divided into seven study areas, as shown in Figure 1.5. Each study area has a distinct "big idea" and vision that defines future development in the area and that helps support the overall vision statements and goals for the Planning Area.

2.1 14th Street Corridor

EXISTING CONTEXT

The existing character of the 14th Street corridor includes a mix of uses and variety of building forms. 14th Street is a major east-west connector between Downtown and the neighborhoods east of Lake Merritt. It is a two-way, four-lane street characterized by intermittent retail, new mixed-use housing development, historic buildings, public resources such as the Public Library, the back of Hotel Oakland, and parking lots. Roughly two-thirds of buildings along 14th Street are one- to four-stories, with the remaining one-third eight-stories, and a few taller high-rises.

Other areas of the 14th Street Corridor Study Area include significant institutional uses, including office space for Alameda County, the County Courthouse, and key public resources including the Oakland Museum of California and the Kaiser Auditorium, both of which are historic landmarks. The Oakland Museum of California was recently renovated with the main entrance now oriented toward Oak Street. The Kaiser Auditorium currently remains out of use.

Several opportunity sites (see Figure 1-6) exist in this study area, including three full block sites (opportunity sites 6, 8, and 11).

VISION AND BIG IDEA

Looking forward, the importance and gateway quality of this corridor will be greatly enhanced by the Measure DD improvements currently underway at the south end of Lake Merritt, and the Emerging Plan seeks to build on these improvements.

The vision for 14th Street is to enhance citywide connectivity and activate the northern edge of the Planning Area. While 14th Street will continue to be an important street for vehicular travel, the Plan seeks to enhance the pedestrian and bicycle environment to increase multimodal access. A diversity of uses and more active ground floor uses will make the area more

Lake Merritt Station Area Plan Draft Preferred Plan

inviting, and the increased activity and additional lighting will add to the safety of the public realm.

Land use and streetscape changes are included to enhance this vibrant center for educational, public services and cultural uses; and to highlight new activity on 14th Street, linking Lake Merritt to Downtown. Key components of the vision include complementing existing government and institutional uses – including the Oakland Museum, Kaiser Auditorium, County Courthouse, Main Public Library – with new residential uses. In addition, active ground floor commercial uses will be promoted in new development (including new County or other office buildings). Detailed streetscape improvements are included in Chapter 6.









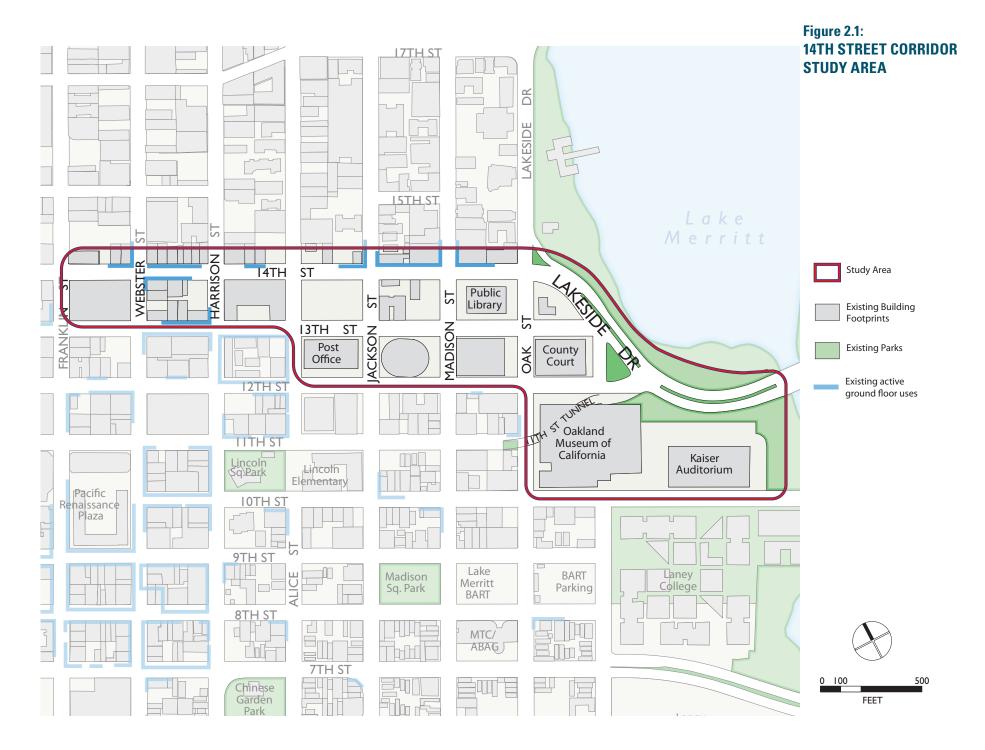








Photos: 14TH STREET CORRIDOR



2.2 East Lake Gateway

EXISTING CONTEXT

The East Lake Gateway district includes East 12th Street and International Boulevard. It has important linkages to Central and East Oakland neighborhoods and commercial districts, to Lake Merritt, and Downtown, and beyond. East 12th Street is also an important bus route that will carry the future AC Transit Bus Rapid Transit (BRT) service through the area. The East Lake Gateway also connects neighborhoods to Laney College and the Oakland Unified School District (OUSD) Downtown Educational Complex.

The existing character of the East Lake Gateway study area is primarily residential, with some retail and institutional uses. Active commercial ground floor uses are focused on the East 12th Street and International Boulevard corridors. Existing heights are predominantly mid-rise, with some low-rise and a few high-rises.

This area encompasses several key assets, including the Lake Merritt Channel and OUSD sites. The planned OUSD Downtown Educational Complex Project is located between 2nd and 4th avenues on East 10th Street, and will host La Escuelita Elementary, MetWest High School, and Yuk Yau and Centro Infantil Childhood Development Centers (which provide preschool programming for children ages three through five and an afterschool program for children in kindergarten through third grade) in a state-of-the-art, multi-use structure.

VISION AND BIG IDEA

The vision for the East Lake Gateway seeks to balance increased vitality and safety resulting from new residential and retail development with new public benefits such as more open space and improved access and linkages to existing and planned community resources and open spaces.

This study area is envisioned as a residential district with active retail uses as well as civic and commercial uses, linking Central and East Oakland to downtown through the new 12th Street improvements currently underway at the south end of Lake Merritt. Land use and streetscape changes will leverage and further Measure DD improvements to the Channel and East 10th Street. They will link the area to Lake Merritt and adjacent cultural/educational uses, like Laney, the Kaiser Auditorium, the Oakland Museum of California, and the new OUSD Downtown Educational Complex.

Improvements will seek to create distinctive/landmark quality design to create a gateway design of buildings along East 12th Street at 1st Avenue. In particular, design will be required to establish a welcoming gateway between the assets of the Channel and new park spaces, and the burgeoning retail areas along East 12th Street and International Boulevard.

Another key component is the establishment of public access along the eastern edge of the Channel. New buildings will be required to ensure public access to the Channel and be set back from the Channel edge and conform to design guidelines such as those outlined in Chapter 5.











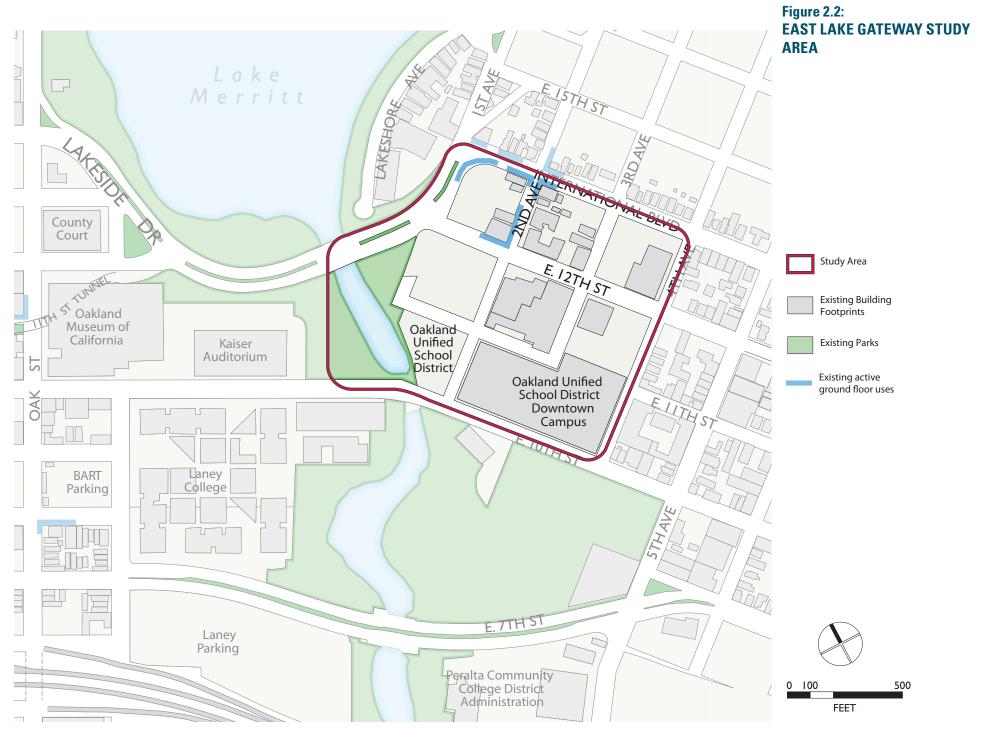








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2.3 Laney/Peralta

EXISTING CONTEXT

The Laney/Peralta study area includes Laney College campus, athletic fields, and parking lot, and the Peralta College District Administration buildings, with the Lake Merritt Channel creating a north-south pedestrian and bicycle connection and 7th and 10th streets connecting east-west through the study area. The Lake Merritt Channel and some land along its edge is State Tidelands Trust land, indicating that residential and some commercial uses would be prohibited along the Channel edge¹. In general, the college is made up of two to three story buildings, with one tower reaching eight stories.

Laney College has a Facilities Master Plan that will direct new development on Laney property, to best meet its educational priorities and the vision of students, faculty, staff, and the neighborhood at large. The Master Plan is guided by the following principles:

- Maintain the integrity of the existing campus core buildings, open space, and athletic fields.
- Identify sites within or at the perimeter of the campus for development to respond to projected growth and programmatic demands.
- Preserve the natural environment along the Estuary and enhance the campus's connection to it.
- Over time, in response to projected growth and creation of potential future development opportunities, replace surface parking with structured parking.
- Strengthen both of the campus's recognized "front doors" and accessible pedestrian access; separate pedestrian from vehicular circulation where possible.
- Prioritize re-use of existing buildings and approach renovation and development through the incorporation of sustainable strategies and practices.

VISION AND BIG IDEA

Land use and streetscape changes are included to enhance the role of the Laney College campus/Peralta District property as a community asset and lively hub of activity. This study area will act synergistically with the BART Station Area blocks to create a core activity node, in particular through establishment of a "festival street" on Fallon Street ("festival streets" use traffic calming and unique streetscape features to create a street that can easily be converted to public use on weekends or special events). The potential "festival street" treatment of Fallon Street would be designed to accommodate all modes of travel in order to better connect the Lake Merritt BART Station to the Laney College campus, and include a decorative surface to also function as a plaza during periodic closures for community events. The Plan also seeks to enhance connections between Laney College to the BART Station with retail, cultural assets, and entertainment.

¹ Port of Oakland, Land Records Management Tideland Grants Land, November 9, 2001.

The Plan will further establish Laney College as a cultural entertainment and community center facility with more community uses and classrooms, with redevelopment of Laney parking lot including community uses, classrooms, and parking.

Crucial to the success of this area, the Plan will seek to promote movement through and throughout the campus, connecting the neighborhood to the Lake Merritt Channel, OUSD's Downtown Educational Complex, Oak to 9th development, BART, East Lake commercial, Lake Merritt open space, and the Bay Trail. Access will be facilitated by adding signage and improving streets and intersections to be more pedestrian friendly.

Open space improvements will focus on establishing the Lake Merritt Channel as a regional open space asset linking the public parks and trails around Lake Merritt to the public parks and trails along the Estuary Channel waterfront. Street improvements will focus on enhancing the east-west connections provided by 7th and 10th Streets. Streetscape improvements for 7th, 10th, and Fallon streets are shown in detail in Chapter 6.











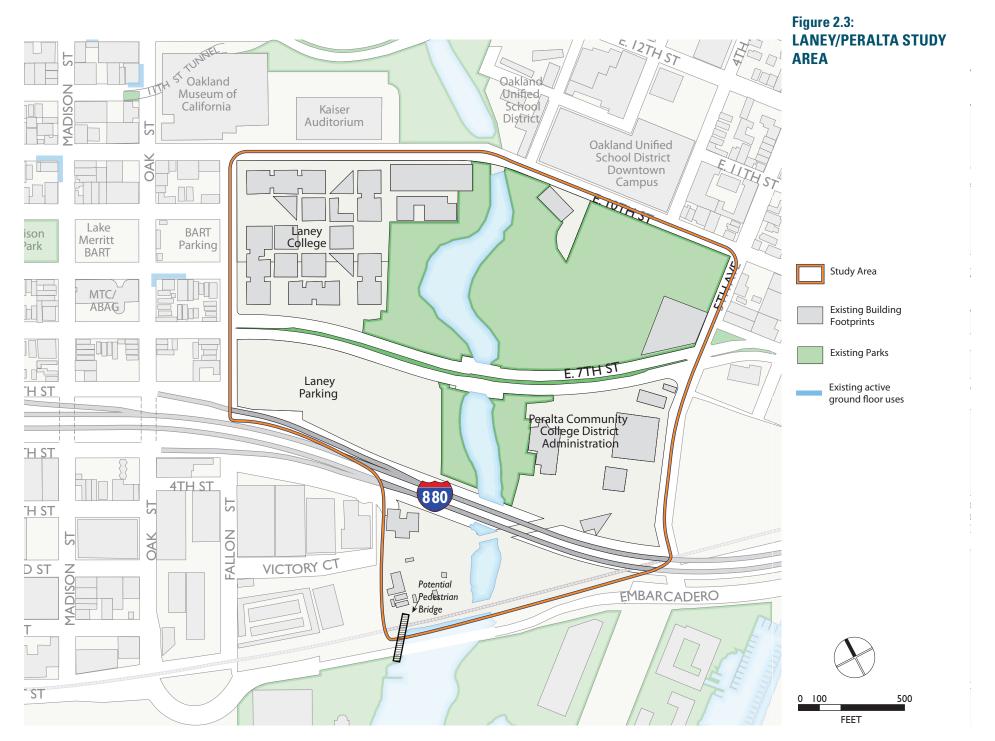








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2.4 I-880

EXISTING CONTEXT

The I-880 study area includes sites along the freeway edge with high noise and air quality issues, freeway access points, and the areas beneath the freeway. The existing character of the area includes a variety of land uses, such as a new high-rise residential project on 7th and Broadway; and the historic 7th Street/Harrison Square residential district, which is comprised primarily of one- or two-story Victorian and early 20th century cottages. Various opportunity sites include the Salvation Army block and underutilized sites along 6th Street between Madison and Fallon streets. Chinese Garden Park (formerly Harrison Square Park) is located between Harrison, 7th, Alice, and 6th streets.

A critical component of the I-880 study area is the area beneath the freeway, which includes six (6) street under-crossings and several parking lots (primarily managed by Caltrans).

VISION AND BIG IDEA

The Plan aims to improve connections between the Jack London District and areas north of the I-880 freeway (Chinatown, BART, Laney College, County offices, Oakland Museum, etc) by improving the freeway under-crossings for pedestrian safety and comfort, including pedestrian-oriented lighting, and improving and/or activating the areas under the freeway. Conceptual streetscape improvements are included in Chapter 6.

In addition, identifying pedestrian safety improvements related to traffic accessing I-880 and the Alameda tubes will be essential for this study area, including improving access to Chinese Garden Park. Broadway, Webster, Jackson, Madison, and Oak Streets from 7th Street to 5th Street (including the freeway undercrossing) should have pedestrian-oriented improvements, including directional signage, to improve access to the Jack London District. Note that traffic patterns related to the Alameda tubes are outside the scope of this project.

Importantly, the Emerging Plan seeks to improve the comfort and usability of Chinese Garden Park and ensure the health and safety of both existing residents and residents in new development by adding landscaping and/or sound wall buffers to the highway edge. The Plan will include policies such as:

- Locate taller buildings to buffer the neighborhood from I-880. Face buildings toward 7th Street, with parking located closer to the freeway, wherever possible.
- Ensure new development incorporates air quality and noise controls.
- Maintain clean indoor air quality (mechanical ventilation, building interiors under positive pressure, particulate filtration and carbon filtration as needed, air intakes away from pollution sources).
- Require HVAC system with filtration for sensitive use sites within 500 feet of a high traffic road if warranted by exposure analysis.
- Locate courtyards, balconies and opening windows away from the freeway.

• Consider installation of sound walls or additional landscaping.

















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Figure 2.4: I-880 STUDY AREA



2.5 BART Station Area

EXISTING CONTEXT

The BART Station Area is located at the center of the Planning Area and includes the Lake Merritt BART station, which is accessible at Oak and 8th and 9th streets; the underground portion of the station runs beneath the two BART blocks bound by Madison, Fallon, 8th and 9th Streets. Aboveground, the two BART blocks include a parking lot (between Fallon and Oak) and plaza space with small ancillary facilities either in existence or under construction (between Oak and Madison). The only block in this study area that is developed is the MTC/ABAG block which includes a four-story office building. The fourth block in this study area is Madison Square Park, which is a full-block park widely used by the Tai-Chi community.

VISION AND BIG IDEA

The Plan envisions development of the BART blocks, in coordination with the MTC/ABAG block if it becomes available, as a catalyst project that creates an active neighborhood hub and serves as part of an activated spine along 8th and 9th Streets connecting Laney College, the BART station, and the heart of Chinatown. Madison Square Park is a key community asset and open space, and the Plan will consider improvements that have been suggested by the community, including additional programming and amenities, while maintaining the full block of open space, to complement a major catalyst development adjacent to the Lake Merritt BART station.

Redevelopment of the BART blocks, as well as potentially the MTC/ABAG block, is envisioned to include high-density uses, such as office, residential, retail, and entertainment uses, to promote activity near the BART station, as well as provide community services, public uses, and amenities throughout the area. The BART blocks should act as a hub of vibrant businesses, possibly with some at-grade public open space and/or rooftop gardens to activate the area.

Station access should be coordinated and improved, including shuttle service stops, kiss and ride drop-off areas, and bus bays. Improving access around the station is discussed at greater length in Chapters 6 and 7. Street improvement concepts for Madison, Oak, 8th, and 9th streets, as described in detail in Chapter 6.















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Photos:

BART STATION AREA

Figure 2.5: **BART STATION AREA STUDY AREA** T4TH ST S S Public Library Z 13TH ST HARRIS WEBST Post County Office Court 2th St 12TH ST 3ART KSON Study Area Oakland ACI TITH ST MADISON Museum of **Existing Building** California Footprints BROADWAY Lincoln Sq.Park Lincoln 5 Elementary **Existing Parks** Pacific TOTH ST Renaissance OA Plaza Existing active ground floor uses 9TH ST Lake Madison **BART** Merritt Sq. Park **Parking BART** 8TH ST MTC/ ABAG Chinese Garden Park 6TH ST 0 100 500 5TH ST **FEET**

2.6 Chinatown Commercial Center

EXISTING CONTEXT

The Chinatown Commercial Center is a vibrant and active center for shopping, eating, and cultural services, as well as a historic district dating back to the middle/late 1800's. It acts as an important regional draw, particularly for the Asian community, drawing people in for shopping, festivals, services, and visiting family. Existing buildings house a range of diverse uses from retail shops and restaurants, groceries, community services, housing in a range of formats, banks, offices, churches, and cultural institutions. Buildings in this study area are typically one- to four-stories, with most of the historic buildings no more than two stories. However, newer development in the area includes several high-rise buildings between Broadway and Webster.

VISION AND BIG IDEA

The Emerging Plan will further enhance this existing community hub and regional destination with high-density commercial and residential uses. The Emerging Plan will ensure that new development is sensitive to the historic context of the neighborhood, and will seek to improve façades of existing buildings and streetscapes, improve access by all modes to the commercial core, improve the pedestrian experience, and improve business quality of life. Targeted improvements include improving loading regulations to reduce double parking and congestion, promoting improved cleaning of the sidewalks and streets, enhancing the overall sense of security in the area, improving access to parking, and enforcing compliance with regulations that aim to improve the quality of the commercial district. Enhancements will seek to address local needs and enhance the vibrancy of one of the most successful retail districts in Oakland.

A key component of the vision for the Chinatown Commercial Center is to enhance the street network to improve pedestrian access and amenities. Streetscape improvements are recommended for all the streets in the Chinatown core, with detailed streetscape recommendations for several streets in this study area, including 8th, 9th, 10th, Alice, Webster, and Harrison streets, described in greater detail in Chapter 6.















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Photos: CHINATOWN COMMERCIAL CENTER PHOTOS

Figure 2.6: **CHINATOWN COMMERCIAL CENTER STUDY AREA** T4TH ST S Public Library Z 13TH ST HARRIS WEBST Post County Office Court 2th St 12TH ST 3ART KSON Study Area Oakland ACI IITH ST MADISON Museum of **Existing Building** California Footprints Lincoln Sq.Park Lincoln **b** Elementary **Existing Parks** Pacific 101H21 Renaissance OAI Plaza Existing active ground floor uses 9TH ST Lake ALICE **BART** Madison Merritt Sq. Park Parking **BART** 8TH ST MTC/ ABAG Chinese Garden Park 6TH ST 0 100 500 5TH ST FEET

2.7 Upper Chinatown

EXISTING CONTEXT

The existing character of the Upper Chinatown study area is that of an active urban neighborhood. There are a wide range of uses currently in the area, including residential, office, schools, and recreational space, with retail and restaurants on the ground floor in some places. Lincoln Square Park is a major asset and community destination, adjacent to Lincoln Elementary, an award-winning school and another key asset of the Planning Area. Many of the buildings in this area are older one-story buildings, with several four- and five-story buildings, and a few high-rise buildings. This study are also includes several opportunity sites.

VISION AND BIG IDEA

The Upper Chinatown area is envisioned as becoming an intensified urban area for living with new high-density housing and accompanying retail, restaurants, commercial uses, and publically accessible open spaces to complement Lincoln Square Park and Recreation Center. Active uses at the ground floor and more day-time uses and residences will help to activate the area at all hours, making a safer and more vibrant neighborhood. Buildings on one-half to full-size blocks are likely to include at least one high-rise. Buildings on smaller sites are likely to be mid-rises.

















Photos: UPPER CHINATOWN PHOTOS

Figure 2.7: **UPPER CHINATOWN STUDY AREA** T4TH ST ST S ST Public Library \subseteq 13TH ST HARRIS WEBST Post County Office Court 2th St 12TH ST 3ART ACKSON Study Area Oakland Museum of IITH ST MADISO **Existing Building** California Footprints BROADWAY Lincoln Sq.Park Lincoln Elementary **Existing Parks** Pacific TOTH S Renaissance OĄ Plaza Existing active ground floor uses 9TH ST Lake Madison **BART** Merritt Sq. Park Parking **BART** 8TH ST MTC/ ABAG Chinese Garden Park 6TH ST 0 100 500 5TH ST **FEET**

3 Summary of Development Potential

This chapter provides an overview of development potential in the Planning Area, including a summary of market demand, development potential by opportunity sites, potential job generation, market feasibility, and summary of architectural and site planning issues.

3.1 Summary of Market Demand Analysis

The following summary of Market Demand Analysis is based on the *Market Opportunity Analysis* report completed by Conley Consulting Group (CCG) in June 2010. The report addresses the market forces that impact future development in the Station Area. The Lake Merritt Station Area Plan is intended to govern changes in the Planning Area between 2010 and 2035, many of which will be incremental and gradual. This market study references the Bay Area growth projections prepared by the Association of Bay Area Governments (ABAG), in the context of the specific market forces affecting this portion of Oakland. The Station Area Plan will consider the environmental, including socioeconomic, impacts of changes in the Planning Area.

Economic Context

The *Market Opportunity Analysis* was written in the winter of 2009-2010, when the U.S. and local economies remained in the grip of a deep and protracted global recession. While there are some indicators that the recession, which started in late 2007, may be abating, the collapse of demand across many economic sectors persists into 2011. The recession has impacted the availability of capital (both equity and debt) to fund development, and depressed property values have rendered new development of most land uses infeasible in the near term. In the absence of some currently unforeseen factor that emerges and accelerates the projected slow recovery, it is CCG's judgment that the after-effects of the recession will linger, depressing development activity for several years. For many economic sectors, the recession has brought activity back down to levels that were originally achieved and passed in the beginning of the 21st Century.

Regional policy favoring growth in the urban core areas, rather than continued suburban and exurban outward expansion, suggests that Oakland should receive a larger share of the East Bay's future growth than has historically been the case. ABAG's projected population growth through 2035¹ would require more new development than was captured during the recent

¹ Association of Bay Area Governments (ABAG), Projections 2007.

housing boom for both the city as well as the Planning Area. By the end of the planning period, projected employment growth for the city would require a future total inventory of 31.5 million square feet (SF) of office space, compared to a current Oakland inventory of less than 14 million SF.

It will be a challenge to achieve these projected growth levels, as delayed development activity in the near term may impact the ability to achieve the robust development projections over the longer term.

Chinatown

The Planning Area includes Chinatown, which is a unique and rich environment, with a wealth of cultural, social, medical, residential, retail and social resources. Chinatown's commercial uses are concentrated in the four city blocks bounded by 7th, 9th, Franklin and Harrison streets. In a less concentrated manner Chinatown's commercial district influences a wider area from I - 880 to 11th Street, and from Broadway to Harrison. Chinatown remains one of the city's most vibrant neighborhood retail districts, and over the last three decades, Asian-oriented retail has spread eastward in Oakland along 12th Street and International Boulevard. In addition to the commercial concentration, Chinatown is a strong residential neighborhood which spans from Harrison to Fallon Streets and from I – 880 to 11th Street.

As described in the project's Existing Conditions Report (2010), Chinatown's rich historical and consistent cultural context attracts residents and visitors, including the many churchgoers and regular patrons of the district's social and health resources. In addition, Chinatown attracts Asian residents from throughout the East Bay for cultural, health and educational services, as well as banking institutions catering to Asian customers.

Demographics and Population Projections

As of 2009, the Planning Area has an estimated population of 12,500 persons in 6,159 households, compared to the estimated 412,000 population and 157,000 households for the city as a whole. The Planning Area population is nearly 70% Asian, of which 84% are Chinese.²

Compared to the city as a whole, the Planning Area has relatively smaller households; more seniors; a larger proportion of renters; lower household incomes; and heavier reliance on public transportation.

The initial Market Opportunity Analysis conducted in 2010 considered the Alameda County Transportation Commission (ACTC) projections that were based on ABAG Projections 2007. This set of projections indicated that that by 2035, the ½ mile area around the Lake Merritt Station would grow by roughly 10,500 households and 7,300 jobs. For the city as a whole, ABAG projects an additional 54,000 households and 93,000 jobs in that period.³ More recent-

² Claritas Inc., 2009.

³ ACTC, ABAG, Projections 2007.

ly, ACTC projections have been updated to reflect ABAG 2009 projections, which are used in the comparative tables in Section 3.2.

Housing

By the early part of this century, the Oakland housing market switched from one dominated by sales of existing single-family homes to one where new multifamily units were 80% of new housing unit development. Given excellent access afforded by many Oakland locations, including the Planning Area, there is a strong opportunity to develop housing in a Transit Oriented Development (TOD) format.

TOD housing appeals to members of the "Baby Boom" generation (born between 1945-1964, now predominantly empty nesters) who are attracted to amenity-rich urban locations as well as to members of "generation X" (born between 1965 and 1978) and "generation Y" (born 1979 to 1999), who show a preference for more environmentally-sound residential choices and urban amenities, as well as a marked aversion to long commutes. Thus demographic trends favor housing in a TOD format.

When development of new housing in Oakland's Central District resumes, we conclude:

- The Planning Area will face competition from more established neighborhoods, where enough units have already been planned or granted approvals to accommodate likely levels of new housing demand for the next 10 years or more.
- Initial developments in the Planning Area are likely to be low- to mid-rise buildings (below eight stories). High-rise housing development is unlikely for the next three to five years, due to financial feasibility and investment risk issues.

Potential sources of demand for housing in the Planning Area include:

- Asian seniors;
- Immigrant families;
- Singles and young households attracted to recreational amenities along Lake Merritt and the Estuary;
- Laney College students from outside of the Bay Area or outside of the United States;
- Aging Baby Boomers, once the neighborhood character has been established.
- The large and growing group of households who desire housing within an easy commute to jobs in other Bay Area locations in the East Bay, San Francisco, and the Silicon Valley.

Accommodating projected household growth in the Planning Area will require intense development of sites beyond Chinatown, including sites above 11th Street and along the improved Estuary. These areas currently lack the neighborhood amenities, active streets and the character required to attract significant levels of development.

Creating a lively neighborhood character with active, pedestrian-friendly streets is a requirement for achieving significant growth in the housing stock outside of Chinatown in the next decade or so.

Retail

The Planning Area includes Chinatown, one of Oakland's strongest neighborhood retail districts. The most recent taxable sales report showed retail sales in the Focus Area, which is a subset of the Planning Area, at \$57 million (2008), representing the city's fifth largest neighborhood retail district in terms of sales. Since 1994, retail sales in Chinatown have grown at a much faster pace (84%) than for the city as a whole (1.74%). Chinatown is unique among Oakland's retail districts in that it regularly draws shoppers to Oakland from outside of the city. However, Chinatown faces increased competition from suburban stores targeting this customer base and from the growing suburbanization of the East Bay Asian population, thus maintaining the district's vitality should be an important City goal.

Historically, food sellers and other convenience goods merchants have been the most successful retailers in Chinatown, including restaurants, shops selling prepared food, and grocers. More recently Chinatown's merchandise mix has broadened to include comparison stores (those selling apparel, home furnishings, home improvement, and specialty goods) as well.

Currently the primary source of retail demand in the Planning Area is the Asian population of the East Bay. Attracting Downtown office workers and non-Asian Oakland residents to this successful commercial district should be a major goal of the Station Area Plan, and for the city.

Outside of Chinatown, the current lack of pedestrian activity and active street retail in the Planning Area is a constraint to attracting potential development to accommodate population or employment growth in the Planning Area.

Untapped sources of support for retail in the Planning Area include:

- Projected growth of up to 38,400 residents by 2035, who could support an additional 414,000 SF of new retail.
- Projected growth of up to 7,300 new employees by 2035, who could support additional eating and drinking, service, and specialty retail.
- The 15,000 commuting students and 400 faculty and staff members of Laney college, which may be augmented by the addition of residential facilities for the growing enrollment of foreign and out-of-Bay Area students. The college-related demand is for casual dining, cafes, bars, and food to go.

With the possible addition of an entertainment anchor related to the college, there would be an enhanced nighttime draw of city residents to the area, further enhancing the Planning Area opportunities for restaurants and night clubs.

Office

Projected employment growth suggests substantial office development potential for down-town Oakland. However, the Planning Area is outside of the established locations for private sector office activity at Lake Merritt, City Center (See Figure 1.1), and the emerging center at Jack London Square. Although office workers currently patronize Chinatown food establishments, the Planning Area lacks the employee-oriented shopping, dining, lodging, and infrastructure amenities necessary to attract Class A office development.

The primary opportunity for the Planning Area is for expansion of its current role as a cluster of government and educational uses, and for retail and professional services that support those uses. Alameda County has indicated that it plans to consolidate some of its functions from elsewhere in Oakland to other sites in the Planning Area. Ideally, new civic uses should be designed to contribute to a lively pedestrian environment in the Planning Area.

In addition to general office space, Chinatown supports cultural, heath and civic organizations which occupy upper-floor space in mixed-use buildings in the Planning Area, typically over ground-floor retail space.

Hotel

Oakland has a small hotel sector with relatively stable occupancy levels and room rates, and has typically been less vulnerable to economic shifts than other cities' hotel markets. The city's hotels have certainly been impacted by the recent recession. Given the hotel sector's small size, each new property represents a major change in the city's inventory, thus increasing the market risk. The Planning Area includes one first-class hotel, the Marriott Courtyard located on Broadway at 8th Street.

The most probable opportunity to expand the city's hotel sector is from increased corporate demand from an expanded employment base. There are currently four proposed future hotel developments in Oakland which would add 760 rooms to the city's existing inventory of 3,800 first class rooms. Thus, this opportunity will follow recovery and expansion of the city's economy, and is likely after 2020.

Sites in the Planning Area with water views overlooking Lake Merritt or the Estuary would be excellent hotel development opportunities, and would be competitive with other Oakland locations for new first-class hotel development. Given the proposed competition, it is likely that only the strongest potential site(s) would be developed for hotel use.

In the mid- to long-term future, the Planning Area could support either a small boutique hotel (30-100 rooms) or a 200+ room full-service facility.

Planning Area Market Opportunity

The amount of new development supported by market dynamics in the Planning Area over the planning period is summarized in Table 3.1 below.

Table 3.1 Planning Area Development Opportunity (2010-2035)

Product Type	Next Decade (2010-2020)	Remaining Period (2020-2035)	Total New Demand
Residential (Units)	900-2,500	3,450-8,000	4,350-10,500
Retail (Square Feet)	83,000-165,000	124,000-249,000	207,000-414,000
Office (Square Feet) ¹	n/a	850,000	850,000
Local Serving Office (Square Feet)	125,000-165,000	186,000-249,000	310,000-414,000
Hotel (Rooms)	n/a	200	200

^{1.} Assumes 44% of countywide projected employment is office-related. Alameda County proposed expansion represents nearly 50% of the estimated market demand

Source: Conley Consulting Group; February 2010

3.2 High and Low Development Potential

As described in Chapter 1, opportunity sites for development were identified in order to make an assessment of the type and amount of development potential in the Station Area. The potential development identified for each opportunity site (shown in Figure 3-1) under the Preferred Plan was determined based on a variety of factors, including market dynamics, building feasibility and conceptual Plan policies (as discussed and refined by the Community Stakeholder Group). These numbers are compared with regional growth projections and the market opportunity assessment, which help guide the development potential, though actual numbers are based on opportunity site capacity.

While the identified opportunity sites are the best guess for sites that will redevelop over the planning period, it is likely that some of the sites identified as opportunity sites may remain in their current state, while others that are not identified as opportunity sites will undergo change. Use of opportunity sites allows a 'best guess' analysis of what the potential development will be in the planning area.

Assumptions used in calculating development potential include:

- **Public Open Space** is included throughout the Planning Area, and is estimated in acres. A 10% park contribution is assumed for all sites over a half-block (0.7 acres) in size, with a few exceptions:
 - Scenario 1 for the BART blocks includes additional open space, including a half-black plaza on the BART Station Block, and smaller public open spaces on the BART Parking lot (15% of the site), and the MTC/ABAG block (25% of the block).
 - o Four large block sites are identified as including 15% park space as a community benefit (sites 6, 8 11, and 15, for illustrative purposes).
 - Finally, new regional park space is shown along the Lake Merritt Channel, with higher park area reflecting set-backs and open space along the channel.
 See Chapter 5 for more detail on the strategy for Parks and Open Space.
- **Percent of Lot Built** identifies the portion of the lot assumed for development. This includes an assumption of setback above a base height. In most cases, this is assumed to be 70 percent. This coverage is less for sites along I-880 (60 percent) in order to account for increased setbacks away from the highway. On full blocks, coverage is assumed to be 65 percent.
- *Housing Density* is assumed to range from 130 to 160 housing units per acre for midrise development, and from 300 to 484 housing units per acre for high-rise development. These assumed densities are used to determine the low and high housing unit estimates.
- *Office* numbers are developed based on an assumed footprint and the number of stories.

- **Retail** is assumed to be at the ground floor only for the majority of sites, focused along key retail streets; the average assumption for ground floor retail is 35% of a site. Some sites have slightly higher or lower retail assumptions based on the portion of the site that fronts onto retail streets. The exception to the ground floor rule is on the BART blocks where two stories of retail are included in Scenario 2 on the BART Station block.⁴
- *Net New Development* includes the subtraction of any existing uses on sites that are not vacant or parking lots.
- **Development potential compared to regional projections** includes only the Traffic Analysis Zones that correspond to the focus area. The larger 1/2 mile study area corresponds to a larger projected population and job increase per ABAG and ACTC.

A comparative summary of net new projected development is shown in Table 3-2. The following findings are shown in Table 3-2:

- The low estimate for residential units is very close to the low end of the Market Opportunity Analysis.
- Due to the continuing collapse of demand across many economic sectors persisting into 2011, the high estimate for residential units in the Preferred Plan is only about half the high estimate contained in the 2009-2010 Market Opportunity Analysis.
- The high and low Preferred Plan unit potential straddles the ACTC growth projections.
- Non-residential development under the Preferred Plan would exceed the Market Opportunity Analysis for retail and for office, except in the high retail Market Opportunity projection.
- The Preferred Plan would exceed ACTC jobs projections.

Depending on actual market demand, less non-residential and more residential development could occur. Currently, no hotel uses are identified, though demand was identified in the Market Opportunity Report. This use could be further considered during the Draft Plan stage.

Detailed development potential by Site is shown in Table 3-3, and Figures 3-2 through 3-7 provide illustrative views of potential development. Note that these drawings are conceptual massing diagrams only, and do not represent actual design.

3-8

⁴ Scenario 2 was not analyzed in Chapter 7: Circulation, Access, and Parking; analysis will be conducted for the Draft Plan.

Table 3-2: Comparative Summary of Projected Development and Preferred Plan Potential Development, 2035

•	•	•			•	•					
Housin	g Units	S	Square Feet Non-Residential ¹								
Low	High	Office Low	Office High	Retail Low	Retail High ¹	Low	High				
439	949	324,000	744,000	62,000	141,000	987	2,263				
3,183	4,612	1,289,277	1,289,277	251,790	251,790	3,492	3,492				
3,621	5,560	1,613,277	2,033,277	313,790	392,790	4,479	5,755				
4,350	10,500	1,160,000	1,264,000	207,000	414,000	3,518	4,295				
83%	53%	139%	161%	152%	95%	127%	134%				
4,933	4,933	n/a	n/a	n/a	n/a	4,169	4,169				
73%	113%	n/a	n/a	n/a	n/a	107%	137%				
	439 3,183 3,621 4,350 83% 4,933	Housing Units Low High 439 949 3,183 4,612 3,621 5,560 4,350 10,500 83% 53% 4,933 4,933	Housing Units Second Low High Office Low 439 949 324,000 3,183 4,612 1,289,277 3,621 5,560 1,613,277 4,350 10,500 1,160,000 83% 53% 139% 4,933 4,933 n/a	Housing Units Square Feet Non Low High Office Low Office High 439 949 324,000 744,000 3,183 4,612 1,289,277 1,289,277 3,621 5,560 1,613,277 2,033,277 4,350 10,500 1,160,000 1,264,000 83% 53% 139% 161% 4,933 4,933 n/a n/a	Housing Units Square Feet Non-Residential¹ Low High Office Low Office High Retail Low 439 949 324,000 744,000 62,000 3,183 4,612 1,289,277 1,289,277 251,790 3,621 5,560 1,613,277 2,033,277 313,790 4,350 10,500 1,160,000 1,264,000 207,000 83% 53% 139% 161% 152% 4,933 4,933 n/a n/a n/a	Housing Units Square Feet Non-Residential Low High Office Low Office High Retail Low Retail High 439 949 324,000 744,000 62,000 141,000 3,183 4,612 1,289,277 1,289,277 251,790 251,790 3,621 5,560 1,613,277 2,033,277 313,790 392,790 4,350 10,500 1,160,000 1,264,000 207,000 414,000 83% 53% 139% 161% 152% 95% 4,933 4,933 n/a n/a n/a n/a	Housing Units Square Feet Non-Residential¹ Job Low High Office Low Office High Retail Low Retail High¹ Low 439 949 324,000 744,000 62,000 141,000 987 3,183 4,612 1,289,277 1,289,277 251,790 251,790 3,492 3,621 5,560 1,613,277 2,033,277 313,790 392,790 4,479 4,350 10,500 1,160,000 1,264,000 207,000 414,000 3,518 83% 53% 139% 161% 152% 95% 127% 4,933 4,933 n/a n/a n/a n/a 4,169				

The high estimate for Retail and Office are based on Scenario 2 for the BART sites, which includes high rise development on all three blocks and up to 2 stories of retail on the BART Station. The high retail and high office scenarios were not analyzed in Chapter 7: Circulation, Access, and Parking.

² The office number combines general office and local serving office.

³ ACTC Projections are based on ABAG Projections are 2009, Focus Area only (less than the ½ mile radius).

^{4.} Note that the low Market Opportunity Analysis numbers are compared with low Preferred Plan totals and high Market Opportunity Analysis numbers are compared with high Preferred Plan totals.

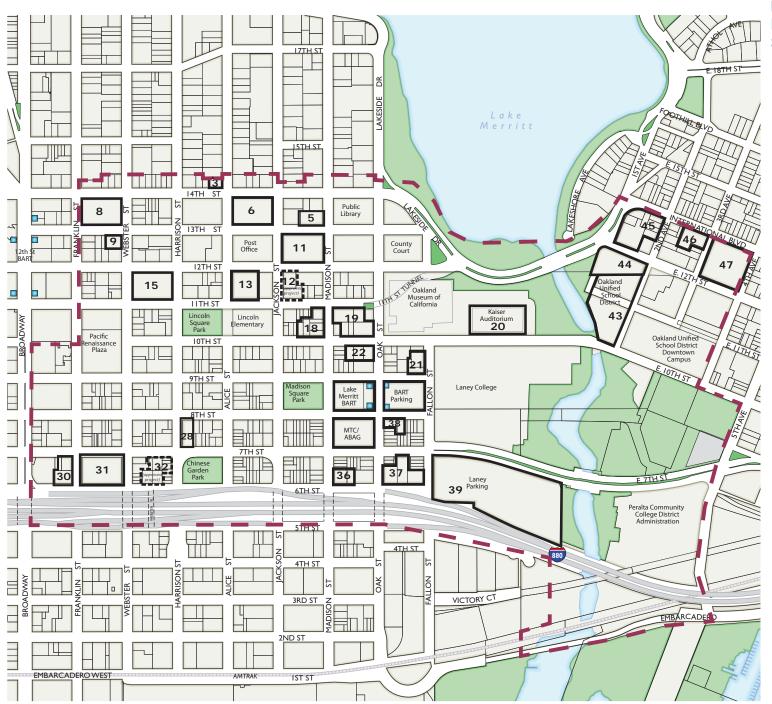


Figure 3.1:
POTENTIAL DEVELOPMENT
SITES



Table 3.3-1:
PREFERRED PLAN
DEVELOPMENT POTENTIAL

SITE		EXISTING USE	HEIGHT ASSUMPTION		BUILT USES: ACRES Emerging	UNITS (LOW)	UNITS (HIGH)	SQUARE FEET	SQUARE FEET	PUBLIC SPACE	COMMUN	EXISTING UNITS/SF	NET NEW UNITS	NET NEW	NET NEW OFFICE	NET NEW RETAIL	LESS HOTEL	LESS INSTITUTIO	LESS INDUSTR	LESS AUTO
					Plan	(2011)	(OFFICE	RETAIL	(acres)	FACILITIES		(LOW)	(HIGH)	002		ROOMS	NAL	IAL	SERVICES
CENTRA	L BART I	BLOCKS SCI	ENARIO 1				_													
BART	1.4	BART	Mid-rise: 6-8	45%	0.6 Housing	8	2 101					-	82	101		-				
Station		Admin	stories; Assume 8	35%	0.5 Retail/				21,000			-				21,000				
			stories, development on		Entertainment				,							,				
			1/2 of block	50%	0.7 Park/Plaza					0.70		-								
		BART	High-rise: 9+	60%	0.8 Housing	25	2 407					-	252	407						
Parking		Parking	stories; Assume one 20 story tower	35%	0.5 Retail				21,000			-				21,000				
			20 Story tower	15%	0.2 Public Plaza					0.21		-								
MTC/AB	1.4	MTC/ABAG	High-rise: 9+	25%	0.4 Housing	10	5 169					-	105	169						
AG		Offices	stories; Assume two	35%	0.5 Office (20 stori	es)		430,000				106,000			324,000					
			20 story towers	25%	0.35 Park					0.35		-								
				33%	0.5 Retail				20,000			-				20,000				
Subtotal	Central E	BART Blocks	Version 1			439	677	430,000	62,000	1.26	-	106,000	439	677	324,000	62,000	-	-	-	-
CENTRA	L BART I	BLOCKS SCI	ENARIO 2																	
		BART	High-rise: 9+ stories; Assume two 23 story towers	66%	0.9 Office (21 stori	es)		850,000				-	-	-	850,000	-				
Station		Admin		66%	0.9 Retail/ Entertainment (two stories)				80,000			-				80,000				
				10%	0.1 Park/Plaza					0.14		-								
		BART	High-rise: 9+	70%	1.0 Housing	29	4 474					-	294	474						
Parking		Parking	stories; Assume one 20 story tower	65%	0.9 Retail				40,000			-				40,000				
				10%	0.1 Public Plaza					0.14		-								
MTC/AB	TC/AB 1.4	MTC/ABAG	High-rise: 9+	70%	1.0 Housing	29	4 474					-	294	474						
AG		Offices	stories; Assume two	10%	0.14 Park					0.14		106,000			(106,000)					
			20 story towers	35%	0.5 Retail				21,000			-				21,000				

Table 3.3-2:
PREFERRED PLAN DEVELOPMENT
POTENTIAL CONTINUED

SITE	SITE	EXISTING	HEIGHT	% LOT	BUILT	USES:	UNITS	UNITS	SQUARE	SQUARE	PUBLIC	COMMUN	EXISTING	NET NEW	NET NEW	NET NEW	NET NEW	LESS	LESS	LESS	LESS
	ACRES	USE	ASSUMPTION	BUILT	ACRES	Emerging	(LOW)	(HIGH)	FEET	FEET	SPACE	ITY	UNITS/SF	UNITS	UNITS	OFFICE	RETAIL	HOTEL	INSTITUTIO	INDUSTR	AUTO
						Plan			OFFICE	RETAIL	(acres)	FACILITIES	*	(LOW)	(HIGH)			ROOMS	NAL	IAL	SERVICES
OTHER S	SITES WI		UNITY FEEDBACK A		NT OR V	ACANT SITES															
3	0.2	Parking Lot	Mid-rise: 6-8 stories	70%	0.1	Housing	15	1	9				-	15	19						
				35%	0.1	Retail				3,000			-				3,000				
5	0.4	Parking Lot	Mid-rise: 6-8 stories	70%	0.3	Housing	35	4	3				-	35	43						
				20%	0.1	Retail				3,000			-				3,000				
6	1.4	Parking lot	High-rise: 9+	65%	0.9	Housing	273	44	0				-	273	440						
			stories; Assume 20	35%	0.5	Retail				21,000			-				21,000				
			stories	15%	0.2	Park					0.21		-								
						Parking							-								
8	1.4		High-rise: 9+	65%	0.9	Housing	273	44	0				-	273	440						
		parking lot	stories; Assume 20	35%	0.5	Retail				21,000			-				21,000				
			stories	15%		Park					0.21		-								
						Public parking	(8 stories)						-								
9	0.3	Parking Lot	Mid-rise: 6-8 stories	70%	0.2	Housing	25	3	1				-	25	31						
				20%	0.1	Retail				2,000			-				2,000				
11	1.4		High-rise: 9+	33%		Office (20,000			400,00	00			-			400,000					
		parking lot	stories; Assume one			sf/floor in one															
			20 story tower	20%	0.3	tower) Retail				12,000			-				12,000				
				15%		Park				12,000	0.21		-				12,000				
				33%		Public parking					0.21		_								
12	0.5	Vacant	Mid-rise:		n/a	Approved	68	6	8					68	68						
		(planned	APPROVED	,		Affordable															
		housing)	AFFORDABLE			Housing															
13	0.8	Developed	HOUSING PROJECT Mid-rise: 6-8	70%	0.56	Project Office			290,00	00			-			290,000					
		one story	stories; Assume 12	20%		Retail			,	7,000			-			,	7,000				
		parking	stories with CUP	10%		Park				,,,,,,,	0.08		-				,				
4.5	4.4	D	urah dan Oa						0		0.08		_	270	4.0						
15	1.4		High-rise: 9+ stories; Assume one	65%	0.9	Housing	273	44	U				-	273	440						
			20 story tower	35%	0.5	Retail				21,000			-				21,000		(23,998)		
			above mid-rise base	15%	0.2	Park			+		0.21		-								
		parking																			
							<u> </u>														

Table 3.3-3:
PREFERRED PLAN DEVELOPMENT
POTENTIAL CONTINUED

SITE	SITE	EXISTING		% LOT		USES:	UNITS	UNITS	SQUARE	SQUARE	PUBLIC	COMMUN	EXISTING	NET NEW	NET NEW	NET NEW	NET NEW	LESS	LESS	LESS	LESS
	ACRES	USE	ASSUMPTION	BUILT	ACRES	Emerging	(LOW)	(HIGH)	FEET	FEET	SPACE	ITY	UNITS/SF	UNITS	UNITS	OFFICE	RETAIL	HOTEL	INSTITUTIO	INDUSTR	AUTO
						Plan			OFFICE	RETAIL	(acres)	FACILITIES	*	(LOW)	(HIGH)			ROOMS	NAL	IAL	SERVICES
18	0.7		Mid-rise: 6-8 stories	70%	0.5	Housing	64	78	3				30	34	48						
		developed one story		65%	0.5	Retail				20,000			-				20,000				(4,000)
		one story		10%	0.1	Park					0.07		-								
19	1.1		Mid-rise: 6-8 stories	70%	0.8	Housing	100	123	3				4	96	119						
		one story		50%	0.6	Retail				24,000			-				24,000				(24,000)
				10%	0.1	Park					0.11		-								
21	0.4	_	High-rise: 9+	70%	0.3	Housing	87	140)					87	140						
			stories; Assume 12 stories	35%	0.1	Retail				6,000			-			(2,723)	6,000				
22	0.5		Mid-rise: 6-8 stories	70%	0.4	Housing	46	56	5				-	46	56						
		one story		35%	0.2	Retail				8,000			-				8,000			(14,500)	
28	0.5	Parking	Mid-rise: 6-8 stories	50%	0.2	Housing	30	3	7				-	30	37						
				20%	0.1	Office			30,00	00			-			30,000					
				35%	0.2	Retail				7,000			-				7,000				
30	0.5	Vacant	High-rise: 9+	60%	0.3	Housing	94	15:	1				-	94	151						
			stories; Assume 12 stories	35%	0.2	Retail				8,000			-				8,000				
			stories	50%	0.3	Parking							-								
31	1.4		High-rise: 9+ stories; Assume two	60%	0.8	Housing	252	40	7				-	252	407						
		1	high rise 25 stories	35%	0.5	Retail				21,000			-				21,000		(83,725)		
			0	10%	0.1	Park					0.14		-								
32			High-rise: APPROVED PROJECT				380	380	D	9,110			0	380	380		9110				
36	0.5		High-rise: 9+ stories; Assume 12 stories	70%	0.3	Office			160,00	00			-			160,000				(15,040)	
37	0.9		Low and Mid-rise: 3 stories facing 7th	50%		Office (8 stories facing			160,00	00			-			160,000		(33)			(1,019)
	ce, Auto	ce, Auto an Services, fac	and 6 -8 stories facing 6th	20%		Office (3 stories facing 7th Street)			2000	00			-			20,000					
				10%	0.09	Park					0.09		-								

SITE	SITE	EXISTING	HEIGHT	% LOT	BUILT USES:	UNITS	UNITS	SQUARE	SQUARE	PUBLIC	COMMUN	EXISTING	NET NEW	NET NEW	NET NEW	NET NEW	LESS	LESS	LESS	LESS
	ACRES	USE	ASSUMPTION	BUILT	ACRES Emerging	(LOW)	(HIGH)	FEET	FEET	SPACE	ITY	UNITS/SF	UNITS	UNITS	OFFICE	RETAIL	HOTEL	INSTITUTIO	INDUSTR	AUTO
					Plan			OFFICE	RETAIL	(acres)	FACILITIES	*	(LOW)	(HIGH)			ROOMS	NAL	IAL	SERVICES
38			Mid-rise: 6-8 stories	70%	0.2 Housing	27	34					-	27	34						
		1-2 stories		35%	0.1 Retail				5,000			10,555			(8,000)	(5,555)				
									3,000			10,555				(3,333)				
39a	4.6	Parking lot	High-rise: 9+ stories	60%	2.8 Classrooms/ Office			240,000				-			240,000	-				
				5%					10,000			_				10,000				
				370	nity Apparatus				20,000							10,000				
				33%	1.5 Structured Par	king						-								
39b	4	Parking lot	Park (assumes all	65%	2.6 Park					2.6		-								
			the parkland for the	35%	1.4 Public Use						61,000									
			Laney site 39 along	35%	TBD						61,000	-								
			the channel)	500/			0.74						= 10	071				(4.40.440)		
43		-	High-rise: 9+ stories; Assume 12	60% 4%		540	871		F 000			-	540	871		F 000		(112,410)		
		1 story	stories; Assume 12	30%	0.1 Retail 0.9 Park				5,000	0.9		-				5,000				
		,	along channel	30%	U.9 Park					0.9		-								
44	1.3	Vacant	High-rise: 9+	70%	0.9 Housing	273	440					-	273	440						
			stories; Assume 20 stories	35%	0.5 Retail				20,000			-				20,000				
			stories	10%	0.13 Park					0.13		-								
45			Mid-rise: 6-8 stories	70%	1.1 Housing	137	168					2	135	166			(75)			
		1-3 stories		35%	0.5 Retail				23,000			8,765				14,235				
				10%	0.15 Park				,	0.15		-				,				
46	0.5	Parking	Mid-rise: 6-8 stories	70%	0.4 Housing	46	56					-	46	56				(3,878)		
		and 1 story		25%	_	0			5,000			_		-		5,000		(0,0.0)		
47	2	Parking	Mid-rise: 6-8 stories	70%		182			0,000			-	182	224		5,555		(26,202)		
.,		and 1 story	Wild rise. o o stories	12%	0.2 Retail	0			10,000			-	102			10,000		(20)202)		
				10%	0.20 Park	_	_			0.20		-								
												_								
n/a		Channel Parks	n/a	n/a	n/a Parkland					9		-				-				
		South of I-																		
		880, NE of I-	-																	
		880; 4 acre																		
Subtotal		DD Park				3,219	4,648	1,300,000	271,110	14.4	61,000		3,183	4,612	1,289,277	251,790	(108)	(250,213)	(29,540)	(29,019)
	ART Bloc	ks Scenario	1)			3,657	5,325	1,730,000	333,110	15.6	61,000		3,621	5,289	1,613,277	313,790	(108)			
					on (assuming 2 ppl/unit)	7,315	10,649			3.07			7,243	10,577						
	ADT DI	1.6		ncluding 1	2,052 existing residents)	19,367	22,701	2.450.000	442.412	44.5			19,295	22,629	2 022 2==	202 777	(4.7.7)	(250 515)	(20 5.53)	(20.015)
IOTAL (E	AKT BIOG	ks Scenario	· ·			3,807	5,596	2,150,000	412,110	14.8	-		3,771	5,560	2,033,277	392,790	(108)	(250,213)	(29,540)	(29,019)
					on (assuming 2 ppl/unit) 2,052 existing residents)	7,613 19,665	11,193 23,245						7,541 19,593	11,121 23,173						
Notes:	F 1.41	na Unita/CE			g square feet of any uses			n that sits. F		so not ne	and for the	site the r-d			rrospondin	lumn oc n	tivo coup	foot		

⁻ existing units/sr shows existing units and existing square reet or any uses that are also proposed on that site. For uses that are not proposed for the site, the reduction is shown in the corresponding column as n

⁻ Only Scenario 1 for the BART blocks was included in the transporation analysis in Chapter 7; further analysis will be conducted for the Draft Plan.

Figure 3.2: ILLUSTRATIVE VIEW OF POTENTIAL DEVELOPMENT: 14TH STREET CORRIDOR



Figure 3.3:
ILLUSTRATIVE VIEW OF
POTENTIAL DEVELOPMENT:
EAST LAKE GATEWAY

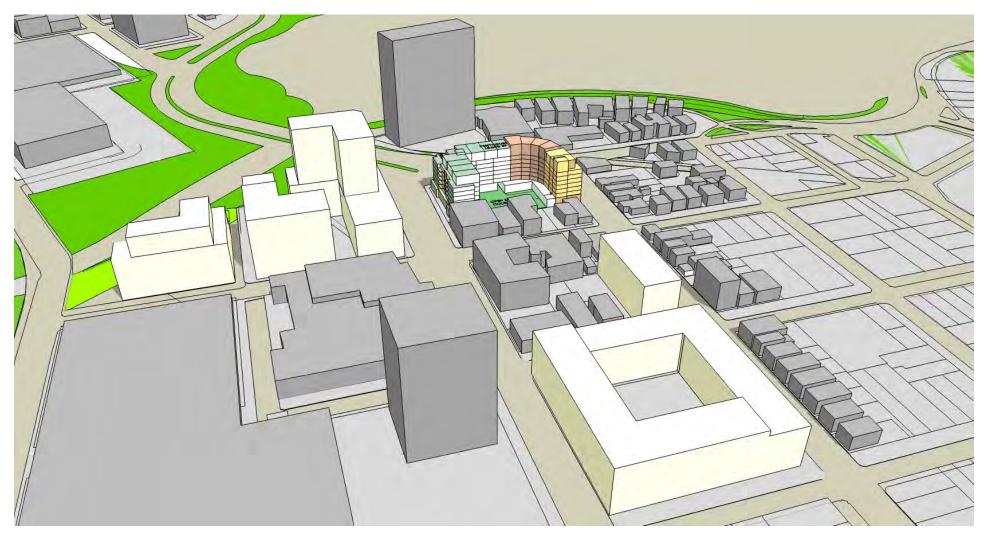


Figure 3.4:
ILLUSTRATIVE VIEW OF
POTENTIAL DEVELOPMENT:
LANEY/PERALTA



Figure 3.5: ILLUSTRATIVE VIEW OF POTENTIAL DEVELOPMENT: I-880



Figure 3.6:
ILLUSTRATIVE VIEW OF
POTENTIAL DEVELOPMENT:
BART STATION AREA



Figure 3.7:
ILLUSTRATIVE VIEW OF
POTENTIAL DEVELOPMENT:
CHINATOWN COMMERCIAL
CENTER

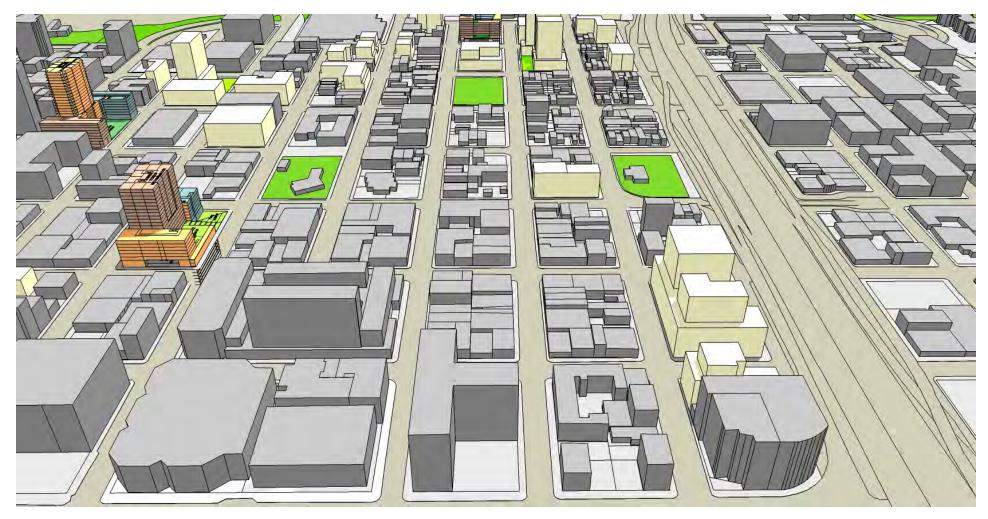


Figure 3.8:
ILLUSTRATIVE VIEW OF
POTENTIAL DEVELOPMENT:
UPPER CHINATOWN



Note: This illustrative view is of building massing only (not design), as originally developed in August 2011. Existing buildings are shown in grey, new buildings are shown in white; and colored buildings are full-block concepts studied in greater detail. The view illustrates only one possible outcome of new development. All drawings will be updated in the Draft Plan based on feedback received to date as well as through the formal review process.

3.3 Job Generation and Types of Jobs

The Station Area Plan could add an estimated 4,423 new jobs to the Planning Area, as shown in Table 3-4, slightly more than what is projected by ABAG. Note that this section considers the projected development and the number of jobs that new development could accommodate; it is not a plan for how to develop those jobs. Based on the identified development potential, the Plan would result primarily in the addition of new retail and office jobs, and at the expense of some existing auto and industrial jobs. While the job estimates shown in Table 3-4 reflect a decline in institutional jobs, it should be noted that these job estimates only reflect new jobs on opportunity sites and do not include jobs associated with Laney College or new jobs that may be associated with the proposed OUSD Downtown Educational Complex. It is also noted that jobs for local residents (where there are a high proportion of monolingual residents) tend to happen in smaller retail and office spaces.

Table 3-4: Preferred Plan Jobs by Type

Type of Job ¹	Low Development Potential	High Development Potential
Office	4,033	5,083
Retail	897	1,122
Hotel	-54	-54
Institutional ²	-250	-250
Light Industrial	-74	-74
Auto Service	-73	-73
Total New Jobs	4,479	5,755

Jobs are calculated based on the following assumptions: 1,000 square feet per institutional job, 400 square feet per light industrial, office, and auto services jobs, and 350 square feet per retail job. All estimates are "net new" potential.

Source: Conley, 2011; Dyett & Bhatia, 2011.

Institutional jobs only reflect changes on opportunity sites and do not include jobs associated with Laney College or new jobs that may be associated with the proposed OUSD Downtown Educational Complex.

3.4 Market Feasibility Assessment

APPROACH

This section examines the conceptual financial feasibility of selected development prototypes evaluated in the Station Area Plan. The basic test of financial feasibility used in this assessment is to evaluate the ability to support the conceptual development costs for a given prototype with project-generated revenues, given market standard return requirements for both equity and debt. Four development prototypes were evaluated, all including market rate housing and ground floor retail.

Any feasibility assessment is a function of the assumed economic conditions which drive product type demand, potential revenue, construction costs, and cost of capital. For a plan that is meant to guide development over a long term 25-year period, there are obvious limitations to relying on current economic conditions to predict future development trends. However, instead of attempting to predict the economic future, this assessment is based on current conditions and discusses the implications of possible future changes over the planning period.

RECESSION IMPACT

At the time this assessment was performed, the U.S. economy was still struggling to show definitive signs of recovery from the protracted effects of the deep recession which started with a rapid loss of economic vitality and a collapse of demand across most sectors in 2008. Unlike other downturns, the California economy has shown unusual susceptibility to the national economic malaise, with a higher unemployment rate and a steeper rate of home price collapse than the national norm. Although there are signs of emergent recovery and even growth in the tech-dominated Silicon Valley, for the most part by Fall 2011, the Bay Area remains in the depths of a deep recession, with the housing sector being the most severely impacted sector of both the national and Bay Area economy.

Housing values have declined sharply since the start of the recession, with 2011 sales prices in some parts of the plan area falling to only 35% of peak 2006 sales prices. With few exceptions, most housing developed since 2001 has been for-sale housing (although some distressed for-sale properties have been restructured financially and converted to rentals). A near-term return to housing prices that supported the mid-decade housing boom is not expected by most industry sources. Many analysts now predict that the first wave of housing construction post the current recession conditions will be designed to fill the rental housing demand from young adults entering the labor force and for aging Baby Boomers. The rate of future price and rent increases is dependent on complex demographic and economic factors and cannot be accurately predicted.

Since the start of the recession, the collapse in demand for new construction has led to a steep decline in contractor's construction cost bids, fueled largely by subcontractors bidding aggressively to capture low-end jobs to keep their doors open. Industry experts have recently suggested that the downward pressure on construction costs has abated, since there are now fewer active firms competing for business. Construction costs are no longer declining, but it cannot be known how contractors will respond to an increase in demand in the future when

the economy recovers and demand for new construction increases again. It is likely that construction costs and revenues will rise at different rates, which will impact the feasibility assumption below.

SCENARIOS REVIEWED

The development prototypes are summarized in Scenarios A through D, which are shown in Table 3-5. Scenarios A and B are full-block developments with a base of 6-story residential units over retail. These scenarios also include a 16-story high-rise tower. An underground parking garage is needed to accommodate the project's combined parking need of 380 spaces, and extends for most of the site. Thus, at this conceptual level, it can't be assumed that the buildings are built as independent developments. Although these scenarios include both midand high-rise structures, it is likely that both will be built with uniform high-rise construction costs. This project was originally tested at Site 6, which is east of Lake Merritt at the block bounded by 13th, Jackson, 14th and Alice Streets. As such the ground floor retail is located outside of Chinatown's prime commercial core area, which is generally concentrated along 7th to 11th Streets and between Franklin and Harrison Streets.

Scenario C is a conceptual eight-story mid-rise project with slightly larger unit sizes than assumed for the high-rise scenario. We assumed a 0.65 acre site on the outer edge of the existing commercial core area with 50% of the parking located in an underground garage and the remaining 50% located in an above ground structure.

Scenario D is a conceptual low-rise multifamily development on a half-acre site, with the parking located in an above-ground structure.

In each scenario the majority of the parking is provided for residents at a Transit Oriented Development (TOD) ratio of 1 per unit. The remaining parking serves the retail uses, assuming that an appropriate design solution is adopted to protect residents' safety and privacy in a shared parking structure.

Table 3-5: Scenario Descriptions

Scenario A: High/Mid Rise Condo							
Calant Cita, Cita 6		1.40					
Select Site: Site 6		Ac		•			
		Load		Average	# of	Density	
	GSF	Factor	NSF	SF/Unit	Units	Units/Acre	
Residential - Hi-Rise	150,000	25%	120,000	750	160	226	
Residential - Mid-Rise	213,120	20%	177,600	1,138	156		
Retail	21,300	0%	21,300	21,300	1		
Housing Amenities	3,000	0%	3,000	3,000	1		
Open Space	15,000	0%	15,000	15,000	1		
Parking Underground	120,000				340		
Parking Structure	16,000				40		
Scenario B: High/Mid Rise	e Apartmen	ts					
		1.40					
Select Site: Site 6		Ac					
		Load		Average	# of	Density	
	GSF	Factor	NSF	SF/Unit	Units	Units/Acre	
Residential - Hi-Rise	150,000	25%	120,000	750	160	226	
Residential - Mid-Rise	213,120	20%	177,600	1,138	156		
Retail	21,300	0%	21,300	21,300	1		
Housing Amenities	3,000	0%	3,000	3,000	1		
Open Space	15,000	0%	15,000	15,000	1		
Parking Underground	120,000				340		
Parking Structure	16,000				40		

Table 3-5: Scenario Descriptions

Table 6 of Good and Dood palents								
Scenario C: Mid Rise Apart	ments							
		0.65						
Select Site: Conceptual Site		Ac						
_		Load		Average	# of	Density		
	GSF	Factor	NSF	SF/Unit	Units	Units/Acre		
Residential - Mid Rise	102,762	20%	85,635	865	99	152		
Retail	15,000	0%	15,000	0	0			
Housing Amenities	3,671	0%	3,671	0	0			
Parking Underground	25,879				61			
Parking Structure	23,300				61			
Open Space	522	0%	522	NA	0			
Scenario D: Low Rise Apar	tments							
		0.50						
Select Site: Conceptual Low-	Rise	Ac						
		Load		Average	# of	Density		
	GSF	Factor	NSF	SF/Unit	Units	Units/Acre		
Residential - Low Rise	57,600	20%	48,000	800	60	120		
Retail	15,000	0%	15,000	3,000	5			
Commercial		0%	0					
Parking Structure					90			

Source: Conley Consulting Group, September, 2011

Revenue Assumptions

Project revenue for Scenario A is generated by residential condominium sales, retail leasing and parking fees. Revenue for Scenarios B-D is generated from leasing of both residential and retail space and fees for commercial parking. Based on recent home sales in the Plan Area, CCG has estimated current condo sales prices at \$350,000 per unit for the high-rise units and \$325,000 for mid-rise units.

Conley Consulting Group (CCG) estimated current residential rental rates at a monthly average of \$2.50 per square foot (SF) for high-rise units, \$2.25/SF for mid-rise units and \$2.00/SF for low-rise units. For the retail space, the monthly rent was estimated at \$2.50/SF, based on current asking rents at projects on the periphery of the Chinatown core retail area. These rents represent a significant decrease from core Chinatown rents, where current rents as high as \$5.00 can be captured. CCG has estimated monthly parking revenue for commercial spaces to be approximately \$250 per space.

Feasibility Findings

As demonstrated in Table 3-6, current rents support low rise construction costs in Scenario D. However, in order to acquire development sites, higher rents will be required to generate higher residual land values to support land payments.

The higher density solutions (Scenarios A,B, and C) require substantial increases in rents or sales prices above current levels to be financially feasible, as shown in Exhibits A-D. The required increase in residential sales prices ranges from \$225,000-249,000. A residential lease rate increase of \$1.80/SF was required for the high-rise units and \$1.87/SF for the midrise units. Before providing for a land purchase payment, the per unit feasibility gap is in the range of \$240,000 for the high density rental apartments, and just slightly less (at approximately \$233,500) for high density for-sale units. It is important to recall that these feasibility gap estimates do not yet include the cost to buy sites, or to provide affordable housing or any other desired community amenities.

Scenario C, the conceptual mid-rise development prototype, would result in a smaller feasibility gap on a per unit basis (at approximately \$46,500), but still required a significant increase in rents to close the gap. A minor \$0.29 and \$0.50 residential and retail rent increase were required to help close the feasibility gap for this mid-rise development.

CCG estimated a need for a minor \$0.25 increase in retail rents for Scenario A and B to a total of \$2.75/ SF to close the feasibility gap. We note that the addition of retail uses is generally a positive impact on project feasibility. However we also note that retail rents currently vary throughout the Station Area from a high of \$5/SF per month in Chinatown's commercial core to about \$2/SF on the edges of the core. Successful expansion of the commercial core in the future to enlarge the area that supports prime rents, by a achieving a careful blend of new tenants, pedestrian draws, and creation of a streetscape and pedestrian way that encourages shopper flow would improve these feasibility findings.

Table 3-6: Summary Of Findings

rable 5-6. Summary Or Findings	
Scenario A	
Product Type	High/Mid Rise Condos
Density	226 Du/Ac
# of du	316
SF of Retail	21,300
Parking Spaces	380
Value at Completion	\$117,753,516
Development Cost	(\$163,909,845)
Residual Value/(Gap)	(\$73,819,143)
Value (Gap)/du	(\$233,605)
Scenario B	
Product Type	High/Mid Rise Apartments
Density	226 Du/Ac
# of du	316
SF of Retail	21,300
Parking Spaces	380
Value at Completion	\$115,591,847
Development Cost	(\$163,909,845)
Residual Value/(Gap)	(\$75,851,327)
Value (Gap)/du	(\$240,036)
Scenario C	
Product Type	Mid Rise Apartments
Density	152 Du/Ac
# of du	99
SF of Retail	15,000
Parking Spaces	122
Value at Completion	\$36,376,374
Development Cost	(\$34,919,708)
Residual Value/(Gap)	(\$4,615,141)
Value (Gap)/du	(\$46,618)

Table 3-6: Summary Of Findings

Scenario D	
Product Type	Low Rise Apartments
Density	120 Du/Ac
# of du	60
SF of Retail	15,000
Parking Spaces	90
Value at Completion	\$21,206,959
Development Cost	(\$17,423,100)
Residual Value/(Gap)	\$734,839
Value (Gap)/du	\$12,247
Note: SF= Square Feet; du = Dwelling Unit.	
Source: Conley Consulting Group, September, 2011	

Exhibits A through D provide detailed information on the feasibility findings.

PLAN IMPLICATIONS

While it is not possible to accurately predict the rate at which housing prices and rents will escalate once the market begins to recover, most industry experts do not predict that a return to values and rents captured during the housing boom will occur in the near term. Thus, it is an assumption of this assessment that lower density housing solutions are most likely to be developed in the near term, and that the higher density developments will occur in the latter part of the Station Area planning period.

Currently, making housing units affordable in Oakland requires a local subsidy of approximately \$123,000 per unit, after application of all non-local courses of affordable housing subsides. As described above, CCG's analysis of current market conditions in the Plan Area indicate that adding additional housing units through a density bonus would not incentivize private developers to provide additional affordable housing units. After the housing price and value increases described above, feasible market rate developments would provide revenues to support land purchase price plus other desired amenities, including affordable housing. At a hypothetical land value of \$25,000 per unit, it would take an additional six market-rate units to support a single affordable housing unit, assuming these units could be added without moving the development as a whole to a higher density, higher cost development product type. A preliminary affordable housing strategy for the Planning Area is provided in Chapter 8 that outlines options for ensuring adequate affordable housing is included in the Planning Area in order to support a sustainable and diverse neighborhood.

The amount of retail space in the Preferred Plan, at 315,000 SF, is within the upper end of the range of demand for new space projected in the Existing Conditions report. Retail is not a public amenity that needs to be subsidized, but rather a valuable element of a project, particularly in the commercial core area. Successful introduction of this amount of retail is dependent on creating strong retail streets that act as an extension of Chinatown's existing commercial strengths, encourages pedestrian flow, and provides for strong visibility and identity.

DEVELOPMENT PROGRAM	Development program per Field Paoli Hi-Rise Residential Mid-Rise Residential Retail Housing Amenities Open Space Parking Undgrnd Parking Structure	226 Du/Ac	GSF 150,000 213,120 21,300 3,000 15,000	NSF 120,000 177,600 21,300 3,000 15,000	Avg SF/Unit 750 1,138 21,300 3,000 15,000	No. of Units 160 156 1 1 1 340 40
			CURRENT	MARKET	BREAK-EVE	N SCENARIO
DEVELOPMENT COSTS	Hard Costs Hi-Rise Residential Mid-Rise Residential Retail/Commercial Housing Amenities Parking Undgrnd Parking Struc. Open Space Total Hard Costs Soft Costs Financing Costs Total (excl. Land)	incl.	\$285 /SF \$285 /SF \$285 /SF \$310 /SF \$30,000 /Sp \$20,000 /Sp \$20,000 /Sp	Estimate 42,750,000 60,739,200 6,925,500 0 10,200,000 800,000 \$121,414,700 \$30,353,675 \$12,141,470 \$163,909,845	\$285 /SF \$285 /SF \$285 /SF \$310 /SF \$30,000 /Sp \$20,000 /Sp \$20,000 /Sp	Estimate 42,750,000 60,739,200 6,925,500 0 10,200,000 800,000 \$121,414,700 \$30,353,675 \$12,141,470 \$163,909,845
	Total (excl. Land)			\$103,909,043		\$103,909,043
NOI	Hi Rise Residential Sales Cost of Sale Net Proceeds	160 units 5.0% _	Per Unit \$350,000 (17,500) \$332,500	Total 56,000,000 (2,800,000) \$53,200,000	Per Unit \$599,000 (29,950) \$569,050	Total 95,840,000 (4,792,000) \$91,048,000
T VALUAT	Mid Rise Residential Sales Cost of Sale	156 units 5.0%_	Monthly \$325,000 (16,250)	Annual 50,700,000 (2,535,000)	\$550,000 (27,500)	Total 85,800,000 (4,290,000)
REVENUE AND PROJECT VALUATION	Net Proceeds Gross Income - Retail Vacancy Expenses	\$2.50 NNN 5% 0%_	\$308,750 53,250 (2,663)	\$48,165,000 639,000 (31,950)	\$522,500 \$2.75 NNN 5% 0%	\$81,510,000 702,900 (35,145)
ENUE A	Net Income - Retail Value at Completion	6.5% Cap	\$50,588	\$607,050 \$9,339,231		\$667,755 \$10,273,154
REV	Net Income - Parking Value at Completion	40 spaces 7% Cap	\$250 /sp/mo	\$120,000 \$1,714,286	\$250 /sp/mo	\$120,000 \$1,714,286
	Value at Completion (excl Cost of Sale)			\$117,753,516		\$193,627,440
ALUE	Value at Completion			\$117,753,516		\$193,627,440
RESIDUAL LAND VA	Less: Development Costs (excl Land) Less: Cost of Sale - Residential Less: Cost of Sale - Retail/Pking Less: Developer Profit (Return on Cost) Subtotal	2.5% 15.0%	_	(\$163,909,845) (\$2,800,000) (\$276,338) (\$24,586,477) (\$191,572,660)	-	(\$163,909,845) (\$4,792,000) (\$299,686) (\$24,586,477) (\$193,588,008)
RESI	Residual Land Value/Feasibility Gap Value (Gap)/DU			(\$73,819,143) (\$233,605)		\$39,432 \$125

DRAFT PREFERRED PLAN

Salact Site: Site 6

Exhibit A: SCENARIO A - HIGH/MID RISE CONDOMINIUMS

Notes:

SF: Square Feet

Load Factor: accounts for non-leasable or non-livable space

GSF: Gross Square Feet

NSF: Net Square Feet (GSF minus load factor)

NNN: A triple net lease. A lease agreement on a property where the tenant or lessee agrees to pay all real estate taxes, building insurance, and maintenance on the property. In such a lease, the tenant or lessee is responsible for all costs associated with the repair and maintenance of any common area.

% Cap: capitalization rate (ratio between the net operating income produced by an asset and its capital cost)

5	Select Site: Site 6						
DEVELOPMENT PROGRAM	Development program per Field Paoli	226 Du/Ac					
89					Avg		No. of
2			GSF	NSF	SF/Unit		Units
E	Hi-Rise Residential		150,000	120,000	750		160
⊨	Mid-Rise Residential		213,120	177,600	1,138		156
<u></u>	Retail		21,300	21,300	21,300		1
≥	Housing Amenities		3,000	3,000	3,000		1
P P	Open Space		15,000	15,000	15,000		1
			13,000	13,000	13,000		340
⊼	Parking Undgrnd						
8	Parking Structure						40
		CUI	RRENT MARKE	т	BRFAK-	EVEN SCEN	ARIO
	Hard Costs			Estimate			Estimate
(0	Hi-Rise Residential		\$285 /SF	42,750,000	\$285 /SF		42,750,000
l K	Mid-Rise Residential		\$285 /SF	60,739,200	\$215 /SF		45,820,800
ő	Retail/Commercial		\$285 /SF	6,925,500	\$285 /SF		6,925,500
္ပ	Housing Amenities	incl.	\$310 /SF	0,020,000	\$310 /SF		0,020,000
5		IIICI.					-
빝	Parking Undgrnd		\$30,000 /Sp	10,200,000	\$30,000 /Sp		10,200,000
₫.	Parking Struc.		\$20,000 /Sp	800,000	\$20,000 /Sp		800,000
1 9	Open Space		-				
DEVELOPMENT COSTS	Total Hard Costs			\$121,414,700			\$106,496,300
Ä	C-#-C+-		050/ 11	\$20,050,075	050/ 11- 1		\$20.050.075
	Soft Costs		25% Hards	\$30,353,675	25% Hards		\$30,353,675
	Financing Costs		10% Hards	\$12,141,470	10% Hards		\$12,141,470
	Total (excl. Land)			\$163,909,845			\$163,909,845
	Total (excl. Land)			\$105,505,045			φ105,505,045
			Per Unit	Total		Per Unit	Total
	Hi-Rise Residential Income	\$2.50 /Unit/Mo	\$1,875	3,600,000	\$4.30 /Unit/Mo	\$3,225	6,192,000
-	Mid-Rise Residential	\$2.25 /Unit/Mo	\$1,688	4,795,200	\$4.12 /Unit/Mo	\$4,690	8,780,544
ō	Residential Parking Income	\$75 /sp/mo	\$75	306,000	\$100 /sp/mo	\$100	111,600
F	Less: Vacancy	5.0%	•	(435,060)	5%	•	(754,207)
≯	Less: Operating Expenses	30%		(2,479,842)	30%		(4,298,981)
l ₽	Net Operating Income	0070_		\$5,786,298	0070		\$10,030,956
>	Value at Completion	5.5% Cap		\$105,205,418	5.5% Cap		\$182,381,014
REVENUE AND PROJECT VALUATION	value at Completion	3.370 Cap		ψ103, <u>2</u> 03, 4 10	3.5 % Cap		Ψ102,301,014
5			Monthly	Annual		Monthly	Annual
ĕ	Gross Income - Retail	\$2.50 NNN	53,250	639,000	\$2.75 NNN	58,575	702,900
l 6	Vacancy	5%	(2,663)	(31,950)	5%	(17,573)	(35,145)
J	Expenses	0%	(2,000)	(01,000)	0%	(11,010)	(00,1.0)
_ <	Net Income - Retail	070_	\$50,588	\$607,050	070	\$41,003	\$667,755
5	Value at Completion	7.0% Cap	ψ50,500	\$8,672,143		Ψ+1,005	\$9,539,357
	value at Completion	7.0 % Cap		\$0,072,143			ψ9,559,557
_ ≧	Net Income - Parking	40 spaces	\$250 /sp/mo	\$120,000	\$250 /sp/mo		\$120,000
~	Value at Completion	7% Cap	φ200 /ορ/πιο	\$1,714,286	φ200 /op/iiio		\$1,714,286
				4 1,111,200			4 1,1 1 1,200
	Value at Completion (excl Cost of Sale)			\$115,591,847			\$193,634,657
	Residual Land Value						
	Value at Completion			\$115,591,847			\$193,634,657
E E	value at completion			Ψ113,331,041			ψ133,034,031
1 1							
\$	Lance Development Co. 1. (1. 11. 15			(0400 000 045)			(0400,000,045)
_	Less: Development Costs (excl Land)			(\$163,909,845)			(\$163,909,845)
Z Z	Less: Cost of Sale - Residential			(\$2,914,902)			(\$5,053,188)
<u>ا</u> ا	Less: Cost of Sale - Retail/Pking	2.5%		(\$31,950)			(\$35,145)
¥	Less: Developer Profit (Return on Cost)	15.0%	-	(\$24,586,477)			(\$24,586,477)
<u> </u>	Subtotal		_	(\$191,443,174)		•	(\$193,584,655)
RESIDUAL LAND VA	B			(ATE 05: 00T)			A=2 22 -
2	Residual Land Value/ (Feasibility Gap)			(\$75,851,327)			\$50,002
	Value (Gap)/DU			(\$240,036)			\$158
	Land Value/SF			(\$1,244)			\$0.82
	Source: Conley Consulting Group, September, 2011						

Exhibit B: SCENARIO B - HIGH/MID RISE APARTMENTS

Notes:

SF: Square Feet

Load Factor: accounts for non-leasable or non-livable space

GSF: Gross Square Feet

NSF: Net Square Feet (GSF minus load factor)

NNN: A triple net lease. A lease agreement on a property where the tenant or lessee agrees to pay all real estate taxes, building insurance, and maintenance on the property. In such a lease, the tenant or lessee is responsible for all costs associated with the repair and maintenance of any common area. % Cap: capitalization rate (ratio between the net operating income produced by an asset and its capital cost)

DEVELOPMENT PROGRAM	Select Site: Conceptual Site Residential Density Mid-Rise Residential Retail Housing Amenities Open Space Parking Undgrnd Parking Structure	152 Du/Ac incl. incl.	GSF 102,762 15,000 3,671 522 25,879 23,300	NSF 85,635 15,000 3,671 522	Avg SF/Unit 865 0 0		No. of Units 99 0 0 0 61 61
DEVELOPMENT COSTS	Hard Costs Mid-Rise Residential Retail/Commercial Housing Amenities Parking Undgrnd Parking Struc. Open Space Total Hard Costs Soft Costs Financing Costs Total (excl. Land)	incl.	\$225 /SF \$150 /SF \$165 /SF \$25,000 /Sp \$20,000 /Sp \$20,000 /Sp	Estimate 23,121,450 1,525,000 1,220,000 \$25,866,450 \$6,466,613 \$2,586,645 \$34,919,708	\$225 /SF \$150 /SF \$165 /SF \$25,000 /Sp \$20,000 /Sp \$20,000 /Sp	-EVEN SCENA	Estimate 23,121,450 1,525,000 1,220,000 \$25,866,450 \$6,466,613 \$2,586,645 \$34,919,708
REVENUE AND PROJECT VALUATION	Mid-Rise Residential Residential Parking Income Less: Vacancy Less: Operating Expenses Net Operating Income Value at Completion Gross Income - Retail Vacancy Expenses Net Income - Retail Value at Completion Net Income - Parking Value at Completion	\$2.25 /Unit/Mo \$75 /sp/mo 5.0% 30%_ 5.5% Cap \$2.50 NNN 5% 0%_ 7.0% Cap 23 spaces 7% Cap	Per Unit \$1,946 \$75 Monthly 37,500 (1,875) \$35,625 \$250 /sp/mo	Total 2,312,145 109,800 (121,097) (690,254) \$1,610,593 \$29,283,517 Annual 450,000 (22,500) \$427,500 \$6,107,143 \$69,000 \$985,714	\$2.54 /Unit/Mo \$75 /sp/mo 5% 30% 5.5% Cap \$3.00 NNN 5% 0%	Per Unit \$2,197 \$75 Monthly 2,595	Total 2,610,155 109,800 (135,998) (775,187) \$1,808,770 \$32,886,726 Annual 540,000 (27,000) \$513,000 \$7,328,571 \$69,000 \$985,714
RESIDUAL LAND VALUE	Value at Completion (excl Cost of Sale) Residual Land Value Value at Completion Less: Development Costs (excl Land) Less: Cost of Sale - Residential Less: Cost of Sale - Retail/Pking Less: Developer Profit (Return on Cost) Subtotal Residual Land Value Value (Gap)/DU Land Value/SF	15.0%	-	\$36,376,374 \$36,376,374 (\$34,919,708) (\$811,352) (\$22,500) (\$5,237,956) (\$40,991,515) (\$4,615,141) (\$46,618) (\$163)		-	\$41,201,012

Exhibit C: SCENARIO C - MID RISE APARTMENTS

Notes:

SF: Square Feet

Load Factor: accounts for non-leasable or non-livable space

GSF: Gross Square Feet

NSF: Net Square Feet (GSF minus load factor)

NNN: A triple net lease. A lease agreement on a property where the tenant or lessee agrees to pay all real estate taxes, building insurance, and maintenance on the property. In such a lease, the tenant or lessee is responsible for all costs associated with the repair and maintenance of any common area.

% Cap: capitalization rate (ratio between the net operating income produced by an asset and its capital cost)

Ę	Select Site: Conceptual Low-Rise						
DEVELOPMENT PROGRAM	Residential Density	120 Du/Ac			Asser		No. of
Š			GSF	NSF	Avg SF/Unit		No. of Units
_ 4	Residential		57,600	48,000	800		60
i i	Retail		15,000	15,000	3.000		5
Ā	Commercial		0	0	0		0
2	Parking (Podium)		-	•	•		90
N.	· =g (· -=)						
DE							
		CIII	RRENT MARKE	т 1	DDEAK	-EVEN SCEN	ARIO
			KENI WAKKE	.1	BREAK	-EVEN SCEN	ARIO
TS.	Hard Costs			Estimate			Estimate
ő	Low-Rise Residential (incl. Parking)		\$185 /SF	10,656,000	\$185 /SF		10,656,000
O	Retail/Commercial		\$150 /SF	2,250,000	\$150 /SF		2,250,000
Þ	Open Space		.=			_	
Ξ	Total Hard Costs			12,906,000			12,906,000
DEVELOPMENT COSTS	0.500.000			#0.000 F00	0.000 11 1		#0.000 F00
	Soft Costs		25% Hards	\$3,226,500	25% Hards		\$3,226,500
	Financing Costs		10% Hards	\$1,290,600	10% Hards		\$1,290,600
□	Total (excl. Land)			\$17,423,100			\$17,423,100
			Per Unit	Total		Per Unit	Total
_	Residential Income	\$2.00 /Unit/Mo	\$1,600	1,152,000	\$2.00 /Unit/Mo	\$1,600	1,152,000
O	Residential Parking Income	\$75 /sp/mo	\$75	81,000	\$75 /sp/mo	\$75	54,000
Ē	Less: Vacancy	5.0%	•	(61,650)	5%	•	(60,300)
≱	Less: Operating Expenses	30%		(351,405)	30%		(343,710)
₹	Net Operating Income	_		\$819,945			\$801,990
REVENUE AND PROJECT VALUATION	Value at Completion	6.0% Cap		\$13,665,750	6.0% Cap		\$13,366,500
<u> </u>			Monthly	Annual		Monthly	Annual
ó	Gross Income - Retail	\$2.50 NNN	37,500	450,000	\$2.34 NNN	35,100	421,200
<u> </u>	Vacancy	5%	(1,875)	(22,500)	5%	(1,755)	(21,060)
₽	Expenses	0%	(, ,	(,,	0%	(,,	(,,
₹	Net Income - Retail	_	\$35,625	\$427,500		\$33,345	\$400,140
E E	Value at Completion	6.5% Cap		\$6,576,923	6.5% Cap		\$6,156,000
N N	Not Income Darking	22	\$250 lanima	\$67.F00	¢2E0 lonima		\$67.500
Ē	Net Income - Parking Value at Completion	23 spaces 7% Cap	\$250 /sp/mo	\$67,500 \$964,286	\$250 /sp/mo 7% Cap		\$67,500 \$964,286
L 12	·	.,,,			.,		
	Value at Completion (excl Cost of Sale)			\$21,206,959			\$20,486,786
	Residual Land Value						
LUE	Value at Completion			\$21,206,959			\$20,486,786
RESIDUAL LAND VALUE	Logo Dovolopment Costs (oval Logo)			(\$47.400.400\			(\$47.400.400\
9	Less: Development Costs (excl Land) Less: Cost of Sale - Residential			(\$17,423,100) (\$413,055)			(\$17,423,100) (\$404,010)
ব্	Less: Cost of Sale - Residential Less: Cost of Sale - Retail/Pking	2.5%		(\$22,500)			(\$21,060)
1]	Less: Developer Profit (Return on Cost)	15.0%		(\$2,613,465)			(\$2,613,465)
A	Subtotal	.0.070	-	(\$20,472,120)		-	(\$20,461,635)
Ē				,			,
Ä	Residual Land Value			\$734,839			\$25,151
"	Value (Gap)/DU			\$12,247			\$419
	Land Value/SF			\$34			\$1
-	Source: Conley Consulting Group, September, 2011						
L	22, 22						

Exhibit D: SCENARIO D - LOW RISE APARTMENTS

Notes:

SF: Square Feet

Load Factor: accounts for non-leasable or non-livable space

GSF: Gross Square Feet

NSF: Net Square Feet (GSF minus load factor)

NNN: A triple net lease. A lease agreement on a property where the tenant or lessee agrees to pay all real estate taxes, building insurance, and maintenance on the property. In such a lease, the tenant or lessee is responsible for all costs associated with the repair and maintenance of any common area.

% Cap: capitalization rate (ratio between the net operating income produced by an asset and its capital cost)

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4 Land Use and Building Design

Land use and building design interact with the streetscape and public realm to establish a sense of place and neighborhood character. This section outlines the land use strategy for the Planning Area and provides a framework for building design, which will be further developed during the next planning stage.

4.1 Land Use Character

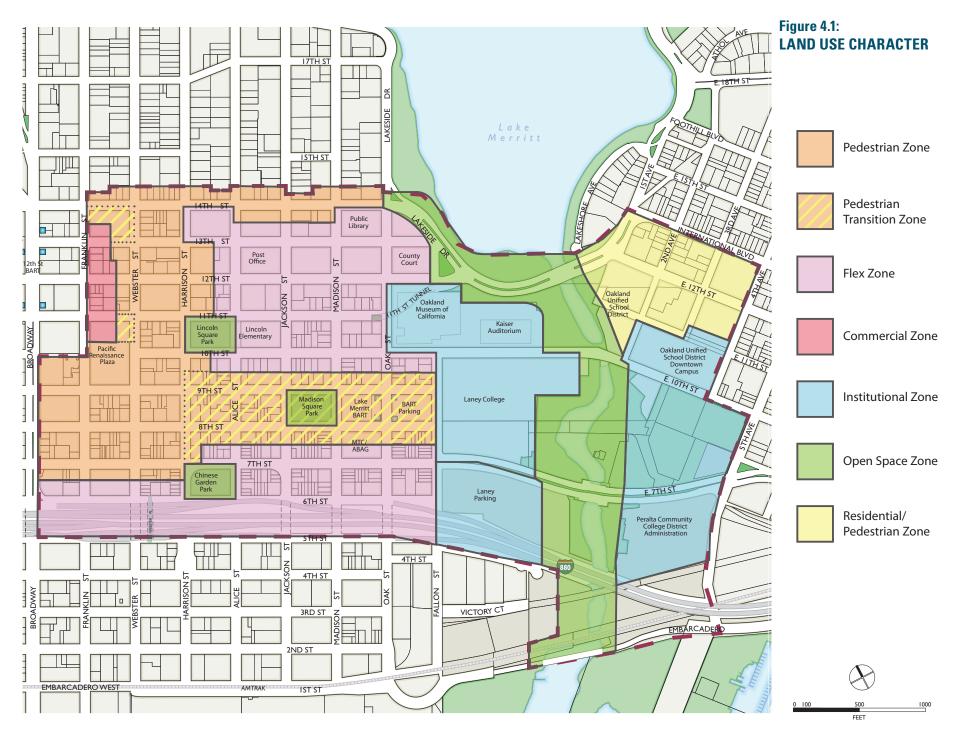
LAND USE CHARACTER

The Station Area Plan will promote a diversity of uses within the Planning Area that complement each other and ensure an active urban neighborhood at all hours. The land use character map (Figure 4-1) shows character differences within the mixed-use context throughout the Planning Area. The land use character concept includes a range of flexible mixed use areas intended to encourage vibrant pedestrian corridors. These are complemented by high-density housing and commercial uses, and new public spaces.

Desired land use character will be achieved through a range of regulatory mechanisms, such as land use regulations, development standards, street improvements, and design guidelines.

- **Pedestrian Zone.** An area of mixed-use, pedestrian-oriented continuous storefront uses with a mix of retail, restaurants, and business and social services. Upper story spaces are intended to be available for a wide range of residential and commercial activities.
- Pedestrian Transition Zone. An area that is currently mostly housing or commercial
 uses, but allows for the gradual transition to a Pedestrian Area by requiring ground
 floor storefront uses in new buildings.
- *Flex Zone.* An area allowing the maximum flexibility in uses, and permitting a variety of commercial, residential and even some light industrial uses.
- *Commercial Zone.* An area allowing a wide range of ground floor office and other commercial activities, with primarily office uses on upper floors.
- *Institutional Zone*. An area appropriate for educational facilities, cultural uses, health services, and other uses of a similar character, such as Laney College, Peralta College District, Oakland Museum, and Kaiser Auditorium.

- *Open Space Zone.* An area intended to meet the active and passive recreational needs of Oakland residents. An Open Space designation along the Lake Merritt Estuary channel would allow uses and facilities that enhance this regional asset.
- **Pedestrian/Residential Zone.** An area appropriate for multi-unit, mid-rise or high-rise residential structures in locations with good access to transportation and other services. A residentially focused area would also allow a variety of ground floor uses that are compatible with a residential area.



4.2 Active Ground Floor Uses

EXISTING RETAIL CONTEXT

The Planning Area includes Chinatown, which is a unique and rich environment, with a wealth of cultural, social, medical, residential, retail and social resources. The Chinatown commercial core is one of the city's most vibrant neighborhood retail districts. Over the last three decades, Asian-oriented retail has also spread eastward in Oakland along 12th Street and International Boulevard.

The Planning Area (extending from 5th Avenue to Broadway and 5th Street to International Boulevard and 14th Street) had reported sales of \$57 million in 2008, making it the city's fifth largest neighborhood retail district in terms of sales. Of this area, historic Chinatown is the most concentrated retail area in the Planning Area, located between 7th, 11th, Franklin, and Harrison Streets. Since 1994, retail sales in Chinatown have grown at a much faster pace (84%) than for the city as a whole (1.74%). Chinatown is unique among Oakland's retail districts in that it regularly draws shoppers to Oakland from outside of the city.

According to area brokers, ground floor retail uses support the highest rents in the Planning Area. In the heart of Chinatown, rents can reach as high as \$6.00 per square foot, with rents more typically peaking at \$5.00 per square foot in the area bounded by 8th, 10th, Harrison and Franklin Streets. Brokers noted that there is little to no long term vacancy in the core area; rather, there is a shortage of available retail space in Chinatown and suggested that new retail east of the core area would be readily absorbed by the Chinatown-oriented market.

Chinatown serves as an East Bay landmark for Asian culture, social services, cuisine, and shopping. The neighborhood attracts Asian residents from throughout the East Bay for shopping, cultural, health and educational services, as well as banking institutions catering to Asian customers. Historically, food sellers and other convenience goods merchants have been the most successful retailers in Chinatown, including restaurants, shops selling prepared food and grocers. More recently Chinatown's merchandise mix has broadened to include comparison stores (those selling apparel, home furnishings, home improvement, and specialty goods) as well. While Downtown office workers and non-Asian Oakland residents also patronize Chinatown's thriving shops, the primary source of retail demand in the Planning Area is the Asian population of the East Bay. However, Chinatown faces increased competition from suburban stores targeting this customer base and from the growing suburbanization of the East Bay Asian population. Maintaining the district's vitality is an important goal of the Preferred Plan.

Outside of Chinatown, the current lack of pedestrian activity and active street retail in the Planning Area is a constraint to attracting potential development to accommodate population or employment growth in the Planning Area.

RETAIL OPPORTUNITY

Untapped sources of support for retail in the Planning Area include:

- Projected growth of up to 38,400 residents by 2035. These residents could support an additional 414,000 SF of new retail.
- Projected growth of up to 7,300 new employees by 2035. New employees could support additional eating and drinking, service and specialty retail.
- The 15,000 commuting students and 400 faculty and staff members of Laney College, a number that may be augmented by the addition of residential facilities for the growing enrollment of foreign and out-of-Bay Area students. The college-related demand is for casual dining, cafes, bars, and food to go.

With the possible addition of an entertainment anchor, perhaps related to the College, there would be an enhanced nighttime draw of city residents to the area, further enhancing the Planning Area opportunities for restaurants and night clubs.

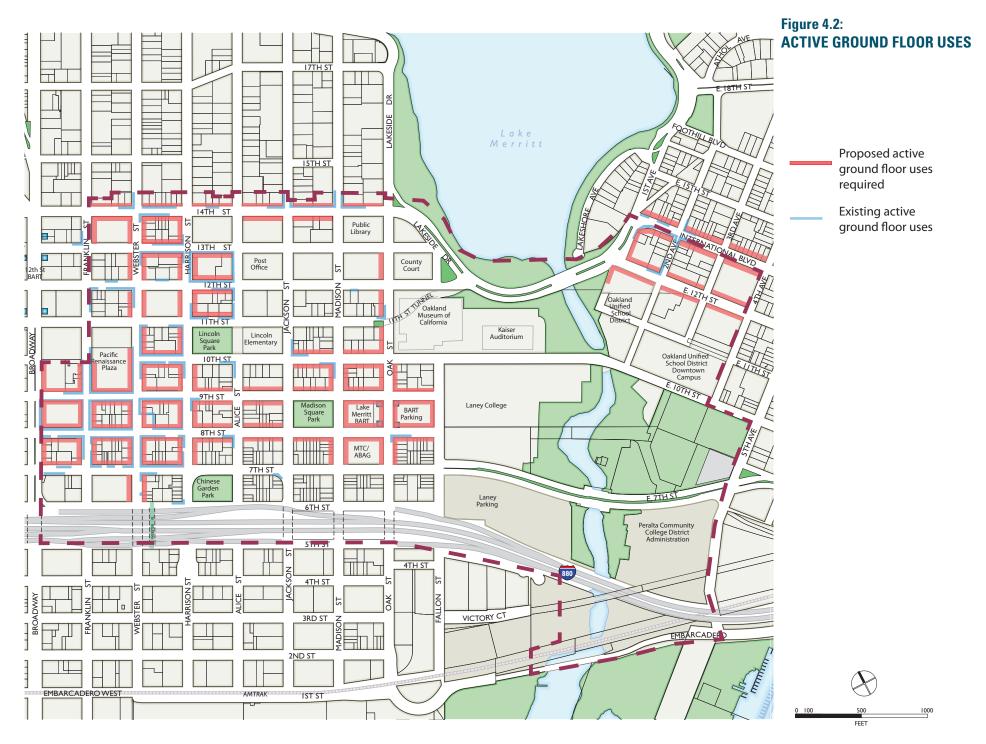
Retail Enhancement and Expansion

The Preferred Plan identifies the strategic expansion of active commercial uses, including retail and restaurants, throughout the Planning Area. This expansion supports an enhanced regional destination, building on and complementing the existing success of the Chinatown Commercial Center, expanding Chinatown businesses, and diversifying retail options as an expansion of Oakland's Central Business District.

Active ground floor commercial uses – those that attract walk-in visitors – are important because they add vibrancy to streets and increase pedestrian traffic, which results in safer streets and more customers for local businesses. Examples of active ground floor commercial uses include: retail stores, restaurants, cafés, markets, bars, theaters, health clinics, tourism offices, banks, personal services, libraries, museums, and galleries.

In order to expand the vibrancy and activity that already exists in some areas, like the core of the Chinatown commercial district, guidelines could be implemented that would *require* active uses in *new* buildings along key corridors, as shown in Figure 4-2. Active uses would primarily be at the street edge, but active uses could also be located at the edge of parks, plazas, or other public spaces. Final zoning regulations will be developed in a later phase of this Plan.

In addition to the requirement of active ground floor uses, other economic development strategies for retail enhancement and expansion are described in Chapter 9.



4.3 Massing and Building Design Concepts

In 2009, the Central Business District Rezoning process established height limits for the majority of the Planning Area, with Height, Density, Bulk and Tower Regulations adopted by the City on April 14, 2011. Allowable height areas under the existing Planning Code are shown in Figure 4-3. The height limits in the Lake Merritt Station Area were considered a placeholder with the understanding that the planning process would revisit and refine the initial height recommendations made as part of the 2009 process.

The planning process for revisiting heights in the the Lake Merritt Station Area has involved feedback from the CSG and TAC, as well as some initial feedback on heights and massing at the September 2011 Community Open House.

The height and massing concepts described below seek to balance the varied goals and preferences of the community and make trade-offs. Key themes related to height and massing include community character, compatibility with historic and natural resources, and accommodating high-density Transit Oriented Development.

HEIGHT AND MASSING CONCEPT

Massing regulations will seek to establish coherence in building massing; respect historic buildings and patterns of lot size and scale; be sensitive to existing buildings, and existing and new parks; and incorporate transitions between developments of differing scales. Height and massing will be regulated at two levels, as shown in Figure 4-4:

- **Base height**: Base heights will be established that complement the existing context, and setbacks will be required above that base height to ensure the street perspective maintains a consistent character. Base heights will be specified as either 45 feet or 85 feet.
- *Total Tower height*: A tower height above the base height will be allowed with massing regulations such as setbacks and tower length limits to ensure that a consistent character is maintained from the pedestrian perspective. This height is the maximum height allowed by right. Towers will be regulated by various guidelines and standards, outlined below.

Base heights are consistent with breaking points in cost of construction for different construction types. The 45-foot height limit is consistent with Type V construction (wood frame, with the lowest construction costs), and the 85-foot height limit allows for Type III modified, and Type I without life safety. The shift to Type I construction represents the greatest jump in construction costs. Above 85 feet, construction must be Type I with life safety, which is the most expensive construction type.

It is important to note that the initial massing strategy in the Emerging Plan (the predecessor to this Preferred Plan) included a third category for added height related to a Conditional Use Permit and provision of community benefits. However, the market feasibility analysis revealed that (at least in the short term) development is not likely to achieve heights sufficient

Lake Merritt Station Area Plan Draft Preferred Plan

to effectively achieve community benefits. A revised strategy for achieving community benefits is addressed in Chapters 8 and 9.

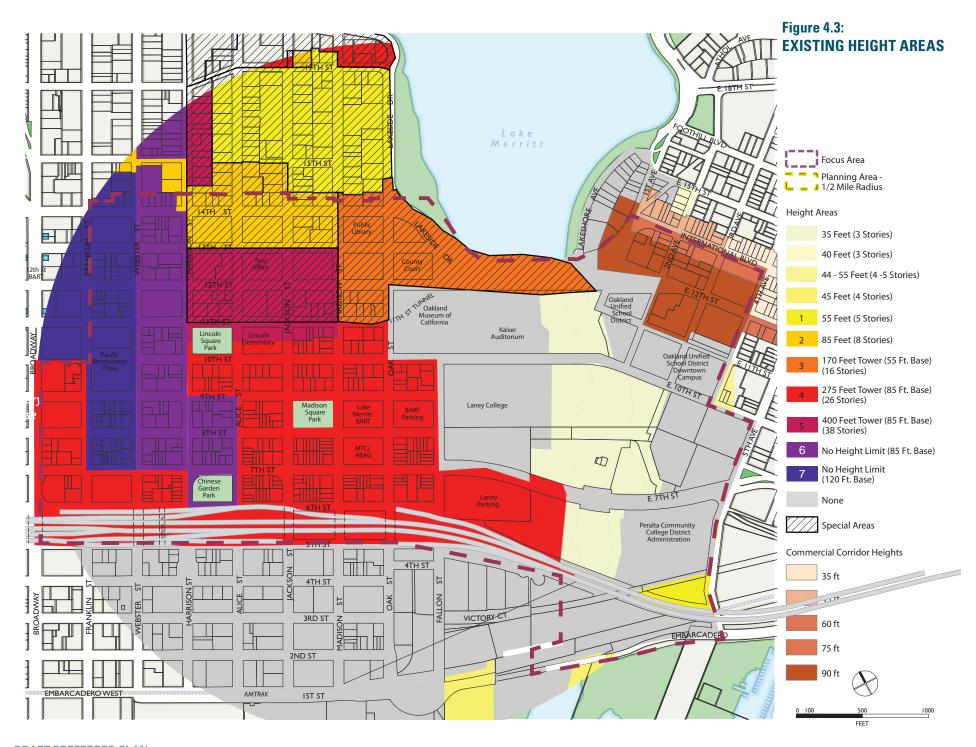
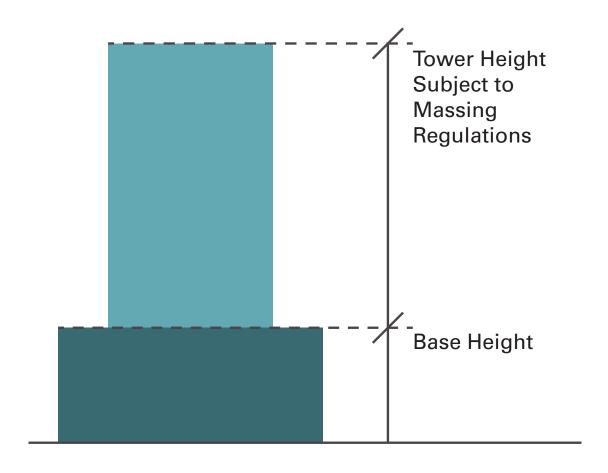


Figure 4.4: MASSING CONCEPT



Height Considerations

Height limitations for each level (base and tower), are defined based on several considerations related to the existing context and the goals and vision of the project. Various factors considered in determining the area height limits are balanced to establish a vibrant, high density, transit oriented district. Key considerations include:

- Existing Height, Density, Bulk and Tower Regulations, as adopted by the City of Oakland April 14, 2011. Allowable height areas under the existing Planning Code are shown in Figure 4-3.
- Base heights in particular will consider:
 - Pedestrian experience.
 - Prevalent height of surrounding buildings which are not likely to change.
 - Community character and consistency with historic building heights and historic districts.
- Base and tower heights consider:
 - Block and lot sizes.
 - Location relative to Downtown (generally taller buildings).
 - Proximity to transit.
 - Location relative to Lake Merritt and the Lake Merritt Channel (generally lower buildings).
 - Adjacency to public open spaces, particularly in terms of ensuring access to sunlight and limiting shading on public spaces at high-use times of day.
 - Adjacency to I-880, where taller buildings might act as a buffer between the neighborhood and the highway.

Draft Heights Map

The draft height map for the Plan is shown in Figure 4-5. Base heights are either 45 feet or 85 feet, depending on the proximity to downtown and the existing context. 85-foot base heights are located closer to downtown and along Broadway (areas 2, 4, 6, 7, 7), and on the BART blocks. 45-foot base heights are located throughout the remaining area. Height Area 9, which encompasses educational and institutional uses, is the only area that allows towers and does not have a base height.

The proposed Height Areas are as follows.

Height Area 1

This Height Area has a total height limit of 45 feet. This area is located along 7th Street in order to preserve the most intact portions of the historic 7th Street/Harrison Square Residential District Area of Primary Importance (API). While pitched roofs are typical of the historic district, they are not required of new development. New buildings will have a compatible height of 45 feet, and will be subject to design guidelines that ensure compatible design.

This Height Area is also recommended for the area including the Fire Alarm Building adjacent to Lake Merritt, given its historic status, waterfront setting, and proximity to the County Courthouse, though Area 2 may also be considered for this site.

Height Area 2

This Height Area has a total height limit of 85 feet. This Height Area is located along the northern edge of 14th Street and is consistent with the existing Central Business District height map, which reflects the 2009 proposal vetted by the Gold Coast neighborhood to the north.

This Height Area is also recommended for the half block immediately south of Madison Square Park and the half block immediately south of the BART parking lot, though Height Area 1 may also be considered for these areas. This Height Area includes some fairly intact portions of the 7th Street API, but also acts as a transition between the API and the higher density development envisioned on the BART blocks and the MTC/ABAG block.

Height Area 3

This Height Area has a base height of 45 feet to reflect the existing neighborhood scale, and a total height limit of 175 feet. This Height Area steps down from Height Area 4 to transition to the smaller scaled East Lake neighborhood to the east.

Height Area 4

This Height Area has a base height of 45 feet to reflect the existing neighborhood scale, and a total height limit of 275 feet to accommodate high density and Transit Oriented Development. This Height Area is located throughout much of the Planning Area, including the Chinatown core, the area under the freeway, and the area just east of the Lake Merritt Channel which is envisioned as a gateway to the East Lake neighborhood.

Height Area 5

This Height Area has a base height of 85 feet and a total height limit of 175 feet. These height limits reflect the existing neighborhood scale and the transition to taller building base heights along 14th Street and leading to Downtown. The total height steps down from Height Areas to the west that link to Downtown Oakland.

Height Area 6

This Height Area encompasses the large educational/institutional areas with a total height limit of 275 feet, with no base height limitation. Note that this height limit on institutional areas represents a change from unlimited heights, but height limitations were determined to be desirable near the Lake Merritt channel.

Height Area 7

This Height Area has a base height of 85 feet and a total height limit of 275 feet. This Height Area is located as a transitional height area between the Chinatown Core and Broadway and I-880, and between 14th Street and Area 8 which transitions into the Downtown core.

Height Area 8

This Height Area has a base height of 85 feet and a total height limit of 400 feet. This Height Area is located on the BART/MTC/ABAG blocks and in the area bound by 11th, Webster, 13th, and Madison Streets. These Height Areas have substantial opportunities for high Density Transit Oriented Development.

While some CSG members indicated that a 45-foot base would be desirable along 11th Street, an 85-foot base is recommended to provide a better transition to the Downtown core. Design guidelines will also help to ensure that the buildings north of Lincoln Square Park are designed to complement the park.

Height Area 9

This Height Area accommodates the tallest buildings as the area nears on the core of Downtown Oakland. The base height in this area is 85 feet, with no total height limit.

Figure 4.5: **PROPOSED HEIGHT AREAS** 17TH ST E. 18TH ST Lake Merritt ISTH ST 45 Ft Total Note: 1a should also be considered for Area 2. 1ata Robert 85 Ft Total Public Library Note: 2b should also be considered for Area 1. Post Office County Court 45 Ft Base 9 3 8 基型 175 Ft Total Oakland Oakland Museum of California Unified School 45 Ft Base 4 275 Ft Total Kaiser Auditorium BROADWAY Lincoln Square Park lementary Pacific enaissance Plaza Oakland Unified School District Downtown Campus 85 Ft Base 5 175 Ft Total E. IOTH ST Madison Lake Merritt BART Laney College 6 275 Ft Total 8 BART Parking 8TH ST 6 2b 2b 85 Ft Base MTC/ ABAG 6 275 Ft Total 7TH ST 85 Ft Base E.7THST 400 Ft Total Laney Parking 6TH ST 4 Peralta Community College District Administration 85 Ft Base 9 No height limit 880 Open Space 4TH ST VICTORY CT 3RD ST Z EMBARCADE 2ND ST **EMBARCADERO WEST** AMTRAK IST ST 1000

INITIAL BUILDING STANDARDS AND GUIDELINES

The Draft Plan will include detailed policies, development standards, and design guidelines. These are regulations that ensure development contributes to an active, comfortable, safe, and an aesthetically pleasing public realm. Streetscape concepts are presented in Chapter 6. Development standards and design guidelines will provide specific guidance on achieving the following concepts in the built environment:

Tower Massing

These concepts aim to limit the impact of towers and ensure towers are well integrated into the existing neighborhood context.

- High-rise office, residential, and other towers should be set back from the base in order to minimize the casting of large shadows and reducing apparent bulk at lower floors. Where large floorplates are necessary on lower floors, middle and upper floors should taper, step back, or otherwise employ a substantial reduction in massing. Towers should generally follow guiding widths are coverage as outlined in the Existing Height, Density, Bulk and Tower Regulations, Table 17.58.04. These regulations may be refined in the Draft Plan as appropriate.
- Towers should be separated from each other to provide sunlight, air and views between them.
- High-rise massing should be divided to reduce overall bulk and step down towards lower adjacent structures.
- Cornice lines should be consistent where new buildings meet existing structures.
- Towers should be designed to minimize shadows on public parks and ensure access to sunlight at high-use times of day.
- Towers should enhance the City skyline without blocking significant views from other buildings.

Ground Floor Design

These concepts aim to ensure a high-quality pedestrian realm and vibrant and active streets.

- Large blank walls should be avoided.
- Design should include articulation in building facades.
- Primary building entrances should be clearly marked and face onto public streets.
- Corner buildings should have distinct architectural features and defined building entrances at the corner to animate the intersection and facilitate pedestrian flow.
- Building mass and surfaces should be articulated with three-dimensional elements that create a visual play of light and shadow and reduce the apparent bulk of buildings.
- Frequent entries and windows with visible activity should occur on all publicly exposed façades of commercial buildings. Entries should be designed so that they are

- clearly defined and distinguishable as seen from the street by incorporating entry plazas, vertical massing, and architectural elements, such as awnings, or porticos.
- The ground floor of buildings identified for ground floor active uses should have visually permeable shop frontages with large windows.
- Commercial establishments should be designed to complement the pedestrian oriented nature of the neighborhood centers and the scale of the neighborhood.
- Ground floor height should be a minimum of 15 feet to ensure useful and consistent commercial storefronts.
- Parking should be designed so it does not impact building continuity. Parking should be located behind or in the interior of buildings, and curb cuts for accessing parking should be limited.

Design Compatibility

Design compatibility standards seek to ensure integration of new buildings into the existing character of the area, while allowing for more intense development and taller building heights. The initial standards focus both historic buildings and context, and cultural markers.

- New buildings should respond to the scale and placement of design features (such as cornice lines, colonnades, fenestration, materials) of earlier buildings adjacent to them.
- Ensure smooth transitions in building height. Smooth transitions can be achieved through various approaches depending on the specific location and context of development. Examples include:
 - Tall buildings stepping down adjacent to historic development.
 - Tall buildings stepping back adjacent to existing low-scale development such that the base building height is in the same range as adjacent development.
 - Use of cornice lines where new buildings meet existing structures to highlight the historic heights of the neighborhood.
- Retain and integrate historic and architecturally significant structures into larger projects, wherever feasible, with adaptive reuse.
- New development should be sensitive to the existing context of height, scale and use, particularly in terms of the pedestrian perspective and in terms of horizontal articulation (see policies on ground floor design).
- New buildings developed within historic districts should seek to contribute to the existing historic character.

Green Building

Green building focuses on a whole systems and environmentally beneficial approach to the siting, orientation, design, construction, operation, and demolition of buildings and land-scapes. Benefits of green building include natural resource conservation, energy efficiency, improved health of employees and residents, and increased economic vitality. Green building techniques include:

- Siting buildings near transit.
- Avoiding development near sensitive habitats.
- Siting buildings to take advantage of passive heating and cooling methods.
- Reusing and/or remodeling existing buildings.
- Using recycled or sustainable products (such as renewable products) that preserve natural resources.
- Installing high efficiency building systems to reduce energy and water consumption.
- Using low Volatile Organic Compound (VOC) paints, adhesives, and sealants and formaldehyde free products to improve indoor air quality.

In 2005, the City adopted a civic green building ordinance requiring green performance in major civic projects, and in 2010, the City adopted a comprehensive green building ordinance for private development projects. In addition to Oakland's local green building ordinance, the State of California recently adopted the new Green Building Code known as CALGreen. Both the City's local ordinance and CALGreen are now in effect, and will apply to new development in the Planning Area. Detailed information on green building in_the City of Oakland can be found at http://www2.oaklandnet.com/GreenBuilding/index.htm. Guidance related to CALGreen can be found at http://www.bsc.ca.gov/CALGreen/default.htm.

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5 Open Space and Recreational Facilities

Parks, public spaces and natural areas are important community assets for both social cohesion and interaction, and for physical health. Open spaces are even more essential in high intensity areas, such as the Planning Area, in order to provide a respite from the activity and noise associated with urban living.

5.1 Existing Open Space and Recreational Facilities

The Planning Area has 34 acres of public spaces that are designated as open space, including Lincoln Square Park, Madison Square Park, Harrison Square Park (Chinese Garden), Peralta Park, Lake Merritt Channel Park and a portion of Lakeside Park/Lake Merritt. These parks, along with a description of their open space zoning designation and their size, are listed in Table 5.1 below (see Figure 5.1 for a map). They are also described in more detail in the *Lake Merrit Station Area Existing Conditions Report*. The open space and recreational facilities in these parks are key assets in the Planning Area and important contributors to quality of life in this dense urban neighborhood. In addition to serving residents and workers these spaces draw users from throughout the city and the region, because of high quality programming, Chinatown's role as a center for Asian culture, and their linkage to regional open space systems.

Table 5.1 does not include the other public spaces that are not specifically zoned as open space, including the BART plaza and courtyards at Laney College; additional public spaces that have some access limitations include the playing fields of Laney College and the gardens in the Oakland Museum of California. These are also valuable public space resources within the Planning Area. The bustling sidewalks in the Planning Area also serve as important public spaces for informal social gatherings and interaction.

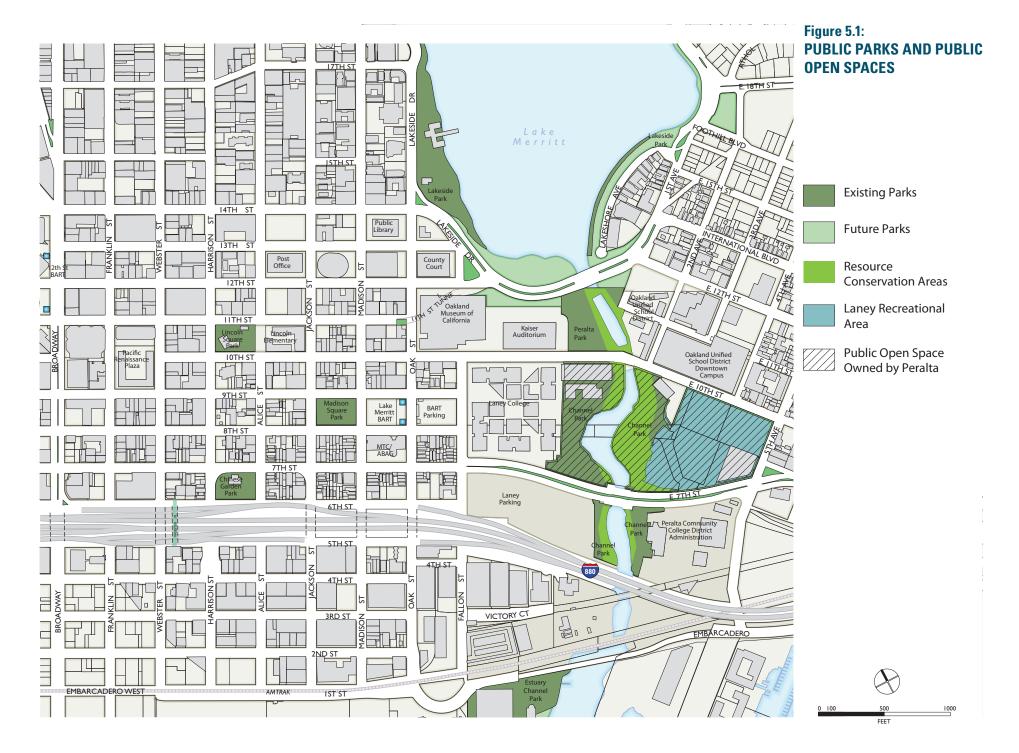
Nearby designated open space areas, just beyond a ½ mile radius from the Lake Merritt BART Station, include the Estuary Waterfront Park and the Bay Trail, Clinton Park in Eastlake, Athol Plaza on East 18th Street and the pathways and parks associated with Lake Merritt.

Table 5-1: Existing Land Zoned as Open Space in the Planning Area¹

Name	Zoning	Definition1	Acreage ²
Chinese Garden Park (Harrison Square)	Special Use Park	Areas for single purpose activities, or historic or aesthetic sites	1.3
Madison Square Park	Special Use Park	Areas for single purpose activities, or historic or aesthetic sites	1.4
Lincoln Square Park	Neighborhood Park	Located in a residential area; located adjacent to elementary schools	1.4
Lakeside Park (Lake Merritt) ³	Region- Serving Park	Large recreation areas with diverse natural and man-made features	6.5
Estuary Channel Park	Region- Serving Park	Large recreation areas with diverse natural and man-made features	5.1
Peralta Park ⁴	Linear Park	Provides linear access to a natural feature such as a creek or shoreline	2.9
Channel Park ⁵	Linear Park	Provides linear access to a natural feature such as a creek or shoreline	8.6
	Resource Conservation Areas	Purpose is to protect the natural environment; Resource Conservation Areas are areas zoned OS (RCA) within existing Peralta and Channel Parks, along the east bank of the channel.	7.4
Total Existing Ad	creage		34.6

- 1. Open Space Conservation and Recreation Element (OSCAR) of Oakland General Plan, pg. 4-5.
- 2. Only includes land specifically zoned as open space.
- 3. Acreage only includes land within the Planning Area and excludes the water body.
- 4. Acreage does not include water, or land zoned as "resource conservation area"
- Channel Park is from East 10th Street east, to I-880. Acreage does not include water, or land zoned as "resource conservation area."

Source: City of Oakland Parks Shapefile, clipped to 1/2 mile radius around Lake Merritt BART, and excluding water.



5.2 Community Needs Assessment

There have been a number of opportunities for the public to convey its suggestions for open space and recreation improvements as part of the Area Plan process. A summary of this feedback, below, serves as a tool to understand the parks, recreation and community amenities needs of those who live, work, own businesses, or visit the Station Area.

COMMUNITY ENGAGEMENT PROCESS SURVEY

In 2009, as part of the Lake Merritt Station Area Plan's Community Engagement Process, a survey was conducted of approximately 1,500 residents, visitors, business owners and Laney College students. The answers to the survey questions about parks and open space show a strong desire of the public for improved facilities and opportunities for new activities and recreation in the area.

A summary of the results shows that:

- Those who live in the study area, children¹, and seniors² ranked "parks and recreation centers" the number one aspect (out of eighteen other criteria) making the area a healthy place to live, work and do business.
- Children and seniors ranked "Insufficient parks and recreation centers" number 4 (out of sixteen other criteria) for the aspect that makes the area an unhealthy place to live, work and do business.
- "Access to parks and open space" was ranked number three (of ten criteria) by visitors and children; and all respondents (residents, business owners, employees, Laney Students and BART patrons) ranked it in the top five of the areas "urgent needs."
- When asked what the most urgent needs were for parks and open space, residents, business owners and visitors ranked "athletic fields/tai chi areas" as the number one need, while employees in the area, and BART patrons said "neighborhood parks (trees, meadows, surfaced creeks)" was the number one urgent need.

LAKE MERRITT STATION AREA PLAN PROCESS

Public input during Lake Merritt Station Area Planning process (including at workshops and open houses, and also at community stakeholder group meetings) has indicated that community members would like to have improved park and open space access. However, feedback did not produce a consensus about community desires for improving open spaces in the Plan Area, nor for the method by which new parks land can be acquired. Of the community comments, some asserted:

¹ Children were defined as those under 17 years old.

² Seniors were defined as those between 65-74 years old.

- Madison Square Park should be remain primarily as open space, without a new community center
- The Plan should include creative strategies for improving current recreation opportunities and creating new parks and open spaces.
- In Chinatown, service providers are constrained for recreational facilities.
- There is an unmet need for youth recreation.

LEVEL OF SERVICE STANDARDS FOR PARKS AND OPEN SPACE

The City of Oakland has a citywide level of service standard of four (4) acres of local-serving parks per 1,000 residents.³. The *Station Area Plan* considers this target, and will attempt to address the open space and recreation needs of current residents, and the expected new residents in the years to come.

However, the Plan Area must share limited resources with other neighborhoods in City of Oakland, with their own parks deficiencies. For example, the OSCAR notes that "the greatest (parks and open space) deficiencies are in Fruitvale and Central East Oakland." These existing deficiencies in other neighborhoods in the City affect the Plan Area: many users of the Recreation Center are from Central and East Oakland/Fruitvale, as the City learned during the focus group and stakeholder interviews, so residents of those neighborhoods, if they were better-served in local facilities, might not need to travel to the Plan Area for recreational purposes alone.

5.3 Implementation Strategies

As new development takes place and the residential population increases, improved access, maintenance, and usability of existing parks, as well as development of new parks, will be essential to ensure a high quality of life in this increasingly dense urban setting.

A main objective of the OSCAR, which still remains City policy, is reducing deficiencies in parks acreage and recreational facilities in the most equitable, cost effective way possible.⁵ The general strategy of the Area Plan is to continue to implement that objective, first by making the most out of existing spaces; secondly, by partnering with the Oakland Unified School district and other schools, and third, by expanding the amount of new parks acreage and recreation facilities

OPEN SPACE ZONING

Parks, open space, and land used for recreation are regulated by the Oakland Planning Code, specifically, the Open Space Zone. The Planning Code regulates activities which take place in

³ OSCAR, pages 4-9 and following, and Table 15, page 4-40.

⁴ OSCAR, page 4-10.

⁵ OSCAR, Objective REC-3: Parkland and Park Facility Deficiencies, pg. 4-39.

parks, and some activities require a permit process, with review by the Parks and Recreation Advisory Commission (PRAC) before they operate in an area zoned for Open Space. For example, to put a new community garden, or a new tot lot in a park requires a Conditional Use Permit (CUP); a full service restaurant in a park also requires a CUP. This means that some activities to improve parks may require a CUP application --payment of the fees, presentations at public hearings, and the time needed for staff review of the proposal. Also, some activities are outright prohibited, depending on the type of open space zoning.

MAINTAIN AND ENHANCE EXISTING SPACES

These sections describes Plan recommendations for how to make the most out of existing open space and recreational facilities in the Planning Area, including ideas for improved access, expanded programming or physical improvements.

Lake Merritt and Lake Merritt Channel

Lake Merritt, the Estuary Waterfront, Peralta Park and Lake Merritt Channel Park provide additional open space and recreation opportunities in the Plan area. Completing improvements along the channel to the Estuary is a priority of the *Lake Merritt Master Plan*, and the *Estuary Policy Plan*. Access to these parks is currently constrained from the Planning Area due to visual and physical obstacles, as well as perceived distance from the current center of commercial and residential activity. An important strategy in the *Station Area Plan* will be to improve the accessibility of these resources, through targeted streetscape improvements, (as outlined in Chapter 6), thereby improving walkability and visibility of these areas. This will implement the *Estuary Policy Plan*, which calls for linking the Estuary to Lake Merritt by enhancing the Lake Merritt Channel.⁶ The *Station Area Plan's* recommendations for new land use development (outlined in Chapter 4) will help to extend the commercial and residential activity closer to the parks. In addition, Measure DD improvements currently underway will improve access to these assets.⁷

Measure DD improvements include:

- 12th Street Redesign and creation of a *new*, four acre park on the southern edge of Lake Merritt, in the Planning Area.
- 10th Street Bridge (Clear Span Bridge, removing culverts to allow waterflow).
- 7th Street Flood Control Pump Station.
- Lake Merritt water quality improvements and amenities renovations.

⁶ See, specifically, actions "OAK-3.1: Create a system of public open spaces that connects Lake Merritt Channel to the Estuary" and "OAK-3.2: Work with public agencies in the area to extend the open space system inland from the Channel."

Measure DD was passed by Oakland voters in 2002, allowing the City to generate \$198 million in bond financing to develop parks, trails, bridges, recreation facilities, historic building renovations, land acquisition and creek restoration.

Lincoln Square Park



Lincoln Square Park is heavily used by hundreds of people during the day and evening. Community members want to maintain the uses and activities at this location and ensure continued maintenance as the neighborhood continues to grow. The OSCAR states: "This urban space is the most popular park in Chinatown and receives very heavy use." A recent focus group by the City's Office of Parks and

Recreation revealed users wanted more trees and greenery, shading, a computer lab with updated equipment in the Recreation Center, and a "multi-level building with full sports/fitness facilities."

Since the publication of the *Lake Merritt Station Area Plan Existing Conditions Report*, some improvements have been made to Lincoln Recreation Center to expand the amount of land dedicated to recreational use. This summer (2011), construction was completed on the transformation of a surface parking lot between Lincoln Elementary and the Recreation Center into additional recreational area with four-square courts, artificial turf areas for playing, and perimeter landscaping to enhance the look and feel of the park.

Additionally, the City has placed the expansion of the Lincoln Square Recreation Center, and improvements to the Park on the 2009-2011 Capital Improvement Projects list. The City has also applied for California State Proposition 84 funds for the same Park improvements and the on-site expansion of the Lincoln Square Recreation Center; decisions on Prop. 84 are expected from the state in spring, 2012.8

Making improvements to the Planning Area's other parks will provide alternative recreation resources and relieve overcrowding.

⁸ The proposed expansion will add an approximately 6400 s. f. new two-story addition to the recreation center, to serve the community of Chinatown and nearby residents. In addition, the park improvements will create additional greenery spaces, outdoor deck area, enhance lighting for evening activities, improve pedestrian pathway and access, and address storm-water treatment using bio-swale filtration and landscaped retention area.

Harrison Square Park (Chinese Garden)



Chinese Garden Park provides important cultural amenities, senior center programming9, and a community garden that is well used by residents in the Planning Area. However, access is constrained and safety a concern given the high volumes of traffic and vehicle speeds on surrounding streets, especially 7th Street. The OSCAR notes, "a Chinese Community Center was recently constructed in this historic park, dramatically changing its character. Access improvements across 7th Street are now needed to ensure pedestrian safety and the usefulness of the Park." The current route from Alameda to I-880 utilizes the portion of 7th Street bordering this park, along with other

city streets, as a part of the highway approach.

Madison Square Park



Madison Square Park has been identified by the community as a key asset that is vital to the physical and mental health of the community, particularly for the Tai Chi community. It has also been identified as a public space that could use significant improvements. Issues currently limiting use of the park include inadequate lighting and feeling unsafe.

As part of the Lake Merritt Station Area Plan process, community members have suggested improvements that would increase use of the park, and potentially bring more people in to use the park at all times of the day:

- New exercise equipment for adults, play structures for kids, community garden, gaming tables; memorial or cultural structures.
- Additional amenities: seating, public restrooms, trash cans, shade and shelter.
- Provide new programming: multipurpose, multigenerational, multicultural; festivals, exercise classes.
- Regulate use and open hours: encourage people to clean up after pets by posting ordinance and fine information. Deter homeless by instituting and posting hours of operation.
- "Activate" the park: vendors, food services, music and performance; day and evening activities;

- Improve linkages: Connect to Lincoln Square Park and other parks in the planning area through physical routes and shared programming to create a network of open spaces.
- To improve visibility into the park (and thus improve safety), remove visual barriers, such as the landscape berms along 8th and 9th Streets and the perimeter wall along Jackson Street.

During initial stages of the planning process, some stakeholders had also expressed the desire to see a community center or senior center here, but since then, community feedback has been overwhelmingly in favor of preserving as much open space (free of permanent structures) as possible in the park.

JOINT USE AGREEMENTS

The OSCAR recognizes that schoolyards are an underutilized open space resource and it directs the City to work collaboratively with Oakland Unified School District (OUSD) to make schoolyards more accessible and attractive.¹⁰ The current joint use agreement between the City of Oakland's Lincoln Recreation Center and OUSD's Lincoln Elementary is a very successful model for making existing schoolyard facilities more accessible to the larger community.

The following are potential additional opportunities for joint use agreements with other public entities that have recreational facilities in the Plan Area:

- The Oakland Unified School District "La Escuelita Education Complex" at Second Avenue and East 10th Street, on the southeast corner of Lake Merritt. This 5.5 acre development, under construction in 2011, will add new schools, a public playing field and basketball courts.
- Laney College's sports fields at Third Avenue and East 10th Street include baseball, football and track and field facilities, along with a swimming pool. While class registration fees are very affordable and Laney has special programs to increase access to its swimming pool, in particular, general public access to these facilities is somewhat limited to Laney students.

NEW OPEN SPACES AND RECREATIONAL FACILITIES

The Preferred Plan also includes recommendations for new parks and open spaces.

Required as Part of New Development

The Preferred Plan recommends that all new development over half a block in size be required to either provide on-site open space or pay in-lieu fees equivalent to having provided that space. However, this requirement would not apply to individual, smaller parcels. The Preferred Plan is recommending that larger new development provide ten (10) percent of lot

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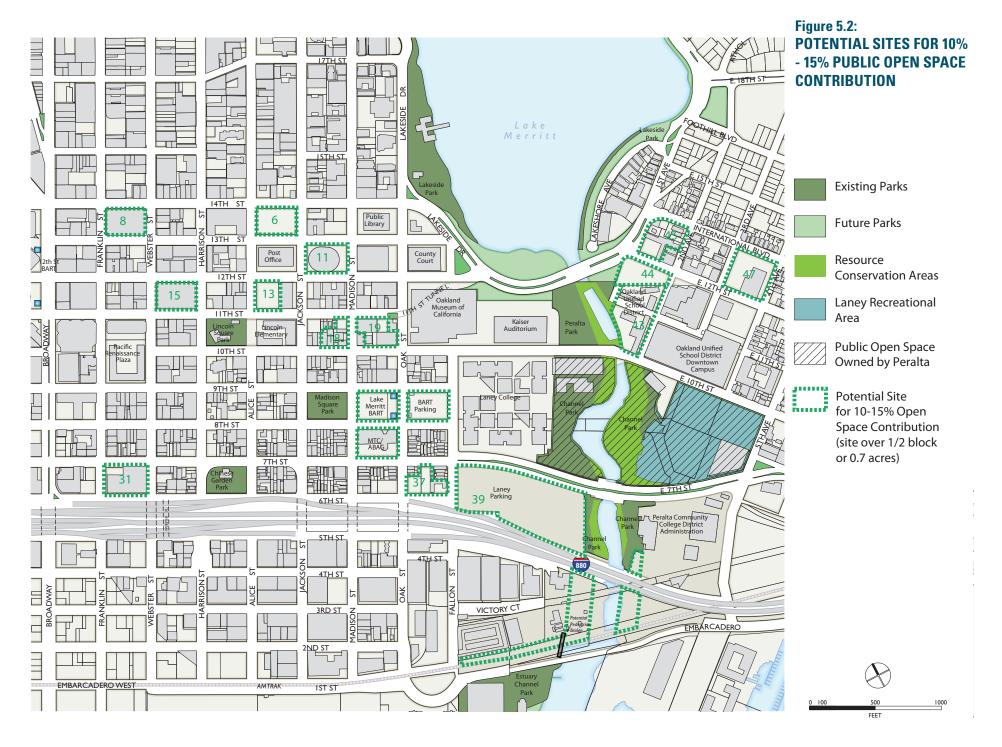
¹⁰ OSCAR Policy OS 2.2

area to publically-accessible open space¹¹. Sites that are over half a block (around 0.7 acres) are identified in Figure 5-2. To meet community benefit obligations (see Chapters 8 and 9), there will be an additional contribution of either: five (5) percent of the lot area for publically-accessible open space, or a contribution to an in-lieu fee. There will be design guidelines written for the Station Area Plan which will address the location, placement and usability of this new open space.

The Station Area Plan acknowledges that different types of open space and recreational facilities are needed to meet the various needs of present and future residents, workers and visitors. Therefore, different types of development that serve different types of users may have different requirements. For example, new office buildings could be required to provide on-site pocket-parks with landscaping while new residential development might be required to provide in lieu fees for an off-site athletic facility, based on the different needs of office workers compared to residents. Requirements may also be different for private landowners, compared to public landowners that are in the business of providing services to the public.

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¹¹ Earlier iterations of this plan had a higher percentage of publically accessible open space.



Innovative Park Typologies

In addition, the Preferred Plan also encourages innovative and lower-cost ideas to expand open space availability:

• Parklets – These are the temporary use of space in the public right-of-way (such as curbside parking spaces), for public uses such as seating, passive recreation, or landscaping. In the fall of 2011, the City of Oakland started a pilot program to encourage the development of up to eight "parklets" on commercial streets.



San Francisco parklet

• Temporary street closures – Festivals or regular events like farmers markets or night markets can convert street space into a recreational space. Fallon Street (with the potential improvements described in Chapter 6) and some of the low-traffic side-street blocks in the heart of Chinatown would be good locations for these types of activity.





Night market

Lake Merritt Improvements

The Preferred Plan recommends a new greenway or linear park along the east side of the Lake Merritt Channel. Measure DD improvements will already create a pedestrian and bicycle pathway between Lake Merritt, the Estuary waterfront, and the Bay Trail along the east side, but the Preferred Plan recommends creating new open space if the public properties along this edge redevelop.

Street Fair

As noted on page 5 of this chapter, Measure DD is creating a new four-acre park along the northern edge of the Planning Area, along with other significant open space improvements.

5.4 Park Guidelines

Along with the amount of parkland, the quality and accessibility of park and open spaces are important elements to ensuring a healthy community and a network of open spaces. Public spaces should be distributed throughout the Planning Area so that they are accessible to all users. As will be described further in *Chapter 6: Streetscape Character* and *Chapter 7: Circulation, Access, and Parking,* overall walkability and pedestrian safety in the Planning Area are expected to improve through implementation of the Station Area Plan. Adequate sidewalks, safe crossings, and active streetscapes aim to encourage walking to parks and other public spaces. The City has a number of objectives, policies and actions in place to govern the creation of new parks (see "Existing Policies" below); in addition there are a number of best practices which the Lake Merritt Station Area Plan can promote for the construction of new parks.

EXISTING POLICIES

The Oakland General Plan guides the creation of new parkland and recreation areas in the City. The *Station Area Plan* will, to the extent feasible, implement the objectives and policies from the *Open Space Conservation and Recreation Element (OSCAR, 1996)*, and the *Estuary Plan (1999)*. Selections of these are:

OSCAR objective REC-2: Park Design and Compatibility of Uses

- REC 2.2: Conflicts between park uses: "site park activities and facilities in a manner which minimized conflict between park users."
- REC-2.3: Environmentally sensitive design: "Protect natural areas within parks."
- REC-2.4: Off-site conflicts: "Manage park facilities and activities in a manner which minimizes negative impacts on adjacent residential, commercial or industrial areas."
- REC-2.5: Park Visibility: "Plan and design parks in a way which maximizes their visibility, while minimizing conflicts between pedestrians, bicyclists and automobiles."
- REC-2.6: Historic Park Features (applicable to Lincoln Square): "Respect historic park features when designing park improvements or programming new park activities."

Oakland Estuary Policy Plan

- Objective SA-2: Punctuate the shoreline promenade with a series of parks and larger open spaces: "Expand Estuary Park."
- Objective SA-5: Enhance natural areas along the shoreline: "There are significant opportunities along the Estuary shoreline and Lake Merritt Channel to enhance remnant tidal marshes and other natural areas." Some of this is part of the current Measure DD projects, such as a new tidal wetland being created between 10th and 12th Street on the west side of the Channel.
- OAK-2.1: Expand Estuary Park. Encourage aquatic sports within the mouth of Lake Merritt Channel.
- OAK-2.2: Create a major new park on the east side of the mouth of the Lake Merritt Channel, at the Estuary.
- POLICY OAK-3: Link the Estuary to Lake Merritt by enhancing the Lake Merritt Channel.
- OAK-3.1: Create a system of public open spaces that connects Lake Merritt Channel to the Estuary.
- OAK-3.2: Work with public agencies in the area to extend the open space system inland from the Channel. (Such as the new four acre park being built as part of the 12th Street reconstruction).

PARK REQUIREMENTS AND GUIDELINES

As part of the Station Area Plan process, the Oakland Planning Code will be amended to write new zoning designations for the Plan Area. This will be an opportunity to include updated park standards to apply to parks and open space in the Planning Area. For example, to meet the goals of the Preferred Plan, revised parks zoning in the Plan Area could relax the current requirement of a Conditional Use Permit for improvements, such as community gardens or tot lots. In addition, policies will be developed that reflect the following best practices and shoreline guidelines.

Best Practices

Other suggestions and guidelines to create and maintain high-quality public spaces include:

- Site parks to maximize sun access and minimize wind and shadows. Locate open space along the east, west, or south side of blocks to maximize exposure to the sun, especially from the southeast, while protecting from wind. Tall buildings should be slender in order to minimize the casting of large shadows; middle and upper stories should taper or step back, as outlined in Chapter 4.
- Maximize visibility from the street. Design open space to be physically and visually accessible from the street and designed for public use (e.g. highlight views of the park, install signage, etc.). Design open space that fronts the sidewalk to be primarily open and free of walls or other obstructions (not including trees, lights, and steps). Use landscaping strategically to identify pedestrian entrances and articulate edges for plazas and courtyards.
- Facilitate maintenance and maximize sustainability. Facilities in the Plan Area are well-used, and require regular maintenance. "Sustainability" includes low-maintenance landscape materials that are climate appropriate, drought-resistant, and require minimal irrigation (See Alameda County's Bay-Friendly Landscaping guidelines). Use of high-quality, durable materials are cost-effective in the long-term. To the extent feasible, standardize park amenities (e.g. benches and trash cans), and incorporate technology (e.g. solar trash compactors, moisture-sensing sprinklers) to minimize costs and make maintenance and repairs more efficient.
- **Design culturally appropriate amenities and programs.** Provide public art, and programming that reflect the culture of the community (e.g. inter-generational and multicultural activities). Provide amenities and programs for a variety of users (e.g. seniors, children, and teenagers) at different times of day and evening.
- Maximize comfort. Ensure that parks are clean and well-maintained. Provide ample seating, which can be comprised of benches, seating walls, and moveable seating. Provide trees, landscaping, shaded and sheltered areas, in addition to areas with full sun access.
- **Design for active and passive use.** Encourage a variety of activities, programs, and events in open spaces to promote active uses, such as kiosks for private businesses and food vendors. Also, provide opportunities for quiet passive recreation.

Shoreline guidelines

The following shoreline design guidelines will help ensure that new open spaces along the Lake Merritt Channel are publicly accessible:12

- Ensure safety and security.
- Design for a wide range of users and relate to adjacent uses.
- Design, build, and maintain in a manner that indicates the public character of the space.
- Provide public amenities, such as trails, benches, play opportunities, trash containers, drinking fountains, lighting and restrooms that are designed for different ages, interests and physical abilities.
- Maintain and enhance the visual quality of the shoreline and adjacent developments by providing visual interest and architectural variety in massing and height to new buildings along the shoreline.
- Ensure that new public access areas are clearly connected to public rights-of-way, such as streets and sidewalks, are served by public transit, and are connected to adjacent public access or recreation areas.
- Employ appropriate siting, design and management strategies (such as buffers or use restrictions) to reduce or prevent adverse human and wildlife interactions.
- Balance the needs of wildlife and people on an area wide scale, where possible.

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¹² San Francisco Bay Conservation and Development Commission, "Shoreline Spaces: Public Access Design Guidelines for the San Francisco Bay, April 2005.

6 Streetscape Character

The Streetscape Character chapter provides an overview of the public process and policy background for streetscape improvement recommendations, an outline of the streetscape vision for the Plan Area, and streetscape improvement recommendations for the Plan Area's key streets.

6.1 Background

Safe and attractive sidewalks that encourage pedestrian activity, slower traffic, a contiguous bicycling network, and strong links to local destinations and adjacent districts are the basic objectives of the Streetscape Character recommendations. Participants in the Subarea Planning Workshops and in Community Stakeholders Group (CSG) meetings have been clear in establishing these objectives as essential for enhancing livability and encouraging investment in the Plan Area. Recent studies, including the *Revive Chinatown Community Transportation Plan* (2004) and the *Lake Merritt BART Station Plan* (2006) focused on the same issues, and this Streetscape Character chapter incorporates many recommendations from these previous efforts; these include sidewalk widening and pedestrian amenities, lane reductions, and possible conversion of streets from one-way to two-way travel.

The City of Oakland *Pedestrian Master Plan* (2004) and *Bicycle Master Plan* (2009) designate specific streets and portions of streets within the Plan Area for improvements, as part of the city's overall multimodal travel network. Franklin, Webster 14th, 9th, and 8th Streets are designated for Class II (striped lane) and/or Class IIIa (shared lane) bicycle routes. Webster, Jackson, Oak, 14th, 8th, and 9th Streets are designated —Pimary Pedestrian Routes," a high priority for streetscape improvements.

State and Federal agencies require that street improvement projects receiving grant funding address multimodal access, particularly pedestrian and bicycle accommodation. Applicable policies include Caltrans Deputy Directive 64 and the Federal MUTCD California supplements. Grant applications submitted to the Metropolitan Transportation Commission (MTC) for capital improvements funding must complete a —Complete Streets Checklist" that encourages provision of bicycle ways with signs, signals and pavement markings, reduced pedestrian street crossing distances, high-visibility crosswalks, pedestrian signals and pedestrian-level lighting, shade trees, planters/buffer strips, and many other features consistent with local community preferences and the recommendations of the Plan.

6.2 Vision Framework

The Lake Merritt Station Area Plan will guide development and capital improvements for the next 25 years, and streetscape improvements are fundamental to the Plan's strategy to support commercial revitalization and transit-oriented infill development in the area. Though individual improvements are important in and of themselves, they will be most effective if they promote a vision for the growth and evolution of the district. In a district that could be easily walkable end-to-end in 10 minutes, using streetscape improvements to link destinations within and adjacent to the Plan Area is a fundamental ingredient. Figure 6.1, the —Streetscape Vision" diagram illustrates the major concepts that underlie streetscape improvement recommendations. These concepts dovetail with the Plan's land use and development policies and circulation improvement strategies:

- *Improve and Expand the Core of Chinatown*. Support the pedestrian-oriented commercial focus of Webster, 8th, and 9th Streets with sidewalk widening, streetscape amenities, lighting, and street crossing improvements, and extend Chinatown's character east along 8th and 9th to BART and Laney College.
- Connect Chinatown to the BART Station and Laney College. Establish an active, pedestrian-oriented, well-lit connection between Chinatown and the Lake Merritt BART Station/Laney College.
- Connect Chinatown to Jack London Square and the Jack London District. Eliminate the dark, unsafe character of streets and sidewalks that extend beneath I-880 with new lighting, enhanced pedestrian crossings, and attractive parking area screen walls.
- Concentrate Multimodal Access at the BART Station. Surround the Lake Merritt BART station blocks with pedestrian-oriented street and sidewalk improvements, bicycle routes, and enhanced bus transfer and kiss-and-ride areas.
- Improve Lighting, Pedestrian Crossings, and Street Trees Incrementally on All Streets. Sidewalk lighting and street crossing safety are the highest community priorities; shade trees add to property values and reduce urban heat island effects.
- Upgrade Oak Street as a Spine between Lake Merritt and the Waterfront. Improve walking and bicycling connections between Lake and Waterfront recreation and commercial destinations with lighting, widened sidewalks, street trees, a striped bikeway, and improved street crossings.
- Establish 10th Street as a "Green" connection to the Lake Merritt Channel Linear Park and Trail. 10th Street links the center of the Plan Area, including Pacific Renaissance Plaza, Lincoln Recreation Center, and Lincoln Elementary School, plus the Oakland Museum and Kaiser Auditorium to the Lake Merritt Channel park and trail improvements currently underway as part of Measure DD. Rain gardens and other sustainable development features should be used to extend a green corridor into the heart of the neighborhood.
- Highlight 14th Street as the Civic Link to Lake Merritt. Special lighting should be installed to highlight the link between the Downtown civic center and newly

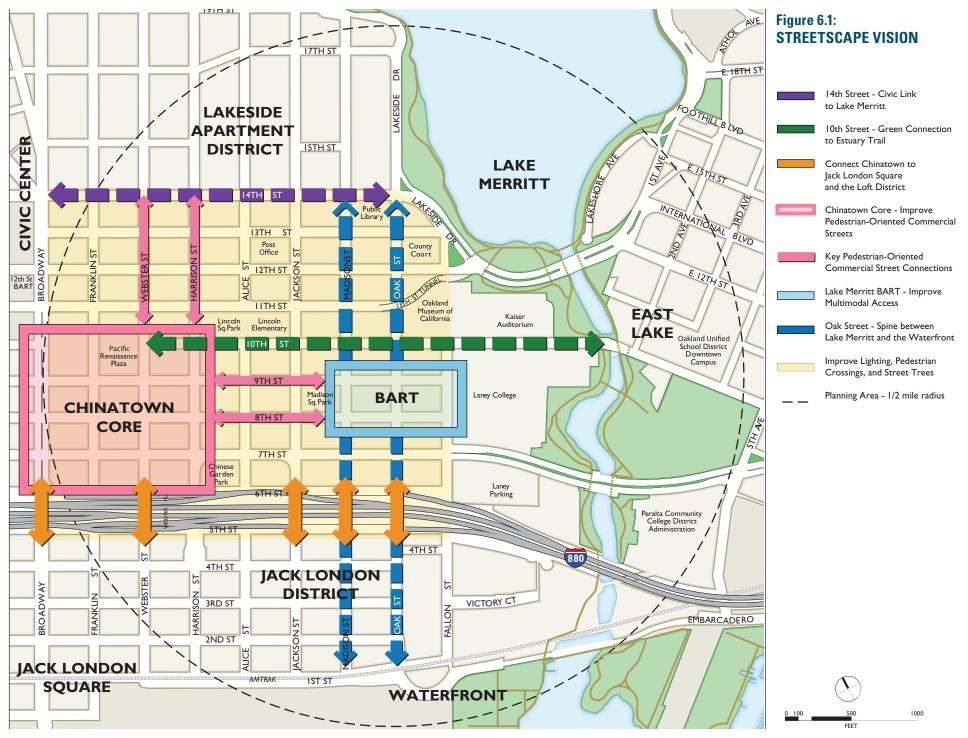
reconfigured Lakeside Drive, the new 12th Street Bridge, and the Lakeview District; continuing the Lake's -necklace of lights" between new fixtures along 14th Street is one option that should be considered. Street crossing improvements and infill street trees are also recommended.

• Add Unique Wayfinding Signage. A system of wayfinding signage should be designed and installed to highlight regional destinations (the Oakland Museum, the Chinatown commercial core, the Main Public Library, among others) and support pedestrian movement between from the Lake Merritt BART station and throughout the neighborhood. Signage should be consistent with existing signs and be fully bilingual.

Many of the improvements needed to pursue these concepts would be difficult to implement without roadway lane reductions, which are discussed in more detail in Chapter 7, —Grulation, Access, and Parking." As the Circulation discussion makes clear, existing roadways in the Plan Area have significant excess traffic capacity, so much so that practically every street in the Plan Area can have a lane removed and still accommodate projected build-out traffic levels; some streets could have two lanes removed.

In addition to lane reductions, previous planning studies have recommended that some or all one-way streets within the Plan Area be considered for conversion to two-way streets. Two-way street conversions were also recommended by a number of Community Workshop participants and by some of the members of the CSG. In the description of recommendations for Key Streets below, those streets deemed not to have likely impacts on surrounding area—i.e., those not part of a traffic couplet—are recommended for possible conversion from one-way to two-way; these streets are Harrison, 9th, and 10th streets.

Couplet streets include Franklin, Webster, 7th and 8th streets, and an analysis of the effects of converting these and other network streets to two-way traffic is not within the scope of this Area Plan and the accompanying EIR. However, conversion of more streets to two-way traffic in the future is a distinct possibility, and it is important that Streetscape Character improvement recommendations, if implemented, not eliminate this potential.

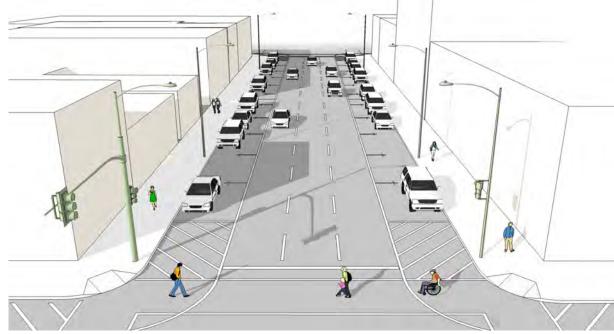


6.3 Streetscape Phasing Concept

Given the studies and construction costs associated with streetscape improvement projects, it is desirable for improvements to proceed in a phased manner that allows less expensive traffic calming and pedestrian safety improvements to proceed in the near term, with more costly lighting and sidewalk widening efforts proceeding later. The —Stet Improvements Phasing's sketches (Figure 6.2) on the following pages depict a scenario in which lane reductions and interim streetscape improvements can occur, while accommodating an ultimate configuration that has either one-way or two-way traffic.

- 1. Existing Condition A typical four-lane one-way street is shown.
- 2. Lane Reduction with Striping Only Paint striping is used to reduce the street from four lanes to three, with the extra space allocated to a wider curbside parking zone and painted corner bulb-out areas.
- 3. Improved Pedestrian Crossings Corner bulb-outs, shortened crosswalks, upgraded traffic signals, and pedestrian-oriented lighting are installed as funding becomes available.
- 4a. Sidewalk Widening and Amenities/One-Way Sidewalk widening, street trees, pedestrian-oriented lighting, and other mid-block streetscape amenities installed as funding becomes available.
- 4b. Sidewalk Widening and Amenities/Two-Way The street is converted from one-way to two-way, with new traffic signals, sidewalk widening, street trees, pedestrian-oriented lighting, and other mid-block streetscape amenities installed as funding becomes available.

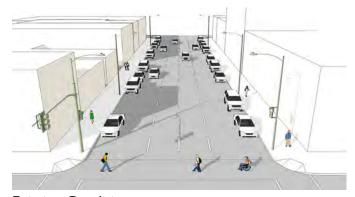
Figure 6.2: STREETSCAPE PHASING



Phase 1: Striping Lane Reduction



Phase 2: Bulb-Outs



Existing Condition

Figure 6.2 Continued: STREETSCAPE PHASING



Phase 3 (Option A): Sidewalk Widening with Lane Reduction



Phase 3 (Option B):Two-Way Conversion



Existing Condition

6.4 Recommendations for Key Streets

Streetscape improvement recommendations for key streets reflect the basic vision framework for the district described above, as well as current City of Oakland policies, recent study recommendations, and specific input from community members and CSG participants. Multiple improvement options are identified for a number of streets, generally those where excess roadway capacity allows for removal of more than one travel lane and/or conversion from one-way to two-way traffic without affecting adjacent streets in the roadway network.

Improvements are described first for key east/west streets, proceeding from north to south, then for north/south streets, proceeding from west to east. Recommended improvements reflect the —Grulation Improvement Strategies" map in Chapter 7, and are illustrated with existing and proposed conditions sketches on following pages (Figure 6.3).

EAST / WEST STREETS

14th Street

14th Street is an east-west connector, linking Downtown to East Lake, and beyond. The initial concept for 14th Street includes corner bulb-outs, sharrow bikeway, sidewalk amenities including pedestrian-oriented lighting and street trees where subterranean basements and utility vaults allow; where subterranean conditions constrain in-ground planting, consider abovegrade planter(s) with small trees or underground tree vaults. Consider distinctive lighting feature(s), such as the —necklace of lights", to create a strong link between the Downtown Civic Center and Lake Merritt.

10th Street (West of Madison)

10th Street runs between Webster Street and East Oakland, changing from a one-way to two-way street at Madison Street. 10th Street has been identified as an important street for a range of pedestrian improvements, and also identified as a street with capacity for a two-way conversion or lane reduction. Several initial concepts were developed, including:

- Option A: Lane reduction from four lanes to three lanes and conversion from oneway to two-way (including left turn lane where needed); widened sidewalks, corner bulb-outs, sidewalk amenities including pedestrian-oriented lighting and street trees.
- Option B: Lane reduction from four lanes one-way to two lanes one-way; angle parking, sidewalk widening, and —gen street" rain gardens and other features along north side; corner bulb-outs, sidewalk amenities including pedestrian-oriented lighting and street trees.
- Option C: Lane reduction from four lanes one-way to two lanes two-way; angle parking, sidewalk widening, and —gen street" rain gardens and other features along north side; widened sidewalks, corner bulb-outs, sidewalk amenities including pedestrian-oriented lighting and street trees.
- Option D: Lane reduction from four lanes one-way to two lanes one-way; Class II bike lane; sidewalk widening, and —gen street" rain gardens and other features

along north side; corner bulb-outs, sidewalk amenities including pedestrian-oriented lighting and street trees.

10th Street (East of Madison)

10th Street East of Madison is a two-way low-volume street. The initial concept for 10th Street east of Madison Street includes class II bike lane; sidewalk widening, and —gen street" rain gardens and other features along north side; corner bulb-outs, sidewalk amenities including pedestrian-oriented lighting and street trees.

9th Street Chinatown Core/West of Harrison

9th Street is an important connecting street between the Chinatown commercial center and the Lake Merritt BART Station and was identified as a priority pedestrian connection by the community. These improvements seek to meet the goals of a shared street where all modes of travel are accommodated, improved pedestrian safety and comfort, room for bicyclists, and slower moving traffic. The initial concepts for 9th Street Chinatown Core/West of Harrison include:

- Option A: Street conversion from three lanes one-way to three lanes two-way (including left turn lane where needed); corner bulb-outs, enhanced pedestrian crosswalks, a bicycle sharrow, and sidewalk amenities including pedestrian-oriented lighting and street trees.
- Option B: Lane reduction from three lanes one-way to two lanes one-way; sidewalk widening, corner bulb-outs, enhanced pedestrian crosswalks, a bicycle sharrow, and sidewalk amenities including pedestrian-oriented lighting and street trees.

9th Street East of Harrison

These improvements seek to meet the goals of a shared street where all modes of travel are accommodated, improved pedestrian safety and comfort, room for bicyclists, and slower moving traffic. The initial concepts for 9th Street east of Harrison include:

- Option A: Street conversion from three lanes one-way to three lanes two-way (including left turn lane where needed); Class II bike lane, corner bulb-outs, enhanced pedestrian crosswalks, and sidewalk amenities including pedestrianoriented lighting and street trees.
- Option B: Lane reduction from three lanes one-way to two lanes one-way; Class II bike lane, sidewalk widening, corner bulb-outs, enhanced pedestrian crosswalks, and sidewalk amenities including pedestrian-oriented lighting and street trees.

8th Street Chinatown Core/West of Harrison

8th Street is an important connecting street between the Chinatown commercial center and the Lake Merritt BART Station and was identified as priority pedestrian connection by the community. The initial concept for 8th Street Chinatown Core/west of Harrison includes a lane reduction from four lanes one-way to three lanes one-way; sidewalk widening, corner bulb-outs, enhanced pedestrian crosswalks, a bicycle sharrow, and sidewalk amenities includ-

ing pedestrian-oriented lighting and street trees. These improvements seek to meet the goals of a shared street where all modes of travel are accommodated, improved pedestrian safety and comfort, room for bicyclists, and slower moving traffic.

8th Street East of Harrison

The initial concept for 8th Street east of Harrison includes a lane reduction from four lanes one-way to three lanes one-way; Class II bike lanes; corner bulb-outs, enhanced pedestrian crosswalks, and sidewalk amenities including pedestrian-oriented lighting and street trees. These improvements seek to meet the goals of a shared street where all modes of travel are accommodated, improved pedestrian safety and comfort, room for bicyclists, and slower moving traffic.

7th Street West of Fallon

7th Street is an important citywide east-west connector. 7th Street west of Fallon is one way eastbound. The initial concept for 7th Street west of Fallon includes corner bulb-outs, enhanced pedestrian crosswalks, and sidewalk amenities including pedestrian-oriented lighting and street trees

7th Street East of Fallon

7th Street is an important citywide east-west connector. 7th Street east of Fallon is a six-lane two way street that separates Laney Campus from the Laney Parking lot. The initial concept for 7th Street east of Fallon includes a reduction of three right-turn lanes to two right-turn lanes at Fallon Street intersection; expanded median island to create pedestrian crossing refuge; signalized mid-block crosswalk connecting central portion of Laney College campus and parking area; corner bulb-outs, enhanced pedestrian crosswalks.

NORTH / SOUTH STREETS

Webster Street

Webster Street is a major north-south corridor and pedestrian street, running through the core of Chinatown and connecting to the Jack London District and the waterfront as well as the City of Alameda via the Webster Tube. The initial concept for Webster Street includes a lane reduction from four lanes one-way to three lanes one-way; sidewalk widening; corner bulbouts, enhanced pedestrian crosswalks, and sidewalk amenities including pedestrian-oriented lighting and street trees. Webster Street from 7th to 5th (including the freeway undercrossing) should have pedestrian-oriented improvements, including directional signage, to improve access to the Jack London District.

Harrison Street

Harrison Street is a major north-south corridor and pedestrian street, connecting to the Posey Tube and the City of Alameda. The initial concept for Harrison Street includes conversion from four lanes one-way to four lanes two-way between 10th and 8th Streets; corner bulbouts, enhanced pedestrian crosswalks, and sidewalk amenities including pedestrian-oriented lighting and street trees.

Alice Street

Alice Street is a local street that has been identified as a key street for lighting improvements. The initial concept for Alice Street includes corner bulb-outs, enhanced pedestrian crosswalks, and sidewalk amenities including pedestrian-oriented lighting and street trees.

Madison Street

Madison Street is a regional north/south connector, providing access to the Lake Merritt BART Station. The initial concept for Madison Street includes a lane reduction from three lanes one-way to two lanes one-way; Class II bike lane, corner bulb-outs, enhanced pedestrian crosswalks, and sidewalk amenities including pedestrian-oriented lighting and street trees.

Oak Street

Oak Street is a regional north/south connector, providing access to the Lake Merritt BART Station. The initial concept for Oak Street includes a lane reduction from four lanes one-way to three lanes one-way; Class II bike lane; sidewalk widening north side; corner bulb-outs, enhanced pedestrian crosswalks, and sidewalk amenities including pedestrian-oriented lighting and street trees.

Fallon Street (8th to 10th Streets)

Fallon Street is a local two-way street that connects the BART Station and the entrance to Laney College. The initial concept for Fallon Street includes a street width reduction; a —estival street" treatment between Laney College main entrance and BART parking redevelopment site that uses traffic calming and unique streetscape features to create a street that can easily be converted to public use on weekends or special events; sidewalk widening; corner bulb-outs; enhanced pedestrian crosswalks; and sidewalk amenities including pedestrian-oriented lighting and street trees.

I-880 Undercrossings - Broadway, Webster, Jackson, Madison, Oak Streets

Improving the I-880 under-crossings is essential for connecting the Planning Area – including Chinatown, Laney, and the BART Station – to the Jack London District and waterfront areas. The initial concept for improving the under-crossings include an ornamental screen wall along sidewalk with integral lighting; corner bulb-outs, enhanced pedestrian crosswalks, pedestrian-oriented lighting at adjacent street corners. Additional design improvements could include murals and ornamental paving. The under-crossings would be further improved with the addition of active uses, including mobile food or retail. Maintenance will also be a key issue for undercrossing improvements.

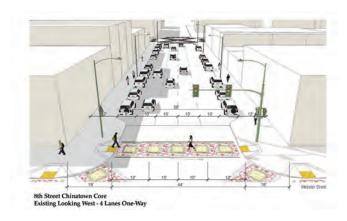
Figure 6.3: STREETSCAPE CONCEPTS

Note: The green color shown on the bike lane is only illustrative. The City of Oakland does not yet have a policy regarding green paint in bike lanes.





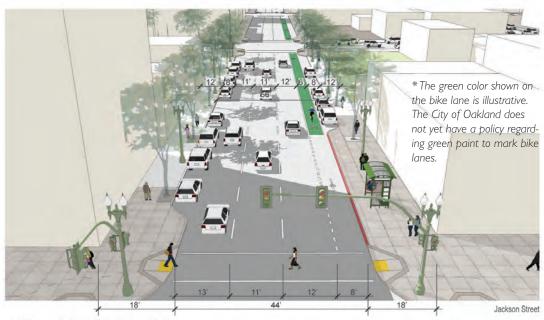
7th Street at Laney College Westbound 4/3 Lane Reduction, Eastbound Narrowed Lane, Widened Median, Bike Lanes, Additional Pedestrian Crossing







8th Street Chinatown Core 4/3 Lane Reduction, Widened Sidewalks



8th Street East of Chinatown Core 4/3 Lane Reduction, Bike Lane

Figure 6.3 Continued: STREETSCAPE CONCEPTS



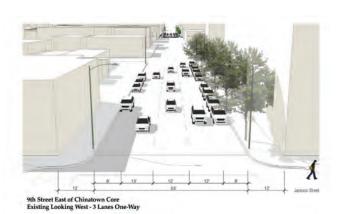
9th Street Chinatown Core - Option A Convert to Two-Way

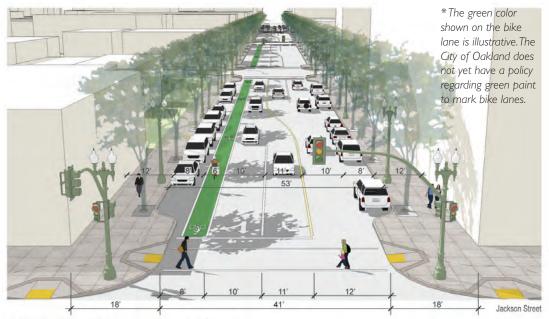


9th Street Chinatown Core - Option B 3/2 Lane Reduction, Widened Sidewalks

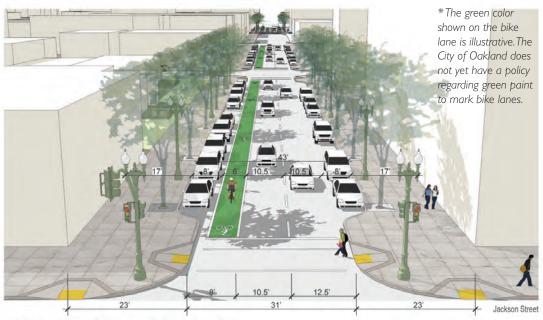


Figure 6.3 Continued: STREETSCAPE CONCEPTS





9th Street East of Chinatown Core - Option A Convert to Two-Way, Bike Lane



9th Street East of Chinatown Core - Option B 3/2 Lane Reduction, Widened Sidewalks, Bike Lane

Figure 6.3 Continued: STREETSCAPE CONCEPTS





10th Street - Option B 4/2 Lane Reduction, Widened Sidewalks, Angle Parking, "Green Street"



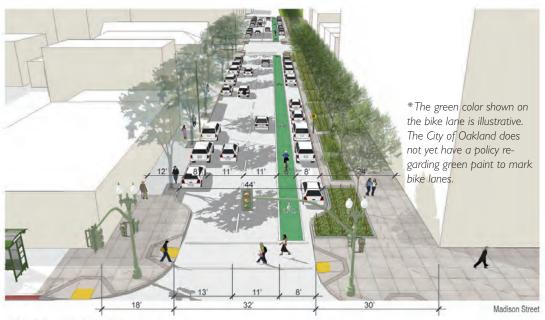
Figure 6.3 Continued: STREETSCAPE CONCEPTS



10th Street East of Fallon Street
Existing Looking West - 2 Lanes Two-Way
4/2 Lane Reduction, Widened Sidev



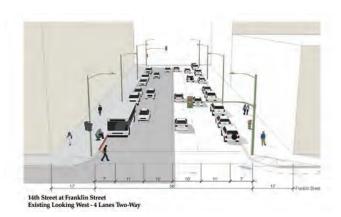
10th Street - Option C Convert to Two-Way, 4/2 Lane Reduction, Widened Sidewalks, Angle Parking, "Green Street"

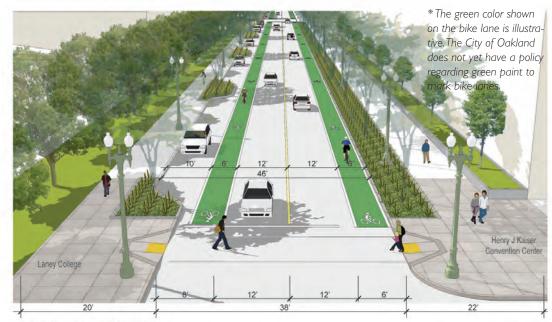


4/2 Lane Reduction, Widened Sidewalk (north side only), Parallel Parking, Bike Lane, "Green Street"



10th Street East of Fallon Street Existing Looking West - 2 Lanes Two-Way



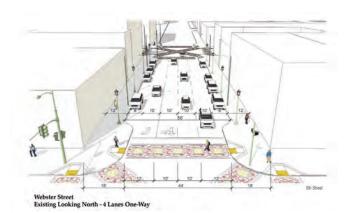


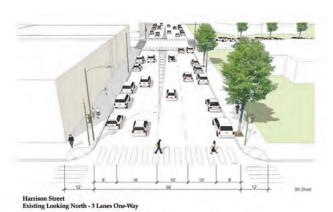
10th Street East of Fallon Street Narrowed Lanes, Widened Sidewalk, Bike Lanes, "Green Street" Improvements

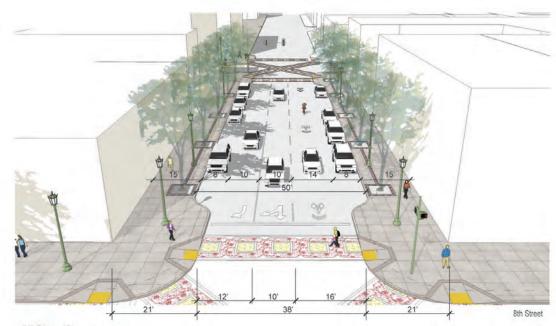


14th Street at Franklin Street Sidewalk Improvements, Distinctive Lighting

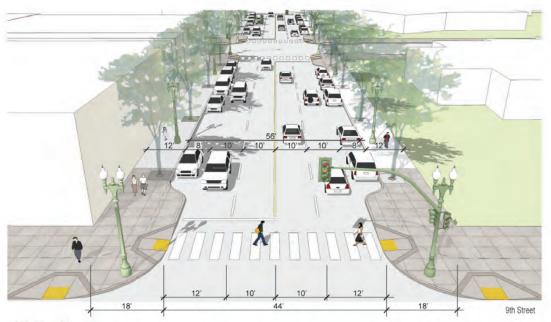
Figure 6.3 Continued: STREETSCAPE CONCEPTS





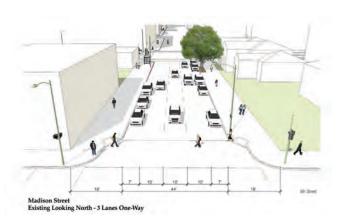


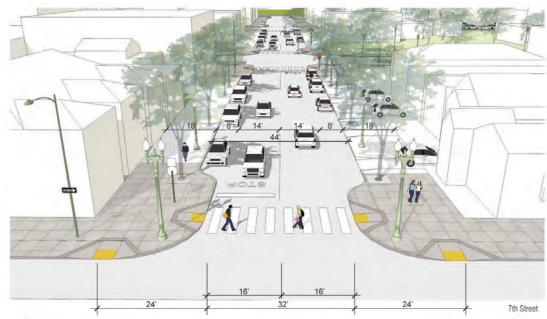
Webster Street 4/3 Lane Reduction, Widened Sidewalks



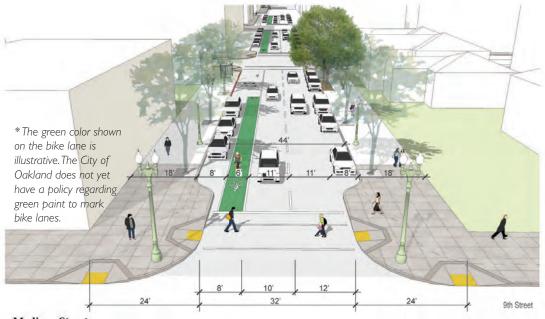
Harrison Street Convert to Two-Way, 3/4 Lane Addition







Alice Street Sidewalk Improvements and Lighting



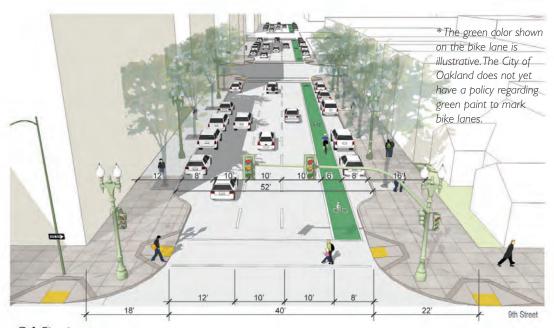
Madison Street 3/2 Lane Reduction, Bike Lane



Oak Street Existing Looking North - 4 Lanes One-Way



Fallon Street 8th to 10th Existing Looking South - 2 Lanes Two-Way



Oak Street 4/3 Lane Reduction, Bike Lane, Widened Sidewalk (east side only)



Fallon Street 8th to 10th - Option B Plaza with Narrowed Lanes, Widened Sidewalks, Street Amenities at Frontage



Oak Street Underpass Existing Looking South - 3 Lanes Two-Way



Webster Street Underpass Existing Looking South - 1 Lane One-Way



Oak Street Underpass Lighting, Ornamental Wall and Fencing, Bulb-Outs, Bike Lane



Webster Street Underpass Lighting, Ornamental Wall and Fencing, Bulb-Outs

6.5 Transit Hub

A Transit Hub on Oak Street is one possible option for improving access at the Lake Merritt BART Station. A more in-depth discussion of access strategies is included in Chapter 7. This discussion explores one or more possible approaches.

Primary access to the Lake Merritt BART station for automobiles and eastbound buses is provided along Oak Street. The block between 8th and 9th Streets could be improved as an on-street —transit hub", with improved bus bays, kiss-and-ride drop-off area, and enhanced pedestrian and bicycle access and support facilities. BART patrons traveling on westbound buses could get off on 8th Street at Oak. An illustrative sketch shown in Figure 6-4 shows removal of existing on-street parking along the easterly frontage to create a bus-only transfer area, and on-street parking along the westerly frontage re-programmed to create a —ks-and-ride" drop-off and pick-up area during peak commute hours. Corner bulb-outs could shorten pedestrian crossing distances and help define the transit hub as a special street segment. In this block, the bike lane planned north and south would continue through with dashed striping. Other configuration for the Transit Hub will also be explored, such as reducing or eliminating the proposed corner bulb outs to allow for more efficient bus operations, and locating the —ks-and-ride" drop-off and pick-up area on the south side of 9th Street between Oak and Fallon Streets to eliminate the need for auto passengers to enter or exit cars adjacent to a traffic lane.

The illustrative Transit Hub sketch also depicts general improvements to plaza areas on adjacent re-development sites. On the west side of Oak Street, planting areas are reconfigured to provide more visibility and pedestrian circulation adjacent to BART station escalator entries. On the east, the large existing concrete shelter structure is replaced with smaller, more contemporary architectural glass structures to allow more space for pedestrian circulation and provides a landmark for the transit hub area as a whole. A key card-accessed bicycle corral is depicted near planned new development on the adjacent BART parking site at 9th Street. More open, corner café-oriented spaces are depicted adjacent to the proposed retail corners at 8th and 9th Streets.

Figure 6.4:
OAK STREET TRANSIT HUB





Oak Street at BART Station 4/3 Lane Reduction, Bikeway, Bus Transfer Area, Kiss-and-Ride Drop-Off, Plaza Renovations

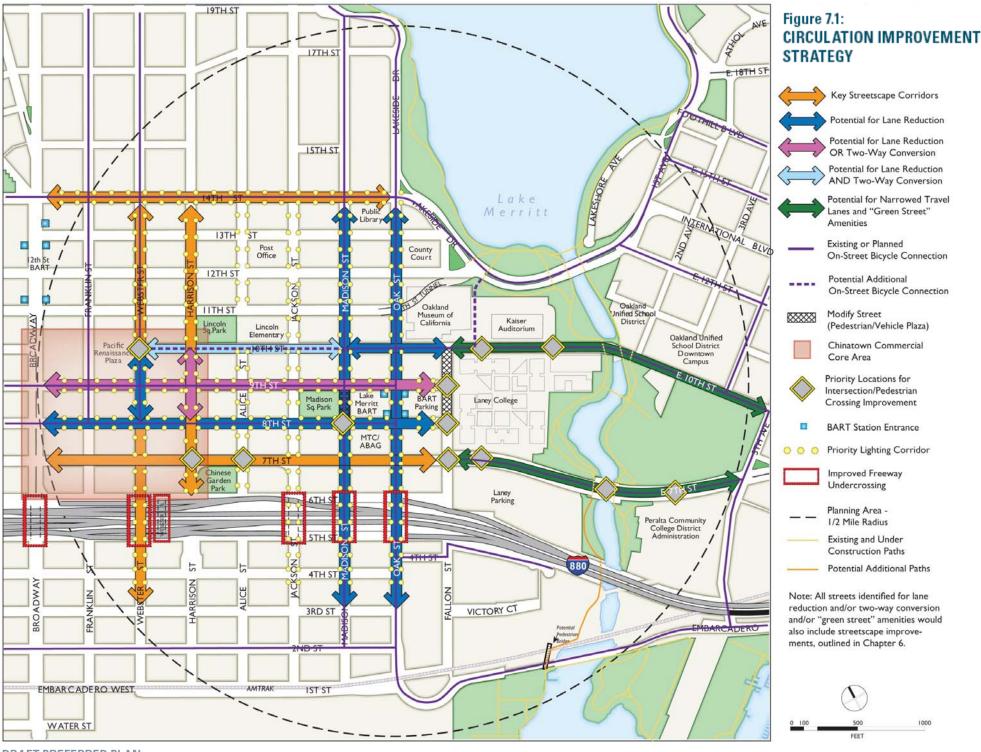
Note: This is only one of many possible access design solutions for the BART Station Area. Additional discussion of access strategies is include in Chapter 7.

7 Circulation, Access, and Parking

The Lake Merritt Station Planning Area provides local residents, employers and employees, students, and visitors access to a broad range of transportation options, including BART, AC Transit, local shuttles, regional freeways, and local streets. The primary circulation goal of the Lake Merritt Station Area Plan should be to provide enhanced linkages within the Plan Area and better connectivity to the surrounding area. Pedestrian, bicycle, transit, and vehicular connections should be enhanced through roadway reconfigurations and redevelopment to maximize the accessibility of open space, mixed use amenities, and transit.

The existing grid of small blocks is ideal to reconfigure the existing roadway network into a system of pedestrian- and bicycle-scale streets, connecting the Lake Merritt BART station to the area's amenities, including Oakland Chinatown, Laney College, and the government office buildings. The circulation system within the Planning Area should minimize the need for auto travel, and promote walking and bicycling, particularly connecting non-vehicular modes of travel to the BART station. Improved connectivity both within the Planning Area and to the surrounding neighborhoods and downtown will enhance the area's accessibility and role as a citywide destination.

The circulation strategies are designed to minimize the need for auto travel and promote the use of walking, bicycling, and transit as the primary mode of travel in the Planning Area. The circulation strategies also closely correlate with the proposed land use plan, concentrating higher density uses near the BART station and providing enhanced pedestrian and bicycle connections. Additionally, the linkages to the surrounding neighborhoods and downtown will be enhanced, reducing the need for employees, students, and visitors of the area to use automobiles to access the area. The overall circulation improvement strategy is shown in Figure 7.1. All streets identified would include streetscape improvements, as shown in Chapter 6.



7.1 BICYCLE AND PEDESTRIAN IMPROVEMENTS

A major improvement to bicycle and pedestrian access is already underway with the Measure DD improvements around Lake Merritt and the Lake Merritt Channel. One additional connection between the Kaiser Convention Center and the Oakland Museum of California is also recommended as part of the Preferred Plan. These improvements represent a major asset in terms of access as well as public open space. The improvements are shown in Figure 7-2.

INTERSECTION AND PEDESTRIAN CROSSINGS

Numerous intersections and pedestrian crossings have been identified by the community as priority locations for pedestrian crossing improvements, including:

- Two locations along 10th Street east of Fallon Street between Laney College and Kaiser Auditorium;
- 7th Street and Fallon Street;
- Three locations along 7th Street between Fallon Street and 5th Avenue;
- 9th Street and Fallon Street;
- 8th Street and Madison Street;
- 8th Street and Fallon Street;
- 7th Street and Harrison Street; and
- 7th Street and Alice Street.

7th Street and Fallon Street Improvements

This report looks in greater detail at the 7th and Fallon streets intersection because it is a city-wide connector that carries substantial traffic. 7th Street represents a challenge for the Planning Area. Several intersections along 7th Street are identified for intersection improvements. The intersection of 7th Street and Fallon Street represents a key intersection in terms of connections to Laney College, the Laney Parking lot, and the BART Station. Improvements at this intersection also provide an opportunity to reduce traffic on 8th Street (which is identified as a key connector for bicycles and pedestrians) between Fallon and Oak streets. While several intersections on 7th will be addressed in the Plan this intersection is described in greater detail as the improvements will impact the roadway configuration and circulation on adjacent blocks.

Currently, 7th & Fallon is a signalized intersection. On the westbound (WB) 7th Street approach to the intersection, there are three right turn lanes to serve traffic headed for the BART station, Laney College or Downtown Oakland, and one left turn lane to serve a small amount of development on Fallon south of 7th. No AC Transit routes use this intersection.

The Laney College Facilities Master Plan (2009) includes discussion of improvements around the campus, including the 7th/Fallon intersection. In particular, it recommends a poss-

ible entry feature and lighting and landscaping improvements at the 7th/Fallon intersection to emphasize it as a gateway to the campus.

The intersection currently operates at LOS C in both the AM and PM peak hours (*Lake Merritt BART*, 2006). Given the relatively good level of service and wide cross section of 7th Street, a number of alternative improvements should be possible without degrading the level of service below the City's standard:

- Removing one of the right turn lanes on 7th Street WB turning onto Fallon Street, so there are two right turn lanes. This could reduce the crossing distance (depending on the improvement), and would allow other changes within the right of way. That could include extending street parking (to gain three to five on street parking spaces—but not reducing the pedestrian crossing distance), or widening the median island present now to provide a larger pedestrian refuge area, and adding corner bulb outs to the intersection. Bulb outs would reduce the effective crossing distance.
- Making 7th Street two-way between Fallon and Oak Streets, so as to allow 7th Street WB traffic to turn right on Oak Street is another option to consider. Today, the large volume of right turning traffic (that presumably influenced the decision to provide triple right turn lanes) is due to traffic having to turn right on Fallon and left on 8th Street in order to turn right onto Oak Street northbound. This —dogleg" movement could be eliminated if WB traffic on 7th Street could proceed all the way to Oak Street, and make a right turn there.

PEDESTRIAN IMPROVEMENTS AND TRAFFIC CALMING

The following pedestrian improvements and traffic calming projects are recommended. Many of the improvement strategies would be applied to all streets and intersections throughout the Planning Area. They include:

- Addition of pedestrian scaled lighting on key streets as shown in 7.1, and enhanced lighting around the BART Station.
- Install four-way crosswalks, or scramble systems at key intersections as outlined in Revive Chinatown:
 - 8th Street and Franklin Street.
 - 9th Street and Franklin Street.
 - 9th Street and Webster Street.
 - 10th Street and Webster Street.
- Paint/re-paint vehicle —top lines" at least five (5) feet back from crosswalks, to reduce vehicle intrusions into pedestrian crossing areas.
- Restripe vehicle travel lanes to 10- to 11-foot widths (rather than 12 feet, as is typically found today), to help reduce vehicle speeds and pedestrian crossing times.
- Provide corner —**b**lb outs" and curb extensions.

- Reduce the number of through travel lanes, as described in Chapter 6 and below, to reduce pedestrian crossing distances.
- Add pedestrian —afuge islands" in the center of streets two-way, where width allows and where consistent with traffic operations and safety needs. Refuge islands are not used on one-way streets, because of the danger of vehicles hitting them.
- Coordinate traffic signals and timing to calm traffic and improve the pedestrian experience:
 - Provide pedestrian —ount down" timers, where not already installed (the City already has a policy to install them gradually).
 - Increase the pedestrian crossing times at intersections, to provide additional crossing times as required in 2010 California Manual of Uniform Traffic Control Devices. Within 600 feet of senior centers, daycare and recreation centers, provide -press and hold" pushbuttons at signals that allow pedestrians to request a longer crossing time (this would require new traffic signal control equipment and programming).
 - Coordinate traffic signals so vehicle speeds are 25 mph or less.
 - Keep signal cycle lengths—the time needed to repeat a series of green/yellow/red signals—as short as possible, in order to minimize waiting times for signals and minimizes crossing against the red.
 - Provide a leading —WALK" interval prior to the display of a green light to vehicles, so that pedestrians may safely begin crossing a street before vehicles start making turning movements.
- Use part-time turn prohibitions where there are significant pedestrian/vehicle conflicts due to turning movements. For example, right turns on red could be prohibited during school hours, or when there are significant numbers of shoppers, such as in the afternoon, or Saturdays.
- Add new traffic signals, where warranted, to slow traffic and provide safe crossings of streets, e.g., at 7th and Alice Streets.
- Ensure sidewalks include a minimum of five (5) feet clear for pedestrian access. Eliminate sidewalk obstructions, such as parking meters, unneeded street furniture, etc., to increase the effective sidewalk width. See Section 7.5 for more detail on sidewalk displays.
- Provide enhanced pedestrian signage and lighting under I-880 to better connect the BART station and the AMTRAK Jack London station at 2nd and Alice Streets.
- Bicycle parking at the BART station is discussed below in the Transit section.

Several of these streetscape and circulation proposals have been found in research literature to be associated with health and health-related outcomes. Transportation improvements in the Preferred Plan with health benefits include:

• Pedestrian improvements such as corner bulb-outs, enhanced pedestrian crosswalks, pedestrian-oriented lighting and street trees. These improvements are likely to im-

prove visibility and safety of pedestrians and improve the overall quality of the pedestrian environment.

• Lane reductions and/or roadway narrowing. These improvements would likely lead to slower vehicle speeds and improve pedestrian and bicycle safety. Lane reduction has been found to reduce pedestrian collisions.

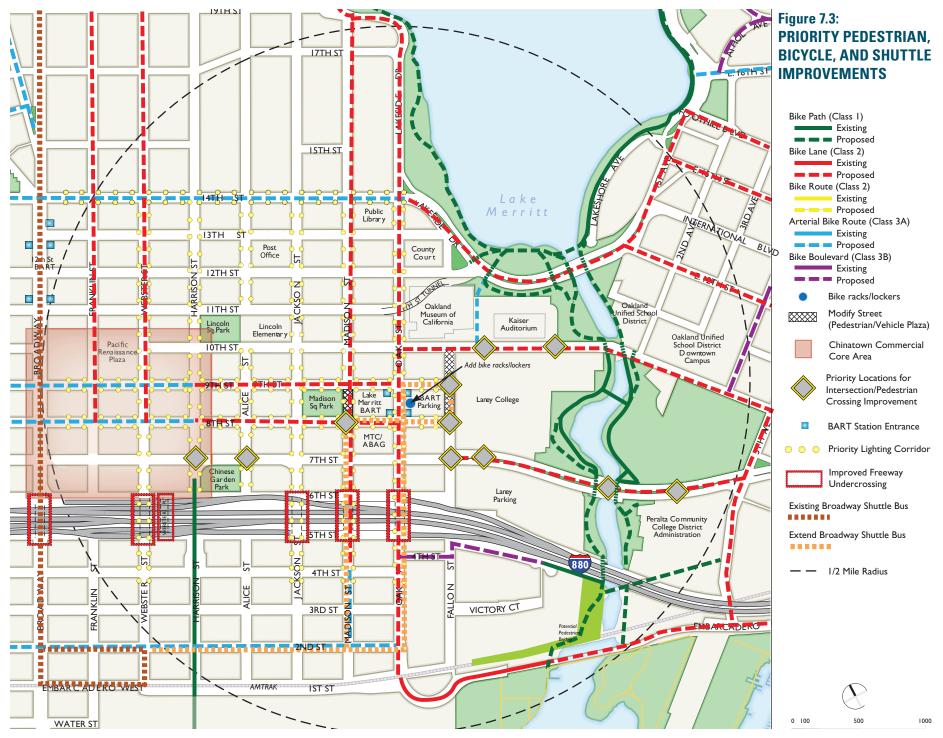
BICYCLE NETWORK IMPROVEMENTS

Figure 7-3 shows the bicycle and pedestrian improvements proposed. Bikeway classifications are as follows:

- **Bicycle Paths** (Class 1) are paved rights-of-way completely separated from streets. Bicycle paths are often located along waterfronts, creeks, railroad rights-of-way or freeways with a limited number of cross streets and driveways. These paths are typically shared with pedestrians and often called mixed-use paths.
- **Bicycle Lanes** (Class 2) give bicyclists striped lanes on streets, designated with specific signage and stencils. Bicycle lanes are the preferred treatment for all arterial and collector streets on the bikeway network. Bicycle lanes should not be installed on low-volume, low-speed residential streets. Because of driveways on those streets, bicyclists are safer riding in the middle of the travel lane.
- **Bicycle Routes** (Class 3) designate preferred streets for bicycle travel using lanes shared with motor vehicles; the only required treatment is signage. There are two types of Class 3 bicycle routes:
 - Arterial Bicycle Routes (Class 3A): On some arterial streets, bicycle lanes are not feasible, and parallel streets do not provide adequate connectivity. These streets may be designed to promote shared use with lower posted speed limits, shared lane bicycle stencils (also known as -sharrows"), wide curb lanes, and signage.
 - Bicycle Boulevards (Class 3B): Bicycle boulevards are bicycle routes on low traffic volume residential streets that prioritize through trips for bicyclists and reduce delay. Traffic calming should be introduced as needed to discourage drivers from using the boulevard as a through route. Oakland's Bicycle Boulevards will be marked with shared lane bicycle stencils (also known as -sharrows") and signage.

The City of Oakland's *Bicycle Master Plan* (2007) is the governing planning document for new bicycle facilities in the City. The plan identifies 8th and 9th Streets; Franklin and Webster Streets; and Madison/Oak Streets and Lakeside Drive, as streets with future Class II painted bike lanes. Tenth Street is proposed for bike lanes east of Madison Street. In addition, 14th Street is shown as a signed bike route (Class III), but with no physical lane reserved for cyclists. In addition, one of the four proposed concepts for 10th Street, illustrated in Chapter 6 includes extending the 10th Street bike lanes to the west, as far as Webster Street. The Emerging Plan also modifies the bike plan by proposing —Isarrows" rather than bike lanes in within the Chinatown commercial core.





7.2 Station Access Improvements

Increasing transit use and improving transit access are essential elements of the Preferred Plan. Between BART, AC Transit, and various private shuttles, the Station Area is one of the transit richest locations in Oakland. BART service connects the Station Area to the larger Bay Area region. The Lake Merritt BART Station in particular is an important station for bicyclists as it is the only station in Downtown Oakland that allows bicycles on during commute hours. AC Transit connects the area by trunk bus lines to Fruitvale, East Oakland, Pill Hill, Kaiser Center, Rockridge, Temescal, Emeryville, Berkeley, and Alameda, among other destinations. Direct service is also available to Grand Avenue, West Oakland, and the Macarthur Corridor

The existing BART station forms the natural focus of transit improvements and intermodal transfers in the area. Although the Lake Merritt station is not expected to have any capacity constraints related to the station itself in the future, new development in the area is expected to increase its use by new residents and workers. Based on a survey of downtown employees (Dowling Associates, 2003), 23 percent of new employees in the area can be expected to use BART to commute to their job, and at least seven percent would use AC Transit. The survey found that approximately five percent of the workers in the area walked to work, and two percent bicycled.¹

This strategy looks at short and long term access solutions for multiple modes of access. The short term improvements are those that can be taken in a six to 24 month time frame, are exempt from CEQA or require minimal review, and require minimal inter-agency coordination. Long term improvements are actions that are likely to take more than 24 months to complete, may require CEQA review, and/or require significant inter-agency coordination.

A variety of design solutions may meet the various multimodal access needs. The Oak Street Transit Hub depicted in Chapter 6, section 6.5 is only one possible concept for addressing access. There could be a few different lay-out options for the shuttle, bus, taxi, and kiss & ride areas. For example, kiss & ride areas could also be located on 9th Street (as opposed to Oak Street where is it shown in the Oak Street Transit Hub). All long-term improvements will be coordinated with future roadway reconfigurations, as discussed in the next section.

CURB MANAGEMENT

One of the guiding strategies for station access improvements is to allocate curb space to reflect the greatest benefit to the greatest number of users, irrespective of mode. This strategy emphasizes the principles of _curb management,' which is defined as proactively managing curb space to maximize the benefits of scarce curb space, typically by restrictions on uses/users, time of day or duration of parking, and/or pricing.

¹ This mode share represents the Chinatown/Metro Center and the County Center areas, which is somewhat lower than the Downtown average.

Short Term Actions

- Repainting curbs and relocating metered parking. To the extent feasible, lost parking
 meters will be relocated within the Planning Area. This could be achieved through
 inclusion of diagonal parking on some streets where there is no conflict with bicycle
 access. One one-way streets diagonal parking could be located on the opposite side of
 the street from a bike lane.
- Re-stripe five metered auto parking spaces on for —ks-and-ride" loading zones and one designated taxi waiting spaces. As an alternative, curb passenger loading zones could be restricted to occupied vehicles during peak commute hours, such as 7-9 AM and 4-6 PM, and be available for short-term parking during the rest of the day. This reduces the congestion caused by vehicles double-parking and blocking moving traffic lanes, and also enhances the safety of passengers. This could be located either on Oak Street (west side, before 9th Street) per the Oak Street Transit Hub, or in some other location, such as on the south side of 9th Street between Oak and Fallon Street.
- Removing parking along east side of Oak Street between 8th Street and 9th Street and designating the block for three bus bays.
- Identify designated spaces for BART police and maintenance staff near the stairwells/elevator headhouse. There are currently two existing yellow zones that are perhaps underutilized (not in right location). Move BART police vehicle parking from the west side of Oak Street to the north side of 8th Street.
- Lane re-striping as part of re-surfacing project (may require CEQA review, especially if bike lanes are added).
- Enforce no parking zones.

Medium and Longer Term Actions

- Provide substitute parking under 880 freeway (owned by Caltrans, currently leased by ABAG/MTC).
- Could include developer-option to provide replacement parking in future buildings to be constructed on BART-owned property (existing surface lot or former BART headquarter site), as an optional element. Replacement parking on this site may be very expensive and contrary to other planning goals.
- Add a second taxi loading zone, if surveys indicate that there is demand after the first taxi zone is in place.
- Allow shared parking where land uses are complementary with respect to their parking demand.
- Create electric vehicle parking/recharging stations.
- Designate motorcycle/moped parking area.

PEDESTRIAN ACCESS

An improved pedestrian environment throughout Planning Area will also improve access to both the Lake Merritt and 12th Street stations. Pedestrian improvements for the Planning Area are outlined above, and include a network of safe walking routes between the station and surrounding neighborhoods (e.g., Oak/Madison Street and 8th/9th Streets) and improved pedestrian scaled lighting and traffic calming. These strategies will improve pedestrian access to the station by improving the safety and vibrancy of streets. Additional improvements to pedestrian access are outlined below.

Short Term Actions

- Provide directional wayfinding signage on street to key destinations, using City of Oakland standard signage. Signs should be multi-lingual and highlight the multiple attractions and destinations in the Planning Area. Signs in neighborhood should also guide travelers to the Lake Merritt station, as well as away from it.
- Improve lighting for pedestrians at the station, including bus waiting areas on Oak Street.
- Improve lighting on key streets accessing the station, such as on 8th and 9th streets and in the Oak Street undercrossing of I-880.
- Provide security improvements at the station;

Medium and Longer Term Actions

- Improve sidewalks south of 880 (Jack London District) to provide better access to Amtrak station.
- Provide corner bulbouts where they do not conflict with bus operations.

BICYCLE ACCESS

An improved bicycle network throughout Planning Area will improve access to the Lake Merritt and 12th Street stations, for example by providing bike lanes on 8th, 9th, Oak, and Madison streets. The Lake Merritt BART Station is the only downtown Oakland Station allowing bikes during all hours (12th Street and 19th Street stations restrict bicycles from the station during the peak hours), further emphasizing the importance of bike access to the Station.

Short Term Actions

• Provide bike corral in plaza (near as possible to station entrances) where the former BART headquarter building was. Based on the 8 percent bicycle mode share from the 2008 BART Passenger Profile survey for the Lake Merritt Station, and assuming that approximately 40 percent of those riding to the station park at the station (rather than taking their bikes on BART), it is estimated that approximately 112 bike spaces (in addition to the 53 existing spaces) would be needed to meet existing demand. Allowing 30 to 40 percent growth at the station, this would indicate an ultimate need

for 130 or 140 bicycle parking spaces by 2035. This total goal may be met over time. This total may be met through short, medium, and long-term actions.

Add bicycle lockers.

Medium and Longer Term Actions

- Provide additional bike station/lockers as part of new development on BART property.
- Provide shared bike parking with Laney College.
- Add bike lanes as noted in *Emerging Plan* section 7.1 (pp. 7-1 thru 7-6).

TRANSIT

Short Term Actions

- Improve on-street bus area by removing parking along east side of Oak Street between 8th Street and 9th Street and designating the curb edge for buses only.
- Provide NextBus arrival screen at transit passenger waiting area; include Alameda shuttle if possible.
- Provide transit kiosk with detailed information on transit options at the hub. All information should be bilingual.
- Increase bus loading areas as described in the curb-management section above, and increase bus layover/parking areas to accommodate at least three buses (or two buses and a shuttle).
- Ensure that pedestrian improvements, such as corner bulb-outs, do not conflict with bus operations.
- Provide bilingual instructional signs for BART ticket and change machines.
- Improve bus waiting area comfort and safety.
- Move bus stops to the far side where possible to improve visibility and operations.
- Maintain 11-foot travel lanes where AC Transit bus routes exist.
- Where bus layovers exist, parking lanes must be at least 10 feet wide to allow the buses to layover outside of the bike lane.

Shuttles

Currently there are several shuttle services in the Planning area, including non-profit services shuttles, Alameda County shuttle, Executive Inn & Suites Shuttle, Alameda County Medical Center Shuttle, Highland Hospital Shuttle, and a new shuttle to College of Alameda. The service needs of the various shuttle services will be considered in allocating shuttle loading and layover spaces. Currently shuttles are loading in shared AC Transit stops or in the BART parking lot. Loading and layover zones for shuttles should be identified.

Over the long term, the existing —Bon Broadway" shuttle bus service, or a future streetcar replacement of this bus service, may be extended to serve the Lake Merritt BART station. Existing service currently runs from Embarcadero West (Jack London Square) along Embarcadero to Webster to provide access to the Amtrak Station, then back along 2nd Street to Broadway, and then north on Broadway to Grand Avenue, where it loops back south on Broadway. On weekends the route extends farther north to the Uptown area. An extension could run via 2nd Street to Oak Street, to a turnaround near the BART station and return on Madison Street to 2nd Street or 3rd Street as a route back to Broadway. This would provide improved connection between Laney College, the Lake Merritt BART station, Jack London Square, the Amtrak station, and the BART stations on Broadway (12th and 19th Street). Shuttle service currently runs at 10- to 15-minute intervals on weekdays between 7 AM and 7 PM. It is likely that an additional shuttle would be required to maintain the existing intervals between shuttles. Additional shuttle routes or extensions that serve the Chinatown commercial core should also be considered, as outlined in Revive Chinatown.

7.3 Roadway Network

The major priorities for the roadway network are to enhance the pedestrian environment by adding pedestrian-scaled lighting, widen sidewalks, and add curb bulb-outs at intersections to reduce the pedestrian crossing distances and improve visibility. Roadway reconfiguration is also a priority with lane reductions where feasible based upon future traffic volumes or two-way street conversions. Bike lanes consistent with those proposed in the City's Bicycle Master Plan and street trees have also been identified as priorities.

7th Street is an east-west arterial that travels one-way eastbound between Broadway and Fallon Street with four travel land and two-way east of Fallon Street with two lanes in each direction. Preliminary future traffic volumes warrant the need for four eastbound travel lanes between Broadway and Fallon Street. This segment of 7th Street has been designated as a streetscape corridor. East of Fallon Street to 5th Avenue, a striped bike lane will be added by narrowing the travel lanes. This segment is also proposed to be a —gen street" to tie into the Channel and may include rain gardens, bio-filtration, or other green amenities.

8th Street is a one way westbound arterial with four travel lanes. Preliminary future traffic volumes demonstrate that this segment has the potential for a lane reduction, removing a travel lane to accommodate additional non-vehicular amenities. 8th Street has been identified in the City's Master Bicycle Plan to provide an on street bicycle lane. This plan proposes to also widen sidewalks to provide an enhanced pedestrian environment. In addition, 8th Street has been identified as a priority lighting corridor, connecting the BART station to Chinatown and Laney College. This plan supports the City's Bicycle Plan by including an on-street bicycle lane on 8th Street east of Harrison, and including a sharrow (shared auto/bicycle lane) through Chinatown (between Harrison and Broadway). These improvements seek to meet the goals of a shared street where all modes of travel are accommodated, improved pedestrian safety and comfort, room for bicyclists, and slower moving traffic.

9th Street is a one-way eastbound collector street with three travel lanes. Preliminary future traffic volumes demonstrate that this segment has the potential for a lane reduction or a con-

version to two-way with one travel lane in each direction and a two-way left turn lane. 9th Street has also been identified as a priority lighting corridor, connecting the BART station to Chinatown and Laney College. The City's Master Bicycle Plan also proposes on street bike lanes. This plan supports the City's Bicycle Plan by including an on-street bicycle lane on 9th Street east of Harrison, and including a sharrow (shared auto/bicycle lane) through Chinatown (between Harrison and Broadway). These improvements seek to meet the goals of a shared street where all modes of travel are accommodated, improved pedestrian safety and comfort, room for bicyclists, and slower moving traffic.

10th Street is an east-west collector that is one way westbound with three to four travel lanes between Webster Street and Madison Street. East of Madison Street, 10th Street is two-way with two travel lanes in each direction between Madison Street and Oak Street and one wide travel lane between Oak Street and 5th Avenue, except for a temporary section of diagonal parking. Preliminary traffic analysis indicates that 10th Street could operate at acceptable levels with two travel lanes. Continuous bike lanes are proposed from Madison Street to 5th Avenue in the City Bicycle Master Plan. The segment is also proposed to be a —gen street" to tie into the Channel and may include rain gardens, biofiltration, or other green amenities. The additional roadway width from removing two travel lanes could be used to modify the parallel on street parking to angled parking to provide additional parking spaces in the area. On street bicycle lanes could also be included to extend the bike network from Madison Street to Webster Street.

14th Street is an east-west arterial with two travel lanes in each direction. While a lane reduction is not option, this corridor has been identified as a key streetscape corridor and a priority lighting corridor. Bicycle lanes have also been proposed along this segment in the City's Bicycle Master Plan.

Fallon Street is north-south local roadway that fronts the Laney College campus with one travel lane in each direction, except between 7th Street and 8th Street where it is one way with three northbound travel lanes. A –festival street" treatment is proposed between 8th Street and 9th Streets with widened sidewalks on both sides of the street to provide better pedestrian access between the BART station and the college with one travel lane in each direction.

Oak Street is a one way, north-south arterial roadway with four northbound travel lanes north of I-880. Future preliminary traffic volumes demonstrate that this segment would operate at acceptable levels with three travel lanes; therefore, a lane reduction is proposed. Oak Street has been identified as a priority lighting corridor, and bike lanes are proposed in the City's Master Bicycle Plan. The eastside sidewalk is also proposed to be widened and additional street trees provided. The Oak Street undercrossing at I-880 has been identified as a priority improved freeway undercrossing to provide better connectivity to the Jack London District.

Madison Street is a one way, north-south arterial roadway with three southbound travel lanes north of I-880. Future preliminary traffic volumes demonstrate that the segment north of 8th Street would operate at acceptable levels with two travel lanes; therefore, a lane reduction is proposed. Oak Street has been identified as a priority lighting corridor, and bike lanes are proposed in the City's Master Bicycle Plan. Additional pedestrian amenities are proposed between 8th Street and 9th Street to improve the connections between the BART station and

Madison Square Park. The Madison Street undercrossing at I-880 has also been identified as needing an improved freeway undercrossing to provide better connectivity to the Jack London District.

Harrison Street is a north-south collector roadway that provides access to Oakland from the City of Alameda through the Posey Tube. Between 7th Street and 10th Street, Harrison Street is one-way northbound with three to four travel lanes. North of 10th Street, Harrison is two-way with two travel lanes in each direction. Harrison Street has been identified as a key streetscape corridor and a priority lighting corridor. Previous studies have identified the segment between 8th Street and 10th Street as a viable candidate for a two-way street conversion

Webster Street is a north-south collector roadway that also provides access to the City of Alameda through the Webster Street Tube. Webster Street is one-way southbound with four travel lanes and has been identified as a key streetscape corridor and a priority lighting corridor. The City's Master Bike Plan proposed bicycle lanes north of 8th Street. The Webster Street undercrossing at I-880 has been identified as a priority improved freeway undercrossing to provide better connectivity to Jack London Square. Webster Street from 7th to 5th (including the freeway undercrossing) should have pedestrian-oriented improvements, including directional signage, to improve access to the Jack London District.

Jackson Street and *Alice Street* have been identified as priority lighting corridors within the Planning Area. The Jackson Street undercrossing at I-880 has also been identified as needing an improved freeway undercrossing to provide better connectivity to the Jack London District.

Franklin Street is proposed to provide bicycle lanes north of 8th Street in the Master Bicycle Plan.

Broadway has been identified as needing an improved undercrossing at I-880 both to provide better connectivity to the Jack London District, and to create a better sense of entry into the Downtown from the south.

All of the I-880 undercrossings, including Broadway, Webster Street, Webster Place, Jackson Street, Madison Street, and Oak Street, have been identified as priorities for pedestrian improvements including lighting.

ROADWAY RECONFIGURATION PHASING STRATEGY

(See the similar section in Chapter 6.)

A major priority of this Plan is to reconfigure the roadways, either through lane reductions or two-way street conversion. Given the studies and construction costs associated with streets-cape improvement projects – for instance, two-way street conversions require complicated traffic studies beyond the scope of this project – it is desirable for improvements to proceed in a phased manner that allows less expensive traffic calming and pedestrian safety improvements to proceed in the near term, with more costly lighting and sidewalk widening efforts proceeding later. The —Seet Improvements Phasing" sketches in Chapter 6 depict a scenario

in which lane reductions and interim streetscape improvements can occur, while accommodating an ultimate configuration that has either one-way or two-way traffic. Each phase is also described here, detailing the benefits of each phase.

<u>Phase 1</u> would reduce the travel lanes along roadways where feasible using roadway striping. This is a low cost improvement that will have an immediate effect on the roadway network, taking over-capacity travel lanes and reallocating to other uses, such as bike lanes, wider curbside parking zone, painted corner bulb-out areas, or angled parking. The City of Oakland will be repaving several roadways in the Planning Area in the next five years, including Madison Street, Oak Street, 8th Street, and 9th Street, and the travel lanes can be restriped at that time

<u>Phase 2</u> would improve pedestrian crossings by constructing bulbouts and shortening crosswalks. The intersection modifications can be constructed at intersections with roadways that keep the current number of travel lanes or reduce a travel lane. This phase could also include upgraded traffic signals and pedestrian-oriented lighting as funding becomes available. This phase could be implemented before Phase 1 where appropriate, and may be available for grant funding.

<u>Phase 3a</u> would widen sidewalks along roadway segments where feasible to enhance the pedestrian environment, including installing street trees, pedestrian-oriented lighting, and other mid-block streetscape amenities as funding becomes available. This phase could be implemented before Phase 1 where appropriate, and may be available for grant funding.

<u>Phase 3b</u> would analyze roadways for conversion from one-way travel to two-way travel, with new traffic signals, possibly sidewalk widening, street trees, pedestrian-oriented lighting, and other mid-block streetscape amenities installed as funding becomes available. While outside of the scope for this project, this phase would require additional funding to evaluate the impacts of converting roadways to two-way travel on the roadway network.

COORDINATION WITH THE CITY OF OAKLAND'S FIVE-YEAR PAVING PLAN

The City of Oakland's Five-Year Paving Plan (to be implemented in the next 7-12 years) includes many Station Area Plan streets. As possible, the Station Area plan will seek to incorporate the Paving Plan into the implementation strategy for street improvements. To the extent feasible, the Station Area Plan EIR will include technical studies that will allow for implementation of bikeway improvements which can be easily incorporated into the paving projects. Bikeways identified in the Preferred Plan with potential for coordination with the Paving Plan include:

- Madison Street (between 2nd and 17th Streets)
- Oak Street (between 2nd and 14th Streets)
- 8th and 9th Streets (between Fallon and Harrison Streets)

ONE-WAY TO TWO-WAY CONVERSION

Many urban areas across the nation have a desire to convert their one-way street system to two-way. Pairs of one-way streets (couplets) were popular in the 1950's and 60's to improve automobile traffic flow and reduce conflicts at intersections. The most common reasons for converting back to two-way include:

- One-way streets create a circuitous and confusing circulation pattern, particularly for visitors.
- Narrower two-way streets have slower traffic.
- Two-way streets improve pedestrian and bicycle safety (ostensibly from slowing automobile traffic or by reducing the number of automobiles circulating in the area).
- Two-way streets result in less use of fuel, fewer miles traveled, and less automobile emissions from circulating around downtown.
- Two-way streets eliminate wrong way travel.

However, the conversion of one-way streets to two-way is often fraught with controversy. Proponents of one-way streets claim they are safer for pedestrians and result in less automobile congestion. Proponents of two-way streets claim they are safer, and create a more intuitive circulation system. Both one-way and two-way street systems have a number of technical advantages and disadvantages. Both systems can be made to work and be safe for all modes of travel. Any decision to convert one-way streets back to two-way is a local decision based on the community's values.

both sides of the street.

One-way streets can provide better traffic signal synchronization set to the slower

speeds expected in urban areas.

Table 7-1: Overview of Advantages and Disadvantages of Two-Way Versus **One-Way Streets**

One-way oneers	
Two-Way Streets	
Advantages	Disadvantages
 Two-way streets create less confusing circulation pattern which is more intuitive to all users. Eliminate indirect routes, which reduces travel time, fuel consumption and emission. Provide more direct routes to destinations. Creates direct emergency vehicle access to and from area. Create slower traffic speeds due to fewer lanes in each direction, parking maneuvers, and an increase in congestion. Improve pedestrian perception of the street as less of a barrier. Increase access to adjacent properties served by driveways. Two-way streets with bike lanes or routes are preferable to bicyclists for wayfinding. 	 Generally increase traffic congestion at intersections. May require left turn lanes at intersections which may eliminate on-street parking adjacent to intersection. Two-way streets increase the number of potential conflict points at intersections, and may increase certain types of crashes (i.e., broadside). Reduce opportunity to increase traffic capacity if ever needed. Narrower two-way streets may be difficult for large vehicles and fire apparatus to negotiate and may require longer red zones and loss of parking at some intersections. With only one lane each direction, traffic control may be required during emergencies. Two-way streets that eliminate turning movements at some intersections will divert turning vehicles to other intersections.
One-Way Streets	
Advantages	Disadvantages
 Fewer automobile and pedestrian conflict points at intersections and pedestrians need only watch for traffic in one direction. Some right turn on red movements eliminated, thus eliminating a potential auto/pedestrian conflict. Left turns into the street from driveways have fewer conflicts. One-way streets generally provide more vehicular capacity and long lines of turning vehicles don't block through lanes. One-way streets have more simplified traffic signal operations reducing delay for individual drivers. One-way streets can accommodate more on-street parking since parking does not need to be removed to accommodate left turn lanes. Drivers have option to park on 	 One-way street systems without uniform patterns are confusing, especially to visitors. One-way streets can increase certain types of pedestrian accidents. Higher speeds on one-way streets can increase crash severity, and one-way streets have the potential for wrong way, head-on collisions. One-way streets can create circuitous emergency response routes, and circuitous truck routes. One-way streets that eliminate turning movements at some intersections will increase them at others. Increased out-of-direction travel adds to air pollution. Can be confusing and unfriendly to bus

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passengers.

Encourages unsafe bicycle travel against traffic or on sidewalks.

7.4 Transportation Demand Management (TDM)

Transportation Demand Management (TDM) strategies aim to reduce automobile use by shifting vehicle trips to non-auto travel modes. Many of the strategies focus on reducing vehicle trips to and from the Planning Area, which in turn reduces the parking demand for area residents, employees, and visitors while increasing the amount of non-vehicle trips. Many of the TDM strategies complement each other and are most effective when implemented in tandem. Some TDM strategies may include:

- Car sharing, a short-term vehicle rental service available to members that may eliminate the need to own a vehicle;
- Shuttle service connecting the Lake Merritt BART station to local employment centers or major destinations, such as Chinatown or Jack London Square;
- Identify a TDM coordinator, who would distribute information to local employees and residents to promote TDM programs;
- Carpool and vanpool ride-matching services;
- Guaranteed Ride Home Program, which allows transit users and car/vanpoolers access to free or reduced taxi service to get home in case of an emergency;
- Subsidized transit passes for area employees and residents; and
- Bicycle parking, both short and long term, located in appropriate places.

These TDM strategies have the potential to reduce vehicle trips to and from the area.

7.5 Transportation and Transit Analysis

The intention of this preliminary assessment is to review and compare the transportation characteristics of the proposed land use plans. An environmental review will also be conducted to quantify the impacts of the Station Area Plan, which will include an in-depth analysis of the transportation system, including intersection analyses for existing and future scenarios. Impacts caused by this Plan will be identified and reasonable mitigation measures will be developed and analyzed.

TRIP GENERATION

This section describes the methodology and analysis used to calculate the vehicle trips and transit trips generated by the Low Residential and High Residential redevelopment alternatives. The same methodology has been applied to the existing land uses proposed for redevelopment to calculate the net new vehicle and transit trips generated. It is important to note that this analysis looks only at trip generation for sites expected to redevelop, or opportunity sites (described in Chapter 3). The existing redeveloped sites, which are primarily vacant, parking lots, and sites with minimal development, currently generate very few trips. As these sites are redeveloped as part of a high density, transit oriented development, the number of trips will increase. Note that trip generation from existing uses that are not identified opportunity sites are not included in this analysis.

Vehicle Trip Generation

The amount of trips generated by each development alternative was estimated by applying appropriate trip rates from the Institute of Transportation Engineers (ITE) to the amount of building floor area or number of dwelling units for each land use type (residential, office, and retail). Reductions were applied to the gross trip generation to account for pass-by traffic (traffic already traveling adjacent to the site) for the retail uses. Due to the proximity of the Planning Area to the Lake Merritt BART station and downtown Oakland, a transit, walk, and bike reduction has also been applied. Per the City of Oakland's *Transportation Impact Study Guidelines* (Transportation Services Division, March, 2007), recent mode splits of up to 83 percent vehicle trips have been approved for environmental documents within the downtown area; therefore, a 17 percent reduction has been applied to the gross trip generation to account for transit, walk, and bike trips to all proposed land uses.

The same methodology has been applied to the existing land uses on opportunity sites in order to obtain a —ntenew external" vehicle trips generated by the proposed project, which equals the total trip generation within the Planning Area with build out of the proposed land uses minus the trip generation of the existing uses.

The —ntenew" trip generation estimates have been calculated for the Emerging Plan Low Residential and High Residential alternatives, which are illustrated in Table 7-2. The existing redeveloped uses currently generate 6,599 daily, 468 AM peak hour, and 595 PM peak hour vehicle trips. The net new external vehicle trips for the High Residential alternative will generate 48,577 daily trips with 4,238 trips during the AM peak hour and 4,905 trips during the PM peak hour. The net new external vehicle trips for the Low Residential alternative will

generate 39,324 daily trips with 3,528 trips during the AM peak hour and 4,043 trips during the PM peak hour. Detailed trip generation calculations for the existing and two alternatives have been included in the Appendix.

Table 7-2: Net New Trip Generation – City Standards¹

Scenario ¹	Doilu	ΑN	l Peak H	lour	PM Peak Hour		
Scenario	Daily	In	Out	Total	In	Out	Total
Low Residential Alternative Net New External Trip Generation	39,324	1,962	1,566	3,528	1,712	2,331	4,043
High Residential Alternative Net New External Trip Generation	48,577	2,104	2,134	4,238	2,272	2,633	4,905

This table reflects the development potential identified in the Emerging Plan (September 2011). Revisions incorporated into the Preferred Plan have resulted in slightly different development potential (particularly related to Scenario 2 for the BART), as outlined in Chapter 3. This analysis provides a general sense of Preferred Plan impacts; more detailed analysis will be completed for the Draft Plan.

Source: Kimley Horn, 2011.

Based on the transit-oriented development nature of the proposed developments, the transit/walk/bike trip reduction is quite low compared to existing commute patterns in the Planning Area. Commute patterns in the Planning Area are more representative of alternative modes of transportation, with 25.1 percent of residents using public transportation and 25.8 percent of residents walking or biking to work.² Therefore, the trip generation has been updated to create a realistic calculation of the vehicle trips generated by the new transit-oriented development using a 50.9 percent reduction in vehicle trips for the proposed residential uses. This same reduction has been applied to the existing residential uses in the Planning Area. The updated net new trip generation estimates have been calculated for the Low Residential and High Residential project alternatives and are illustrated in Table 7-3.

The existing redeveloped uses – which are primarily vacant sites, parking lots, or sites with minimal development – with the 50.9 percent residential reduction, currently generate 6,509 daily, 461 AM peak hour, and 586 PM peak vehicle trips. The net new external vehicle trips for the Low Residential alternative will generate 30,987 daily trips with 2,889 trips during the AM peak hour and 3,266 trips during the PM peak hour. The net new external vehicle trips for the High Residential alternative will generate 36,461 daily trips with 3,309 trips during the AM peak hour and 3,776 trips during the PM peak hour. Detailed trip generation calculations for the existing and two alternatives have been included in the Appendix.

² Claritas Inc., 2009; Dyett & Bhatia, 2009.

Table 7-3: Net New Trip Generation – Additional Reductions¹

Scenario ¹	Doily	AM	l Peak H	lour	PM Peak Hour		
Scenario	Daily	In	Out	Total	In	Out	Total
Low Residential Alternative Net New External Trip Generation	30,987	1,888	1,001	2,889	1,206	2,060	3,266
High Residential Alternative Net New External Trip Generation	36,461	1,972	1,337	3,309	1,537	2,239	3,776

This table reflects the development potential identified in the Emerging Plan (September 2011). Revisions incorporated into the Preferred Plan have resulted in slightly different development potential (particularly related to Scenario 2 for the BART), as outlined in Chapter 3. This analysis provides a general sense of Preferred Plan impacts; more detailed analysis will be completed for the Draft Plan.

Source: Kimley Horn, 2011.

As previously stated, an environmental review will be conducted that will analyze the traffic impacts at the local intersections. Currently, most of the intersections in the Planning Area operate at acceptable levels per City of Oakland standards during weekday AM and PM peak hours. Several intersections, particularly near the I-880 interchanges, operate at or over the City's standards. It is expected that the additional vehicle trips generated by either of the alternatives may cause significant impacts at several intersections in the Planning Area. Therefore, as previously discussed, this Plan will focus on reducing the amount of vehicle trips by implementing TDM measures to increase transit, walk, and bike trips.

Transit Trip Generation

Due to the proximity of the Planning Area to the Lake Merritt BART station and numerous AC Transit routes, it is anticipated that the Emerging Plan will generate transit trips. As discussed in the vehicle trip generation, the City trip generation standard allows a 17 percent reduction to the gross trip generation to account for transit, walk, and bike trips. Assuming that five percent of the trips generated will be walk and bike trips results in twelve percent using transit, shown in Table 7-4.

It is estimated that the existing land uses that would be redeveloped under the Emerging Plan would generate 901 daily, 63 AM peak hour, and 85 PM peak hour transit trips. With the higher density land uses proposed, the High Residential alternative is predicted to generate 7,129 daily, 619 AM peak hour, and 721 PM peak hour net new transit trips. The Low Residential alternative is predicted to generate 5,791 daily, 516 AM peak hour, and 596 PM peak hour net new trips. Both alternatives result in a higher percentage of transit trips in the Planning Area because of the increased densities and land uses that are more conducive to transit use.

Table 7-4: Net New Transit Trip Generation – City Standard¹

Scenario ¹	Doily	AM Peak Hour					
Scenario	Daily	In	Out	Total	In	Out	Total
Low Residential Alternative Net New Transit Trip Generation	5,791	294	222	516	254	342	596
High Residential Alternative Net New External Trip Generation	7,129	315	304	619	335	386	721

This table reflects the development potential identified in the Emerging Plan (September 2011). Revisions incorporated into the Preferred Plan have resulted in slightly different development potential (particularly related to Scenario 2 for the BART), as outlined in Chapter 3. This analysis provides a general sense of Preferred Plan impacts; more detailed analysis will be completed for the Draft Plan.

Source: Kimley Horn, 2011.

Based on the Transit-Oriented Development nature of the proposed developments, the proximity to the Lake Merritt BART station, and the existing commute patterns in the Planning Area, the transit trip generation has been updated to create a realistic calculation of the transit trips generated. Existing commute patterns in the Planning Area indicate that 25.1 percent of residents use public transportation. Transit trip generation applying this higher rate is shown in Table 7-5.

Using the higher transit trip generation, the existing land uses proposed for redevelopment generate 936 daily, 66 AM peak hour, and 88 PM peak hour transit trips. With the higher density land uses proposed, the High Residential alternative is predicted to generate 11,811 daily, 977 AM peak hour, and 1,157 PM peak hour net new transit trips. The Low Residential alternative is predicted to generate 9,013 daily, 763 AM peak hour, and 897 PM peak hour net new trips.

Table 7-5: Net New Transit Trip Generation – Additional Reductions¹

Scenario	Doily	AM Peak Hour					
Scenario	Daily	In	Out	Total	In	Out	Total
Low Residential Alternative Net New Transit Trip Generation	9,013	344	419	763	449	448	897
High Residential Alternative Net New External Trip Generation	11,811	387	591	977	618	539	1,157

This table reflects the development potential identified in the Emerging Plan (September 2011). Revisions incorporated into the Preferred Plan have resulted in slightly different development potential (particularly related to Scenario 2 for the BART), as outlined in Chapter 3. This analysis provides a general sense of Preferred Plan impacts; more detailed analysis will be completed for the Draft Plan.

Source: Kimley Horn, 2011.

PRELIMINARY ROADWAY SEGMENT CAPACITY ANALYSIS

This preliminary traffic analysis evaluated the roadway segments within the study area to determine if the roadways are projected to be under or over capacity in the future using methodology from the 2000 Highway Capacity Manual (HCM). The Florida Department of Transportation (FDOT) has developed a methodology consistent with the 2000 HCM that defines a roadway segments' capacity based on traffic density and/or average speed. The FDOT roadway segment classifications are based on several criteria, including area setting, type of roadway, number of signalized intersections, and number of lanes.

Each roadway segment in the Planning Area has been classified as Class IV due to the amount of signalized intersections along the segments. To conduct a conservative analysis, the peak hour volumes have also been adjusted from the FDOT values to account for left turn and right turn lanes and one-way streets. The City's standard for this area is to meet level of service E or better, which correlates to a roadway segment's volume being under the capacity of the roadway.

Future peak hour roadway segment volumes have been obtained from projected peak hour intersection data from other sources, including *Oak to Ninth Avenue Draft EIR* (volumes projected to 2025), *I-880/Broadway-Jackson Interchange Project Study Report* (volumes projected to 2030), and *Central District Urban Renewal Plan Draft EIR* (volumes projected to 2035). The intersection projections were used to derive peak hour volumes on the adjacent roadway segments. These volumes were then compared to the calculated capacity of the roadway to determine if the roadway is projected to be under or over capacity in the future. If a roadway segment was determined to be under capacity in the future, the roadway segment was evaluated assuming one less travel lane. If the segment was still under capacity with one less lane, it was determined that a lane reduction was feasible along that roadway segment. Results of the roadway segment analysis area illustrated in Table 7-6.

Table 7-6: Roadway Segment Analysis

	Drainatad	Curren	t Lane Con	figuration	Remove One Travel Lane				
Roadway Segment	Projected - Peak Hour Volume	# of Lanes	Capacity	Under/ Over Capacity	# of Lanes	Capacity	Under/ Over Capacity		
7th Street – East of Broadway	3,373	4	2,795	Over	-	-	-		
8th Street – East of Broadway	1,714	4	2,795	Under	3	2,082	Under		
10th Street – West of Fallon Street	845	4	2,093	Under	2	972	Under		
14th Street – West of Oak Street	1,570	4	2,093	Under	2	972	Over		
Oak Street – North of 7th Street	1,283	4	2,795	Under	3	2,082	Under		
Madison Street – North of 8th Street	1,376	3	2,082	Under	2	1,377	Under		
Harrison Street – North of 7th Street	2,485	4	2,795	Under	3	2,082	Over		
Webster Street – North of 7th Street	2,134	4	2,795	Under	3	2,082	Over		

As the segment analysis results illustrate, 8th Street, 10th Street, Oak Street, and Madison Street are projected to be under capacity in the future with the removal of one travel lane. Therefore, lane reductions are proposed along these roadways and the roadway width be real-located to other uses, such as bike lanes, widened sidewalks, or angled parking.

Future peak hour traffic projections for 9th Street through the study area were not readily available. Existing traffic volumes traveling through the three-lane corridor peak at 475 vehicles during the PM peak hour. The three-lane roadway capacity for this facility type is 2,082 vehicles per hour and the two-lane roadway capacity is 1,377 vehicles per hour. Future

peak hour volumes would have to nearly triple for the roadway to be over capacity with two travel lanes. Therefore, 9th Street is a candidate for a lane reduction, with the additional roadway width reallocated to other uses, such as a bike lane and widened sidewalks.

7.6 Parking

Parking is a critical component of mixed-use and transit-oriented development. While pedestrian, bicycle and transit modes of transportation are supported and encouraged through this plan, considerations must also be made for residents, employees, students, and visitors who use automobiles to travel to the area. Parking is already a key concern in certain areas of the Planning Area, particularly in Chinatown, and parking demand will undoubtedly increase with new development and redevelopment in the area. The methodology used to calculate the parking requirement based on the City's Planning Code and the projected parking demand based on the MTC parking methodology are presented below. Loading is addressed in Section 7.7.

EXISTING PARKING IN PLANNING AREA

BART Parking

Two BART parking areas serve the Lake Merritt BART station – a surface lot between the BART headquarters and the Laney College entrance and a surface lot behind the Metro Center – that provide 206 off-street parking spaces. These parking areas are typically filled to capacity each morning. The Lake Merritt BART station is the only station in proximity to downtown that provides off-street parking. Other BART stations within central business districts, such as the nearby 12th Street/Oakland City Center and 19th Street stations in Oakland and the Embarcadero and Montgomery Street stations in San Francisco do not provide parking. The Preferred Plan recommends that the BART parking lot not be replaced since this is an urban station and access to the station will be improved for all travel modes, including pick up/drop off, transit, shuttles, pedestrians, bicyclists, and taxis. One strategy for maintaining access to the Station for riders that drive and park is to improve linkages to other parking areas in the Station Area, such as under I-880.

On-Street Parking

Currently, most streets provide metered on-street parking within the Planning Area; however, there are some streets that have non-metered parking. A majority of the available on-street parking is parallel parking, with the exception of 10th Street between Alice Street and Harrison Street adjacent to Lincoln Park, which provides angled parking along the north side of the street. Future street design will consider addition of diagonal parking where it does not conflict with bicycles.

Other Parking Lots

Laney College provides a 900 space surface parking lot on 7th Street east of Fallon Street exclusively for students. Parking permits or decals are required in addition to a paid parking receipt. Parking fees are \$2 per day, and the lot is usually full during peak student hours. A key strategy for accommodating the access needs of Laney Students and mitigating the park-

ing demand in the area students is to increase the use of transit by students accessing the college, particularly given that full-time Laney students have AC Transit EasyPasses and the proximity of the Lake Merritt BART Station. This will include improving the safety of transit access, particularly at night, and working with transit service providers to ensure that routes and schedules serving Laney College meet student needs.

Surface parking is currently available under I-880 through the planning area. The parking areas near Chinatown are available to the public with parking rates ranging up to approximately \$5 per day. The parking area under the freeway near the Lake Merritt BART station is currently private parking and not available for the public. Better coordination with these lots, for instance by improving connectivity to the I-880 lots to the Chinatown commercial core and to the BART Station, is one possible way to ensure public parking access.

There are also several public parking areas scattered throughout the Planning Area. Public parking is available at the Oakland Museum of California at Oak Street and 10th Street. There are also surface and structured parking available near the County government buildings along Jackson Street at 14th Street and 13th Street. Public parking is also available at a two-story parking garage at Webster Street and 14th Street and several smaller surface lots in the planning area. Several of these large parking areas are potential opportunity sites; the Preferred Plan recommends that existing public parking lots or garages that are redeveloped be required to receive incentives to include structured public parking as part of the redevelopment plan.

PARKING REQUIREMENT

The City of Oakland's current parking requirements outlined in Chapter 17.116 were utilized to calculate the off-street parking supply that may be required for any new development or redevelopment. It is important to note that parking requirements may change as part of new regulations developed specifically for the Planning Area. The current parking requirements outlined in Chapter 17.116 provide parking rates for various land uses based on the zone of the development. A majority of the Planning Area is currently zoned as CBD (central business district) and consists of parking rates reduced when compared to other zones within the City.

Multifamily residential uses are proposed throughout the Planning Area and current parking regulations require one space per unit. Office uses are proposed in the current CBD-P, C, or X zones, and do not require any off-street parking. The retail areas are proposed in several zones, including the current CBD-P, C, or X zones, and do not require any off street parking. Also the S-2 and C-40 zones in the East Lake area, which require up to 2.5 spaces per 1,000.

Based on the two alternative development plans and using the parking rates in the current Zoning Code, the proposed developments in the Planning Area require 3,882 off-street parking spaces for the Low Residential Alternative and 5,558 off-street parking spaces for the High Residential Alternative.

PARKING DEMAND

The Metropolitan Transportation Commission (MTC) has published a report for planning and implementing parking policies and programs that are supportive of smart growth and transit

oriented development, *Toolbox/Handbook: Parking Best Practices and Strategies for Sup- porting Transit Oriented Development in the San Francisco Bay Area.* This document developed a parking demand model based on numerous case studies throughout the Bay Area that
takes into account the characteristics of an area such as transit availability, walkability, auto
ownership, and the types and densities of land uses. The model organizes communities into
one of five major area types and provides a range of parking rates for each area type.

The Lake Merritt BART station Planning Area is categorized as a City Center/Urban Neighborhood based on its location adjacent to downtown Oakland, the availability of high-quality transit, and the density and types of existing and proposed land uses. These parking rates are designed to support the proposed mixed-use and transit oriented concept of this Plan and avoid the development of significant excess parking. This strategy encourages the —pxk once" mentality where visitors would park in one location and visit several destinations within a walkable distance. The MTC model provides two sets of parking rates, a low rate and a high rate, which have been developed based on case study results and from other parking information collected as part of the Toolbox/Handbook. Parking rates range from 0.50 to 1.25 per residential unit, 0.25 to 1.25 per 1,000 square feet of office space, and 1.00 to 2.00 per 1,000 square feet of retail space. Using these rates, parking demand can be calculated for the two residential alternatives. The Low Residential alternative would require 2,628 to 7,466 off street parking spaces and the High Residential alternative would require 3,466 to 9,561 off street parking spaces.

Table 7-7 provides a summary of the required parking and the projected parking demand for both the Low Residential and High Residential Emerging Plan alternatives. As shown in Table 7-7, the City Code requirement, ranging from 3,882 (low) to 5,558 (high), is a realistic set of numbers to use, given the history of parking in Downtown Oakland and current City requirements. The requirement is greater than the MTC Low Rates, but much lower than the MTC High Rates, indicating that the existing standards are likely reasonable for the Planning Area. However, these standards could be further refined by establishing a parking maximum or by reducing auto parking requirements in exchange for increased bicycle parking and/or transit passes.

Table 7-7: Parking Demand Comparison¹

Alternative	City Code	MTC Parking Rates	MTC Parking Rates
	Requirement	Low Rates	High Rates
Low Residential	3,882	2,628	7,466
High Residential	5,558	3,466	9,561

This table reflects the development potential identified in the Emerging Plan (September 2011). Revisions incorporated into the Preferred Plan have resulted in slightly different development potential (particularly related to Scenario 2 for the BART), as outlined in Chapter 3. This analysis provides a general sense of Preferred Plan impacts; more detailed analysis will be completed for the Draft Plan.

Source: MTC Rates from Toolbox/Handbook: Parking Best Practices and Strategies for Supporting Transit Oriented Development in the San Francisco Bay Area

PARKING STRATEGIES

Implementing parking management strategies would reduce the overall need for additional parking supply and increase the effectiveness of parking throughout the Planning Area. Initial strategies follow; additional strategies will continue to be developed and strategies outlined here will be refined in the Draft Plan.

Provide Unbundled Residential Parking

Typically, parking is bundled into the purchase or lease of a residential unit. This strategy would provide reserved parking spaces for sale or lease separately from the cost of housing. Reserved parking would still be available for residents who wish to pay a fee. Overall parking supply for residential uses would be reduced as fewer residents may opt to not own a car or park in other locations. The parking spaces that are not purchased or leased with the residential unit would then be available for other parkers.

Implement Transportation Demand Management (TDM) Programs

TDM strategies are designed to reduce vehicular trips generated by area residents and employees, such as providing car sharing, carpool/vanpool matching, guaranteed ride home, and transit subsidies (such as the AC Transit EasyPass). This would lead to fewer people using automobiles to access the area and potentially result in reduced parking demand.

Implement Transportation Strategies from the Emerging Plan

The transportation strategies recommended as part of this Emerging Plan are designed to reduce automobile trips within the area, promote transit, and provide an enhanced pedestrian and bicycle environment for all users. Priority lighting corridors and wider sidewalks improve the pedestrian environment, promoting more walking between the BART station and destinations. On street bicycle facilities connecting to the BART station provide another option for residents, visitors, students, and employees to access transit. In addition, converting excess travel lanes to diagonal parking will increase the on street parking supply and offer automobiles more parking options.

Parking Enforcement Program

According to the City of Oakland Parking Division, there is a dedicated parking enforcement officer for the core of Chinatown (the area bounded by 8th, 9th, Webster, Franklin Street) from 7:30 to 3:30 pm. After that, there are roving parking enforcement officers. However, double parking consistently occurs, particularly in the Chinatown core area. Many times the double-parkers are delivery vehicles unloading merchandise (street loading is discussed further below). Increased parking enforcement, including the issuance of multiple tickets for vehicles parking in the same spot for long periods, could help alleviate some of the congestion caused by the double-parking vehicles.

Provide Additional Bicycle Parking Facilities

In addition to on street bicycle facilities, bicycle parking should be provided at all new developments and additional secured bicycle parking should be provided at the BART station. The City of Oakland requires bicycle parking in its City Code for any new or re-development. At

the BART station, bicycle racks and parking meters around the station have been observed as fully occupied, in addition to bicycles locked to street trees. Additional secure bicycle parking would encourage more biking to and from the station and potentially reduce the parking demand in the area.

Parking Maximums

Excessive parking supply can be discouraged by establishing maximum parking ratios in addition to the minimum parking ratios required for development. Maximum parking ratios would place an upper limit of parking, or a cap, that could be provided for new developments or within an area. Maximum parking ratios limit the number of parking spaces, and promote more efficient use of land and use of alternative modes of travel, such as transit. Since a majority of the required parking for the Lake Merritt planning area is for the residential uses, parking maximums would limit the number of available parking spaces per unit. Developers or individual tenants could secure additional parking spaces at off-site locations, if desired.

Shared Parking

Shared parking is a concept of using a parking space to serve two or more land uses without conflict. Conventional regulations require that each development, or land use type, provide enough parking to serve its own peak demand, leaving unused parking spaces during the off-peak periods. Shared parking allows multiple complementary land uses, whose peak parking demands do not coincide, to share the same pool of parking spaces, resulting in a more efficient use of those spaces. Typically mixed-use developments lend themselves to shared parking as the peak parking demand for various uses occurs at different times of the day. The use of shared parking is an effective way to efficiently use existing parking resources and reduce the costs of constructing excess parking facilities in the future. Since the parking requirement for the redevelopment west of the Lake Merritt Channel is entirely for the proposed residential uses, shared parking can only be implemented in the proposed redevelopment in the Lakeside neighborhood. The proposed retail and residential mixed use developments in this area should explore this strategy to determine an appropriate number of required parking spaces.

Parking Pricing

This strategy charges vehicles for using a parking facility, typically for parking in an off street facility such as a parking lot or garage, or parking on street using parking meters. Setting reasonable parking rates for short-term parkers and higher rates for long-term parkers can discourage employees from driving to work and encourage the use of alternative modes of travel, such as transit or biking. This will also reserve spaces for the short term needs of visitors and customers. Higher rates and shorter pricing periods should be implemented at the more convenient parking spaces, such as on-street spaces and parking near building entrances, to increase turnover and favor higher-priority uses. On street parking should also have a higher hourly rate than the rate in off street public lots or garages to encourage parking turnover of on-street spaces. This also creates additional revenue for the City of Oakland, which could then be used to implement other improvements in the planning area.

Provide Additional On Street Parking

The Preferred Plan is recommending the removal of travel lanes along roadways that are projected to have excess capacity in the future and reallocating that space to other uses. One option is to modify the on street parking from parallel parking to angled parking. The City recently made modifications along the north side of 10th Street between Alice Street and Harrison Street adjacent to Lincoln Park, altering the parallel parking to angles parking, creating additional public parking spaces. This strategy could be explored in the future and implemented along several other streets within the planning area, such as other segments of 10th Street, Franklin Street, or Webster Street, creating additional public parking areas near Chinatown. This modification has the potential to double the amount of on street parking within a block. With most streets being one-way in the planning area, motorists have to parallel park along the left side of the street, a less practiced parking maneuver. One possibility is to modify the on street parking along the left side of a one-way street to angled parking. This would also benefit bicyclists by decreasing the number of potential conflicts since bike lanes or shared travel lanes are typically located along the right side of a one-way street. Truck loading could still take place during the permitted loading times in these spaces.

7.7 Street Loading

Street loading and double parking is an issue not only in Oakland Chinatown, but in high-density retail areas around the Bay Area and the county. As discussed in the *Revive Chinatown Community Transportation Plan*, double parking is a major problem in the Chinatown core area. Commercial and non-commercial vehicles, both of which have been observed to double park, impede traffic flow along the roadway and can pose a safety hazard to drivers, pedestrians, and delivery people. The California Vehicle Code allows commercial vehicles to double park for active delivery if no yellow zones (delivery) are available, however there are several blocks within the core that do not have on-street delivery parking spaces marked.

Double parking by commercial vehicles typically occurs throughout the day but is generally highest during weekday morning hours, typically between 8:00 AM and 9:30 AM. During weekends, few commercial vehicles were observed double parking; however, due to vehicles frequently parking for long periods of time in the on-street parking spaces, double parking by non-commercial vehicles is exacerbated.

The Plan identified the following areas with heavy double parking, either due to a lack of delivery parking areas or a concentration of retail land uses:

- The east side of Webster Street between 9th Street and 10th Street;
- The south side of 9th Street between Webster Street and Harrison Street;
- The north side of 7th Street between Webster Street and Harrison Street;
- The south side of 10th Street between Webster Street and Harrison Street;
- The north side of 8th Street between Franklin Street and Webster Street; and
- The west side of Webster Street between 7th Street and 8th Street.

LOADING STRATEGIES

This Plan builds upon the recommendations from the Revive Chinatown Plan, which developed an on-street loading/parking program in the Chinatown core area to reduce double parking in travel lanes:

- Create metered truck loading zones for active truck loading only with 30-minute time limits;
- Designate the great majority of the on-street loading/parking spaces for truck loading only during the morning peak hours and short-term parking thereafter, with some spaces designated on-street loading throughout the day, depending on the needs of each individual block.
- Increase effectiveness of parking enforcement by using walking beats to give violations and give multiple tickets for vehicles parked in the same space for long periods.

It is proposed that each block within the Chinatown core area provide metered truck loading zones with 30-minute time limits between 7:30 AM and 10:00 AM. After 10:00 AM, the onstreet parking should metered and limited to 30 to 60 minutes with certain high-loading blocks maintaining loading spaces throughout the day.

In addition, enhanced pedestrian corridors should be provided to local off-street parking areas, particularly the parking areas under I-880. Webster Street and Harrison Street are identified in this Plan as priority lighting corridors and the Webster Street underpass at I-880 is identified as a priority improved freeway undercrossing. 8th Street and 9th Street have also identified as priority lighting corridors and providing bike lanes will create better non-vehicular connections to the Lake Merritt BART station.

7.8 Sidewalk Vendor Displays

The Chinatown commercial center is a vibrant neighborhood, with active streets characterized in many locations with merchant displays on sidewalks. Vendor displays occur generally in front of grocery and produce markets. These stores are mostly concentrated along 8th Street from Franklin to Harrison Streets and Webster Street from 7th to 9th streets. While sidewalk vending adds vitality to the street and promotes local economic development, it can also conflict with pedestrian access in some locations. Some vendor displays occupy approximately 25 percent of the sidewalk width, while others occupy up to 75 percent of the sidewalk width, leaving an effective width of only two (2) feet for pedestrian movement. Some storeowners also use on-street parking spaces for temporary storage of boxes and pallets, causing pedestrian, parking, and traffic circulation impacts. The Emerging Plan seeks to encourage sidewalk vending to enhance the commercial core, but also to regulate displays in order to ensure a consistent and comfortable pedestrian environment. The Emerging Plan recommendations build on Revive Chinatown, including:

³ City of Oakland, Revive Chinatown Community Transportation Plan, September 2004.

- Reduce sidewalk obstacles by replacing parking meters with central pay booths and consolidating newsstands in the core area. This project would reduce the number of sidewalk obstacles and increase effective sidewalk widths, facilitating pedestrian movement
- Ensure that sidewalk vendor stands do not block sidewalks (minimum five-foot clear zone). A minimum width of five feet must be maintained along sidewalks, clear of any obstacles, to allow smooth pedestrian movement, especially on heavily traveled sidewalks in the core
- Promote merchant education and provide city enforcement
- Consider additional guidelines, such as:
 - The finish materials used for display merchandise must be smooth, nonabsorbent and cleanable.
 - Merchants must be responsible for making sure that all activities on the sidewalk stay within the approved area and maintenance of the storefront, exterior walls, sidewalk and gutter in a clean condition at all times. Sidewalks shall be washed daily at locations with food displays and as needed at others.
 - All movable display stands shall be promptly removed from the sidewalk in accordance with approved time of operation every day.

Currently, merchants are required to pay a yearly permit fee for using the public right of way for their business. This permit fee is meant to pay for enforcement of the clearance requirements, However, the yearly fee has been described as a financial and logistical burden for business owners. The Station Area Plan could include some recommendations for balancing the needs of merchants and the need to provide some enforcement – such as amending Oakland Municipal Code Section 12.04.090 to allow the use of the sidewalk right-of-way in front of businesses in the Plan Area without the need for a yearly permit fee; provided, however, that there is maintained, at all times, a clear space along such sidewalk of not less than five (5) four feet in width for the use of pedestrians.

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8 Community Resources

Community resources, including cultural and historic resources, schools, health, and affordable housing, are key components to a vibrant and complete neighborhood. Parks and open space are discussed in Chapter 5.

8.1 Cultural Resources

The Station Area Plan will seek to preserve and enhance the Planning Area's numerous cultural resources. This section discusses the impact of future development on the cultural resources, practices, use of space, and events; and also discusses areas in which the Plan could enhance these resources. Recommendations in this section for enhancing and highlighting cultural resources will be further developed into policies and design standards in the Draft Station Area Plan, and Section 8.5 (below) outlines an initial community benefits.

URBAN DESIGN AND CONNECTIONS TO CULTURAL RESOURCES

The Preferred Plan recognizes the importance of enhancing and improving connections between the Planning Area's cultural resources. Potential catalyst projects include the installation of wayfinding signage, lighting, and streetscape elements on Fallon, 8th, and 9th Streets, which would improve connections between Laney College, Chinatown, Lake Merritt BART Station, the Oakland Museum, and Kaiser Auditorium. Urban design strategies should help to knit institutions—like the Museum, the College, and the Main Public Library—into a vibrant and coherent district.

Improving the pedestrian experience in the Chinatown commercial core is important to the Preferred Plan's goal of preserving and enhancing the neighborhood's vibrant culture. Transportation improvements, such as corner bulb-outs and traffic calming measures along 7th Street, should be addressed to promote pedestrian access, as outlined in Chapter 6, and safety to Harrison Square (Chinese Garden Park). A key factor in improving access to Harrison Square will be calming traffic accessing I-880 from the Alameda tubes; a separate study addressing this topic is underway by the Alameda County Transportation Commission. Improvements should also address pedestrian connections and improved access to the Chinatown Core from the Lake Merritt BART Station, Jack London Square, and parking areas under and beyond I-880.

Area-wide streetscape improvements, particularly along 8th and 9th Streets, - such as strategic sidewalk widening, cultural markers, and increased pedestrian-scaled lighting - should be further explored to enhance pedestrian access, safety, and experience along these cultural

spines, which have heavy pedestrian activity, transparent/active storefronts, and a concentration of compatible land uses within walking distance. See Chapter 6 for the initial streetscape design concepts for these streets.

Future ground-floor development and land-uses along these spines should be consistent with the existing urban design pattern and character to promote cultural vibrancy. Particularly along 8th Street in the Chinatown commercial core, the Preferred Plan encourages street and sidewalk improvements and regulations that strike a balance between pedestrian circulation, sidewalk vending, and loading/unloading of goods. Strategies such as delineating a clear pedestrian path and defining sidewalk obstruction limits for merchants should be further explored (see Chapter 7). A good balance is critical as these elements together contribute to preserving and promoting the area's unique cultural identity. Detailed standards related to maintaining compatibility with the existing urban design pattern and character as well as streetscape design standards will be developed in greater detail in the Draft Station Area Plan.

STREETFEST AND LUNAR NEW YEAR BAZAAR

Future development in the study area and particularly in the Chinatown commercial core must minimize negative impact on both of the community's annual street festivals which help identify the area as a major regional destination. Streetfest occurs in the Chinatown commercial core, between 9th Street, Broadway, Harrison Street, and 8th Street and usually includes three performance stages. The event runs Saturday and Sunday on the last weekend of August, with estimates of up to 90,000 visitors attending. The Lunar New Year Bazaar takes place over a few blocks including 8th and 9th streets between Webster and Franklin Streets in January/February each year.

Transportation improvements in the Preferred Plan, such as sidewalk widening, lane reductions, two-way conversions, parking access, and bike lanes, should take into account their impact on street closures and circulation during these annual popular events, and efforts should be made to enhance these cultural activities in terms of access and traffic flow.

NIGHT MARKETS/ OTHER FESTIVALS

Future development and transportation and parking improvements should also take into consideration outdoor seasonal festivals which may involve street closures, such as the Obon Festival by the Buddhist Church of Oakland, the summer Night Market in the Chinatown commercial core, and future festivals/markets held by other cultural institutions. As discussed elsewhere in the Preferred Plan, Fallon Street between 8th and 9th Streets is proposed to be designed as a "festival street." Where possible, the Preferred Plan will identify additional outdoor market opportunities, such as the possibility of utilizing the edges or interior of Madison Square Park for such events.

LANGUAGE ACCESS IN WAYFINDING SIGNAGE

Language access in public signage is an important cultural service for existing and emerging immigrant populations in the Chinatown commercial core and BART blocks. New street and

¹ Ong, Jennie, Chinatown Chamber of Commerce, September, 2011.

sidewalk improvements in these subareas will maintain the bilingual wayfinding signage currently visible and consistent in the neighborhood.

EMERGING DEMOGRAPHICS AND CULTURAL NEED

The existing Asian Branch Library in the Chinatown Core is an important cultural resource in the Planning Area, heavily serving an existing and emerging immigrant population in the area and region. The Asian Branch Library is the second-busiest branch in the system after the Main Library. It had 389,000 visitors in 2009 and 340,000 visitors in 2010, with the drop attributed to reduced hours as a result of budget cuts. In 2010, it circulated 316,000 books representing 13 percent of all books checked out in the system that year. The collections represent eight different Asian languages including Chinese, Japanese, Tagalog, Thai, Cambodian, Vietnamese, Korean, and Laotian, in addition to English language books. Library staff are multilingual.²

With the Preferred Plan's projected increase in the number of residents living in the area, this library branch, as well as many of the other cultural resources and service providers (see page 8-4 of the Existing Conditions and Key Issues Report for a detailed list), could potentially be overburdened with a cultural diversity of new residents requiring language access and unique services. Future land-use and development scenarios should include adequate community facilities based on a comprehensive analyses of the social and cultural impact of current demographics and future growth in the Planning Area.

Community facilities could include support for additional multilingual and cultural community centers and/or support for the library. Additional community facilities are a community benefit that the Plan will seek to include. A key strategy will be to establish joint-use arrangements with Laney College and OUSD (see Chapter 5: Parks for more detail on this), and partnerships with new development to include needed community facilities. Section 8.5 includes an initial approach to achieving community benefits in the Planning Area, including additional community facilities.

EXERCISE AND CULTURAL ACTIVITIES AT MADISON SQUARE PARK

As referenced in the Existing Conditions and Key Issues Report, Madison Square Park is the current site for numerous martial arts and exercise activities performed by hundreds of adults and senior citizens. This activity has made Madison Square Park a cultural gathering space and regional destination.

The Preferred Plan recommends improvements to Madison Square Park, such as adding shelter, seating, modernized play/exercise structures, a park maintenance facility, and permanent restrooms. The idea of creating a possible community center with a minimal footprint on the Park will require further public discussion.

² Cheung, Janet, Asian Branch Library manager, September, 2011.

Every effort should be made for nearby development to enhance and further activate the current cultural activities at Madison Square Park with compatible land-uses at the ground level, such as cafes, restaurants, a community center, and public restrooms.

INFORMAL CULTURAL ACTIVITY AND SEATING IN PUBLIC SPACE

As described in the Existing Conditions and Key Issues Report, social gatherings (i.e., board games, meetings) often occur at informal public spaces (i.e. outside cafes, along circulation paths and edges, at stairwells) in the Chinatown Core and BART blocks, and there is a need for more shaded public seating. Future land-use scenarios and streetscape/open space design in the Preferred Plan, in particular along 8th and 9th Streets, will recognize and enhance these informal cultural activities and gathering opportunities, which contribute the area's vibrancy and safety with increased "eyes on the street." Park and streetscape standards in the Draft Station Area Plan will identify potential locations for informal gathering places and provision of amenities that facilitate use of the public realm. See Chapter 5 for more detail on public open spaces.

8.2 Historic Resources

The Lake Merritt Station Area has a rich history that is reflected in many of its older buildings and parks. As noted in the *Historic Preservation Element (HPE)* of City of Oakland's *General Plan*, the preservation and enhancement of these historic resources could significantly contribute to the area's economy, affordable housing stock, overall image and quality of life. The Preferred Plan seeks to maximize the land use and development opportunities created through preservation and restoration of historic buildings.

EXISTING HISTORIC RESOURCES

As described in the Lake Merritt Station Area Plan's *Existing Conditions and Key Issues Report*, the Planning Area has many historic resources, including individual structures and historic districts that incorporate a cluster of structures with similar character and may encompass multiple city blocks. Historic resources in the Planning Area are shown on Figure 8-1.

The Planning Area's historic buildings range from those of highest ("A" rating) and major ("B" rating) importance to those of secondary and minor importance ("C" and "D" ratings). Eight buildings or places in the Planning Area have Landmark status, Oakland's highest level of recognition of historic significance: Kaiser Convention Center, Lincoln Square, Hotel Oakland, the Main Post Office, the Oakland Museum of California, 801-833 Harrison Street (the former Hebern Electrical Code Co. Building), the Chinese Presbyterian Church and the recently landmarked Buddhist Church of Oakland.

Eight Areas of Primary Importance, or API (historic districts that appear eligible for the National Register of Historic Places), are within or partially within the Planning Area. They range in size from two parcels to multiple blocks and over 100 parcels. They are the Chinatown Commercial District, 7th Street/Harrison Square Residential District, King Block, Real Estate Union Houses, Lakeside Apartment District, Downtown District, and Lake Merritt District. There are also several Areas of Secondary Importance, or ASI (locally significant historic districts that do not appear eligible for the National Register of Historic Places).

HISTORIC PRESERVATION STRATEGIES

The Preferred Plan aims to protect the value of historic resources, in order to create an interesting and fine-grained urban fabric that could help preserve character, sense of place and history, and provide great visual interest. In addition to the strategies described below, streetscaping improvements (including lighting, wider sidewalks, tree plantings, as described in Chapter 6) could also enhance the overall character of historic districts.

Protecting Historic Resources

Here are some strategies for protecting individual historic resources:

- **Residential Façade Program.** The City has an existing program in the Central City East Redevelopment Area that offers assistance (via Housing and Redevelopment funds) to homeowners to make improvements to their homes. Even relatively small investments, such as painting, can dramatically improve the lifespan and physical appearance of a building. This program could be expanded to the Central District Redevelopment Area (thus encompassing the entire Planning Area).
- *Mills Act.* This is a City program that offers potential property tax reductions in exchange for doing work that will extend the lifespan of historic buildings and/or improve their exterior physical appearance.
- **Demolition Findings.** In 2011, the City adopted an ordinance that requires analysis and a threshold of findings be met before a historic resource can be demolished. The findings and submittal requirements vary depending on the significance of the historic resource, but provide protection for contributors to historic districts or Potentially Designated Historic Properties that are rated A, B or C.
- State Historical Building Code. Provides alternative building regulations for permitting repairs, alterations and additions necessary for the preservation, rehabilitation, relocation, related construction, change of use, or continued use of a "qualified historical building or structure." These standards are intended to save California's architectural heritage by recognizing the unique construction issues inherent in maintaining and adaptively reusing historic buildings.

Re-Use of Existing Historic Resources

The Preferred Plan also seeks to encourage the preservation of existing historic resources where feasible by facilitating re-use or incorporation into new development. Conversion to a different use is a useful strategy if a building is no longer well-located or well-suited for its original use. Larger single family homes can be retrofitted to become multi-family residential uses, providing additional density in this urban transit-oriented setting. Houses which are no longer desirable for residential purposes can be reused as professional or non-profit offices, galleries, restaurants, or bed-and breakfast inns. Old industrial buildings can be converted to light manufacturing, offices or even residential uses.

There are also opportunities to incorporate existing, low scale development into new structures. This would be a particularly valuable strategy in historic districts. For example, in the King Block (pictured on the right), an Area of Primary Importance. The existing character of this district includes some dense, multi-story development. However, it also includes some low-scale historic resources. Incorporat-



ing denser and larger development on top of the existing low-scale buildings would be a way to finance the preservation of that low-scale building while enhancing the overall character of the district.

Conversion of historic structures and incorporation of historic structures into new development can be facilitated by waiving certain building or zoning code requirements that do not impact safety. This could include application of the State Historical Building Code (described above) or reduced parking or open space requirements. Detailed code revisions will be drafted in the next phase of this planning process.

Preservation can also be facilitated by the relocation of some of the historic buildings that are scattered throughout the Planning Area into a historic district with similar character. These buildings could fill in the smaller vacant lots within historic districts. Relocation is already facilitated via CEQA exemption (HPE, Action 3.8.1.2) and could be further facilitated by establishment of a relocation assistance fund from financial mitigations for significant and unavoidable CEQA impacts on historic resources.

Ensuring Compatible New Development

Some opportunity sites for development within the Planning Area may be located within historic districts or adjacent to historic resources. Good, compatible design of new development will create an interesting and fine-grained urban fabric that could help provide transitions, preserve character, sense of place and history, and provide great visual interest.

Design Review Guidelines

Design Review Guidelines for historic districts or new development adjacent to historic resources will also help to ensure compatible development. These will be developed in more detail in the next phase in the Station Area Plan, but should include guidance related to transitions between existing historic resources and new development, including height, building form, roof pitch, scale of parcelization, character reinterpretation and façade articulation with respect to scale and proportions. Streetscape design standards will also be developed in the Draft Plan to ensure street improvements complement historic buildings as part of a pedestrian-oriented environment.

Height Limits in the 7th Street/Harrison Square Residential District

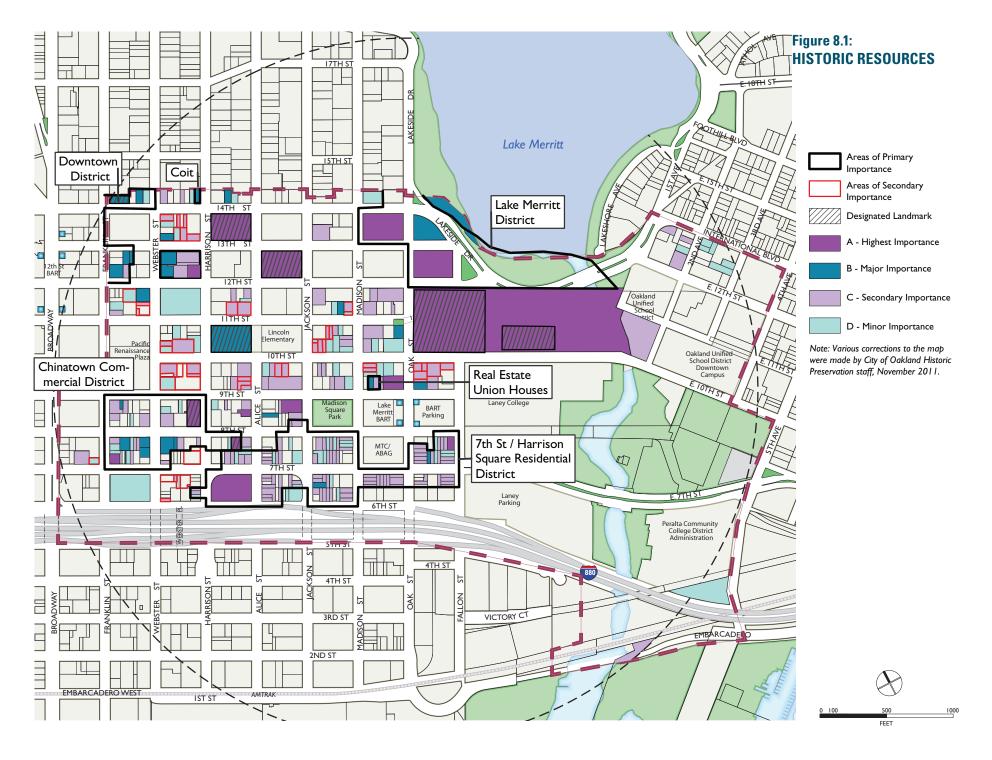
The 7th Street Historic district (an API) is characterized by a collection of two- to three-story Victorian and early 20th Century residential buildings. During the rezoning of the Central Business District in 2009, it was determined that building height was a distinguishing characteristic of this API (other APIs and ASIs in the Planning Area do not include building height as a distinguishing characteristic). Therefore, the proposed height map (see Chapter 4, Figure 4-5) includes a height limit of 45 feet for a portion of this district that is most intact to ensure that any new development maintains that building height context.

Protecting Historic Parks

The Preferred Plan also recognizes the value of historic parks, including the historically significant Lincoln Square and Harrison Square (Chinese Garden), both of which are part of Oakland's original city plan in the early 1850s, when the city was incorporated. Madison

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Square Park, although relocated from its original site a block away, was also one of the original set of full-block parks that were part of the City's early layout. Ideas for improvements to these parks are described in the Open Space and Recreational Facilities" Section of this document.



8.3 Health Impacts

Community health is affected by a number of factors in an urban environment—not only those which are related to the actions of individuals, such as health behaviors and lifestyle choices, but also factors such as income, education, employment and working conditions, access to health services, nutrition, and the quality of physical environments. The Preferred Plan seeks to improve overall health and safety of community members in the Planning Area, but may inadvertently cause negative impacts. The potential impacts and tradeoffs of proposed improvements are described below.³

LAND USE

The Preferred Plan proposes an overall increase in the density of urban development in the Planning Area, including in the mix of uses and the number of residences and population. New development will bring new amenities, in the form of improved transportation and streetscapes, a variety of neighborhood-serving uses, and public services. Increased walkability, more residents living near public transit, and access to daily shopping needs and public facilities may encourage more physical activity (i.e., walking and biking) and reduce obesity rates. In addition, new retail and office uses may create new jobs and economic development opportunities in the community, increasing or supplementing incomes and keeping dollars within the community. On the other hand, new development may also lead to higher traffic volumes, collision rates, reduced air quality, and noise impacts from vehicles and businesses. The Plan's policies will seek to reduce these potential negative impacts.

Proposed new multi-family housing should be designed to accommodate a range of income levels. Ensuring that residents can find quality housing within their means is essential to avoiding overcrowding, poverty, and homelessness. An affordable housing strategy is a key tenet of the plan, but it should also be coupled with a strategy to reduce the effects of displacement and gentrification since property values may increase with implementation of the plan. (Affordability and displacement issues are described more fully in Section 8.5 below.) Affordability can affect health outcomes in a variety of ways. For instance, higher housing costs may impact people's ability to buy food or get medical care. Higher levels of food insecurity are associated with an increasing percentage of income spent on housing. Lack of affordable housing could also result in displacement of existing residents or overcrowding. Housing displacement is stressful, and potentially results in loss of job, difficult school transitions, and loss of cohesive social networks.

In terms of environmental hazards, the Planning Area's proximity to I-880 and other high volume roadways may create noise and air quality impacts on sensitive receptors (e.g., residents). Policies to mitigate these potential impacts (e.g., standards for windows, construction, screening, and ventilation) will be implemented, particularly for residences within 500 feet of such roadways.

³ The health impact analysis was informed by the review and analysis in Health Impact Partners' letter to the City of Oakland Re: Comments on the DRAFT Transportation Element of the Lake Merritt Station Area Plan. July 25, 2011.

TRANSPORTATION

The transportation improvements in the Preferred Plan are intended to promote pedestrian and bicycle mobility. The Plan focuses on improving the safety and convenience of travel on foot or by bike through improvements to streets and streetscapes. Reducing street widths and narrowing vehicle lanes are expected to reduce vehicle speeds and collision rates, while increased sidewalk widths, adding pedestrian-scaled lighting, landscaping improvements, I-880 undercrossing improvements, and other pedestrian amenities (e.g., lighting, bulbouts, seating) are expected to encourage people to walk and make walking safer, particularly at key intersections that have a history of being particularly dangerous for pedestrians. Walking is a form of physical activity which can prevent chronic disease, reduce stress, and improve mental health. The Preferred Plan proposes improving bicycle circulation through both bicycle lanes (Class II) and shared vehicle/bicycles lanes (Class III). The former are preferable in order to prevent conflicts between bicycles and vehicles and to reduce the proximity to tailpipe emissions. These improvements are described in greater detail in Chapter 7.

Finally, the proposed green streets may further improve air quality and reduce toxins and potential sewer overflow during stormwater events by filtering pollutants and slowing runoff.

Some potential unintended negative impacts of street improvements include the proposed mid-block pedestrian crossing near the 7th Street channel. While intended to increase pedestrian access, marked crosswalks at uncontrolled intersections may actually reduce pedestrian safety.

PUBLIC FACILITIES AND SAFETY

Parks and community facilities are essential in any community, but particularly in high-density urban communities where space is limited and the benefits essential. Parks, open spaces, and recreation facilities provide space for physical activities that have positive health benefits (tai-chi, dancing, badminton, basketball) and social interaction, which can lead to general well-being and a strong sense of community. The Preferred Plan proposes an extension of the greenway along the Lake Merritt channel to connect to the Estuary waterfront Bay Trail, providing a linear park connecting to a regional recreation trail.

Active usable open spaces are currently limited in the plan area, and the increase in population may further increase wear and strain capacity at existing facilities. One option to be explored in the Preferred Plan will be the potential for joint use of Oakland Unified School District (OUSD) and Laney College recreation facilities to provide additional open space opportunities for healthy living. Chapter 5 provides details on the Preferred Plan strategy for improving Park access and quality.

In terms of public safety, programming and infrastructure improvements are intended to enhance safety in the Planning Area. Street lights that illuminate the sidewalk at night, more "eyes on the street" resulting from new residential developments, and neighborhood safety patrols (e.g., through a community benefits district) may improve both actual and perceived security in the Planning Area.

8.4 Oakland Unified School District Schools

Schools are a critical resource and hub of the community. For both students and adults, schools contribute to education and culture, and provide physical gathering space in the Planning Area. This section describes both the potential impact of the Preferred Plan on existing school facilities as well as opportunities for the City, Oakland Unified School District (OUSD), transit providers, students, families, and other stakeholders to foster relationships and improve overall quality of life.

PRIMARY AND SECONDARY SCHOOLS

Primary and secondary schools play an important role in the character of the community and the presence of children and students of all ages during the school day. OUSD operates two elementary schools and one small high school in the Planning Area. There are also two small charter schools serving middle and high school students, respectively. Additionally, one middle school and two high schools serve students in the Planning Area, but are located elsewhere. These schools along with their capacity and enrollment are shown in Table 8.1.

Table 8-1: Primary and Secondary Schools that Serve the Planning Area

School Name	Existing or	Enrollment	Percent
	Planned Capacity ²	(2010-2011)	Capacity
Lincoln Elementary School	576	635	110%
La Escuelita Elementary School	360 ²	250	69%
Westlake Middle School ¹	606	644	106%
MetWest High School	180 ²	151	84%
Oakland High School ¹	1,404	1,777	127%
Life Academy High School ¹	391	272	70%
Total	3,517	3,729	106%

¹ Outside Planning Area boundary.

Source: Oakland Unified School District Website, http://www.ousd.k12.ca.us/ousd/site/default.asp, Accessed December 17, 2009; Capacity: Oakland Unified School District. Downtown Education Complex Draft Initial Study/Mitigated Negative Declaration, August 2010. Oakland Unified School District Website, Presentation to Oakland Unified School District, Long Range Facilities Master Plan, 2005, Enrollment: California Department of Education, Educational Demographics Unit, http://dq.cde.ca.gov/dataquest/, Accessed September 9, 2011.

Oakland Unified School District Schools

Lincoln Elementary School has over a century of history serving youth in the neighborhood and is one of the highest-performing elementary schools in OUSD. Currently, the K-5 public elementary school serves over 600 students—slightly over capacity. A large percentage of the student population comes from a home where a language other than English is spoken, including Cantonese, Mandarin, and Mongolian.

² Planned capacity in Downtown Education Complex

La Escuelita Elementary and MetWest High are much smaller, serving approximately 250 and 150 students, respectively. MetWest's internship-based education program creates a school that is strongly linked to the community. Students partner with local businesses and organizations as part of the curriculum, building relationships with adults professionals. These schools are in the process of being consolidated into the Downtown Education Complex: a state-of-the art, multi-use structure currently under construction. The elementary and high school will increase their capacity by 110 and 44 students, respectively. Yuk Yau and Centro Infantil Child Development Centers will also be located within the complex, creating an educational center.

Outside of the Planning Area, OUSD's schools are also near or above capacity. While Life Academy High School has additional capacity available, Westlake Middle School and Oakland High School are above capacity.

Overall, student enrollment currently exceeds capacity. However, the Downtown Education Complex will increase student capacity, as shown in Table 8.3 to accommodate more elementary and high school students. In addition, local charter schools may be able to accommodate additional students.

Downtown Educational Complex

The planned OUSD Downtown Educational Complex Project is located between 2nd and 4th Avenues on East 10th Street, and will host La Escuelita Elementary, MetWest High School, and Yuk Yau and Centro Infantil Childhood Development Centers (which provide preschool programming for children ages three through five and an afterschool program for children in kindergarten through third grade) in a state-of-the-art, multi-use structure. The Complex is adjacent to Laney College and will have a welcoming orientation to the street and the neighborhood. It presents the opportunity to leverage this School District investment to enhance relationships across the District and revitalize the East Lake Gateway Area.

Other Schools

Several charter schools have operated in the Planning Area with varying lengths of time and success. Currently, American Indian Charter School II serves nearly 170 middle students and Oakland Charter High School approximately 120 high school students. Both charter schools have some remaining capacity to accommodate additional students.

In terms of after-school programming, for over 50 years the Chinese Community Center & Milton Shoong Chinese Cultural Center has offered Chinese language classes to youth, English as a Second Language (ESL) classes, and a gym for cultural and recreational activities such as basketball, badminton, volleyball, and dance classes.

School Demand

Student enrollment will likely increase with the Preferred Plan, given the expected increase in residential dwelling units. The demographic makeup of new residents (i.e., whether residents are seniors or families with children) will affect the demand on existing school facilities. Demographic projections for Alameda County illustrate an overall aging of the population. Spe-

cifically, the number of seniors, age 60 years and over is expected to increase by 59 percent between 2010 and 2035. Assuming the same level of increase in the Planning Area by 2035, we can expect a higher proportion of seniors in the future, from 30 percent of the overall population currently, to 36 percent of the population by 2035. However, these projections do not take into account the Preferred Plan and the vision of creating a more family-oriented community in the Lake Merritt Station Area. The analysis below seeks to estimate potential enrollment based on new housing projected with the Preferred Plan.

Although OUSD has not adopted student generation rates to project potential student demand from new housing, a 2006 study prepared for OUSD by Lapkoff & Gobalet Demographic Research Inc. analyzed the impact of new housing development on enrollment and facilities in the district. The study found that market-rate units produce between 0.01 and 0.1 students per housing unit and affordable housing units somewhat more: 0.4 to 0.7 students per unit. Actual demand will depend on the rate and level of buildout of the Station Area Plan, as well as the demographic makeup of units. However, it is possible that new students generated by the Plan may exceed the capacity of existing OUSD schools and charter schools that serve the Planning Area. Given that OUSD is currently experiencing declining enrollment district wide and contemplating school closures, it is unlikely that new school facilities would be developed in the short-term.

HIGHER EDUCATION

Laney College is located within the Planning Area and provides educational and cultural programming to residents of the Planning Area and beyond. Laney College is the largest of the four Peralta Community Colleges, serving over 14,000 students with more than 480 full-time and adjunct teaching positions. The college offers Associate of Arts and Associate of Science degrees in a range of subjects and certificates in vocational programs. The school serves Alameda, Albany, Berkeley, Emeryville, Oakland, and Piedmont, though students from other nearby cities attend as well. Most students work while attending Laney College, and take classes part time. Laney College also functions as a community facility and cultural gathering place. The campus is home to Laney Bistro, a restaurant operated by students, and the Performance Theatre and an Arts Center and Gallery, which hosts numerous artists and performers.

The Preferred Plan seeks to work with Laney College to become even more of a community facility with more community uses and classrooms; and facilitate access by adding signage, and improving streets and intersections to be more pedestrian friendly.

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⁴ Association of Bay Area Governments, Projections 2009. Population by Age for Alameda County. The Lake Merritt Station Area Plan Existing Conditions and Key Issues Report (Table 6.1) cited a population of 12, 052 according to Claritas Inc., 2009. Of this total, 3,619 or 30 percent are 60 years and older. Using projections for Alameda County as a proxy, we can extrapolated that this age cohort may increase to 5,219 residents by 2035 or 36 percent of the total population in 2035 (16,018). Notably, this analysis does not take into account the Preferred Plan and the additional population increase that may result.

POLICY RECOMMENDATIONS

The Station Area Plan can help support students and schools through an integrated approach to land use, transportation, and the provision of education and community facilities. Aligning pedestrian improvements and public transit routes to users, including students and families, can ensure to safe access to and from schools. Sharing in use of existing parks, playgrounds, and recreation facilities can reduce overall costs and enable more efficient use by students during the school day and adults in the evenings and on weekends. Lincoln Elementary and the adjacent Lincoln Square recreation center already have a joint use agreement and can serve as a model for coordination and lessons learned.

- Ensure safe convenient pedestrian routes to and from schools through streetscape improvements, adequate sidewalk widths, traffic calming and by coordinating with OUSD and local school sites to implement Safe Routes to School projects.
- Coordinate with AC Transit to ensure that public transit adequately serves all schools in the Planning Area by aligning routes and schedules.
- Coordinate development plans and projected student enrollment impacts from the Station Area Plan with OUSD staff.
- Identify opportunities for joint use of City, OUSD, and Laney College recreation facilities

8.5 Initial Approach: Community Benefits

The term: "Community benefits" refers to a range of community amenities and services that are essential to a sustainable, diverse, and highly livable neighborhood. This section provides an overview of the initial approach to achieving community benefits in the Planning Area. Several community benefits provide added value through co-benefits. Actions, policies, or strategies that meet two goals simultaneously are those that have co-benefits. An example of co-benefits is in the preservation of older homes, which not only preserves historic resources, but also helps avoid displacement of existing residents.

An initial list of desirable community benefits includes:

- Affordable housing;
- Family housing;
- Historic preservation;
- Additional public open space;
- Community facilities;
- Maintenance of parks and public amenities;
- Provision of transit passes, such as the AC Transit EasyPass (possibly in exchange for a lowered parking requirement);
- Other designated public amenity.

Most of these benefits could be implemented through a variety of strategies, which will be further refined and developed in the Draft Area Plan. Strategies will consider the following possible approaches:

- Implementing an impact fee or Planning Area fee, such as through a lighting district, parking rate surcharge, or permit fee surcharge;
- Requiring new development to provide a benefit, or contribute to the provision of a benefit;
- Relaxing standards or development incentives in exchange for benefits;
- Considering a different process achievement of benefits on sites owned by public agencies;
- Phasing of incentives over time in order to respond to the market; or
- Other funding sources or financing mechanisms (outlined in Chapter 9).

The community benefits listed above are described in greater detail throughout the Preferred Plan in their respective chapters (i.e., Chapter 5: Open Space and Recreational Facilities, Chapter 6: Streetscape Character, Section 8.2: Historic Resources, and Section 8.6: Affordable Housing). Chapter 9: Economic Development provides added detail on strategies, includ-

ing a Section 9.2: Incentives for Economic and Community Benefits, and Section 9.3: Mechanisms to Implement an Economic Development Strategy.

The Draft Plan will include details on the capital and/or operating and maintenance costs of each of these benefits, and a more detailed strategy of incentives or financing strategies.

8.6 Draft Affordable Housing Strategy

Affordable housing is a critical component of a sustainable neighborhood and is sorely needed in the Planning Area. As of 2009, median household income for the average 2.65 person household in the Planning Area was \$27,786 compared with the citywide median income of \$49,481. The HUD defined area median income (for Alameda and Contra Costa Counties) was \$89,300 well above the City of Oakland and Planning Area incomes. In Plan Area census tracks, 45 percent of residents are cost burdened and may have trouble affording basic necessities after paying rent. Therefore, it is imperative that a strategy is in place to ensure affordable housing is available to all existing and future residents, especially since having affordable rents targeted to 30 percent of household income both stabilizes low income residents and provides these households with expendable income for other living and recreating expenses.

While 30 percent of the existing housing units in the Planning Area have affordability restrictions, due to declining federal assistance to support new affordable housing construction, uncertainty about the future of the City's Redevelopment Agency (which produces tax increment, the most important local source of affordable housing funding) and abysmal City revenue projections, a creative menu of strategies is needed to provide additional affordable housing to accommodate the area's projected population growth and maintain a balanced mix of incomes in the area. The Affordable Housing Strategy for the Lake Merritt BART Station Area Plan provides these key strategies.

The Lake Merritt BART Station Area Plan Affordable Housing Strategy is composed of the following elements:

- Assessment of Existing Conditions
- Recent Efforts and Affordable Housing Projections
- Affordable Housing Goals
- Funding Outlook
- Station Area Plan Implementation Strategies

ASSESSMENT OF EXISTING CONDITIONS

I. Demographic Trends

Population

The estimated 2009 population in Oakland is 411,736. Approximately 3 percent of that population is within a half-mile of the Lake Merritt BART Station (Planning Area population). Since 1990, Oakland,s population has grown by 11 percent, less rapidly than population growth of the Bay Area or the East Bay (ABAG, US Census).

Ethnicity

The majority of Planning Area residents are Asian (64 percent); 54 percent of area residents are Chinese. Vietnamese (including ethnic Chinese residents of Vietnamese descent) and Filipino residents comprise 2.7 percent and 2.5 percent of Planning Area residents, respectively.

In the Planning Area 57.5 percent of residents speak an Asian language at home, compared to 13.9 percent for the City as a whole. Oakland's Chinatown has historically functioned as a port of entry for new Chinese immigrants. Historically, as these families became more established they moved out of Chinatown and often out of the city. Although Oakland's Asian population grew from 53,206 to 70,002 between 1990 and 2010, the Oakland Asian population is currently 4.7 percent of the Bay Area Asian population, down from 6.0 percent in 1990. Similarly, today Oakland's Asian population is 13 percent of the East Bay Asian population, down from 20.1 percent in 1990.

The remaining reported racial composition of Planning Area residents follows: 13 percent are African-American, 12 percent are White, and 11 percent belong to Other Races.

Age

As of 2009, the Planning Area population is generally older than the City of Oakland's population. In the

Planning Area 24 percent of the population is over age 65, and 14 percent are children under 18. In comparison, in Oakland 11 percent of the population are seniors and 24 percent are children. The median age of the Planning Area is 46.1, significantly older than the Oakland median age of 36.8.

Income

The Planning Area median household income of \$27,786 is far lower than citywide (\$49,481).

The Health Impact Assessment prepared for this Plan notes that for Planning Area census tracts, 45 percent of residents are cost burdened (paying equal to or more than 30 percent of their household income on rent) and may have difficulty affording necessities such as food, clothing, transportation and medical care. A slightly higher percentage of Oakland renters (52 percent) have unaffordable rent costs. In the Plan Area 29 percent of homeowners spend 50 percent or more of their income on housing costs and are considered severely cost burdened. Of owner households in Oakland, this value is slightly lower at 23 percent.

Transit Use

The Planning Area average of only 0.66 vehicles per household suggests a higher use of public transportation than for the city as a whole, where there is an average of 1.35 vehicles per household.

Smaller Households

The average household size in the Planning Area is 1.94 persons, compared to Oakland's average household size of 2.65.

Housing Tenure

Most housing units in the Planning Area are renter-occupied (84 percent), with only 16 percent of units occupied by owners. In contrast, for the City of Oakland, 59 percent are renter occupied and 41 percent are owner occupied. Sources interviewed for the *Lake Merritt Sta*-

tion Area Plan Market Opportunity Analysis suggest that despite current over supply conditions in the citywide housing market, there may be pent up demand for for-sale housing in Chinatown.

Housing Prices

The average home sales price in Oakland in 2009 was \$250,000, representing a nearly 52 percent decrease in average sales price from levels reached in 2007 (2007 average sales price was \$511,146). In 2006, selected new multifamily developments in Oakland's Central District which includes the Planning Area, one bedroom units between 650 and 750 SF were priced between \$324,000 and \$499,000, from \$499 to \$830/SF. Larger two bedroom units between 1,100 and 1,350 SF were priced between \$619,000 and \$899,000, from \$476 to \$692/SF. Condominium units in Central Oakland that resold in late 2009 typically sold for 50 percent to 60 percent below their peak levels in 2006.

Recently, the vast majority of condominium sales in Oakland's Central District have been short sales, auction sales, and foreclosures. The flood of foreclosures is keeping supply high and prices low. It is reported that a large number of buyers are purchasing distressed properties with cash as opposed to mortgage financing.

Rental Rates

The average market rate monthly rent in Oakland in 2009 according to Realfacts was \$1,550. Trends over the decade show that rents began to rise in 2005 to their current level. According to the Health Impact Assessment, the Plan Area is relatively affordable at 70 percent of the median gross rent in the City overall.

II. Existing Affordable Housing Policies

Density Bonus Ordinance

Oakland's Density Bonus Ordinance allows developers of five (5) units or more to exceed the maximum allowable density set by zoning, if they include units set aside for occupancy by very low-, low-, and moderate-income households and/or seniors. The City defers to state law for the allowed concessions a developer may request such as increases to project density, and relaxation of development standards (e.g., reduced setbacks and parking requirements).

Jobs/Housing Impact Fee and Affordable Housing Trust Fund

This fee was established to assure that certain commercial development projects compensate and mitigate for the increased demand for affordable housing generated by such development projects within the City of Oakland. A fee of \$4.60 per square foot is assessed on new office and warehouse/distribution developments to offset the cost of providing additional affordable housing for new lower-income resident employees who choose to reside in Oakland. Fees go into a Housing Trust Fund which is then made available to nonprofits.

Condominium Conversion Ordinance

One way in which the market responds to the increased demand for ownership units is through condominium conversion. Condominium conversion, or the conversion of rental apartments to ownership condominiums, present complex challenges to local government. On the one hand they can improve the housing stock, provide ownership opportunities for moderate income households, and contribute to more stable neighborhoods. However, they also reduce the apartment rental inventory thereby increasing rents and decreasing vacancy rates.

Oakland's Condominium Conversion regulations include tenant protections in the form of early tenant notification requirements, right of first refusal, and tenant relocation and moving assistance.

In the "primary" and "secondary" impact area, replacement rental units are required to be provided equal to the number of units being converted. The primary and secondary areas are boundaries that have been drawn on a map of Oakland based on their housing characteristics and sensitivity to condo conversion impacts. Outside these areas, replacement rental units are required when 5 or more rental units are proposed for conversion to ownership units. The Lake Merritt Station Area Plan area is partially inside the "primary" impact area, however the majority of the Plan Area is outside of both the "primary" and "secondary" impact area. Replacement rental units ensure the balance of rental and ownership units is maintained, which is critical in Oakland, where most households are renters (59 percent) and even more important in the Lake Merritt Station Area Plan area where the overwhelming majority of residents are renters (84 percent).

Residential Rental Adjustment Program

The city's residential rental adjustment program limits rent increases to once per year at an amount equal to the average annual percentage increase in the Consumer Price Index. This ensures stability in rental rates for existing tenants. The City's Just Cause for Eviction Ordinance helps to ensure tenants are not subject to eviction motivated by a rental property owner's desire to increase rents.

III. Analysis of Constraints to Housing

The City of Oakland has undertaken a number of initiatives to expand the production of affordable housing such as designating large areas for high-density housing, maintaining low open space and parking requirements and providing for streamlined permitting processes, among other practices. Oakland charges building fees to cover the cost of processing development requests which can have an impact on the cost of housing. Total building fees typically range from \$25,000 and \$40,000 per dwelling unit. When compared to the market cost of producing housing in Oakland (land and site preparation, construction, financing, etc.), permit and impact fees⁵, while a cost factor, are not as significant as other cost factors in the production of affordable housing (such as the market cost of land and State requirements to pay prevailing wages on construction labor for housing development assisted with public funds).

Additional constraints include land costs, environmental hazards, land availability, construction costs, financing, and neighborhood sentiment. Market prices for land are high in the desirable, high-cost San Francisco Bay area. Recent sampling of land acquisition costs for City of Oakland-funded affordable housing ranged from almost \$19,000 to almost \$55,000 per

⁵ Note that Oakland has no development impact fees on residential development.

unit (the variation was largely a function of project density). Speculation plays a role in the high price for land. Many sites have been held for a long time by owners not highly motivated to sell and/or waiting for further increases in value. The cost of land and land preparation is further increased in Oakland by the fact that most sites with housing development potential are relatively small parcels that can be difficult to develop (including those that might be irregularly shaped). Many sites have existing structures and infrastructure that must be removed, replaced, and/or reconfigured. The redevelopment of underutilized sites also adds to the cost of development when contaminated soils or hazardous materials in existing buildings/structures must be mitigated. Construction costs, which typically represents 50 to 60 percent of the total development costs are another significant factor contributing to high housing costs.

RECENT EFFORTS AND AFFORDABLE HOUSING PROJECTIONS

Affordable rental units typically serve households earning between 30 percent and 60 percent of Area Median Income (AMI), which includes the areas of Alameda and Contra Costa Counties combined, with housing costs limited to 30 percent of the target income level. In addition, lower income households may be served if Section 8 assistance (either project- or tenant- based, in which tenants pay 30 percent of their income, and the Oakland Housing Authority subsidizes the remainder of the unit's rent) is available. Affordable ownership developments typically serve households earning between 80-120 percent of AMI. In 2011, the 30%, 60 percent and 120 percent AMI household incomes for a family of four are \$27,700, \$55,380 and \$110,750, respectively.

Currently, the Planning Area has 1,694 affordable housing units which represents nearly 30 percent of the existing 6,200 units in the Planning Area. An additional 1,230 units are in the development pipeline (789 units fully entitled). The existing affordable housing units are at low risk of converting to market rate as many of the affordability restrictions on units have been extended for an additional 55 years.

The Association of Bay Area Governments (ABAG) projects a total need of 1,327 units, 648 of which need to be affordable, in the Planning Area by 2015. The affordability of this new projected housing for the period 2007-2014, as assigned by ABAG for the City as a whole, and inferred for the Planning Area is provided in the Table 8-2.

Table 8-2: Affordable Housing Projections for 2015

	Oakland RHNA	Inferred Planning Area Housing Need Allocation (2010-15)
Affordability Level	Housing Need (units)	Housing Need (units)
Very Low Income	1,900 (13 percent)	172
Low Income	2,098 (14 percent)	190
Moderate Income	3,142 (21 percent)	286
Above Moderate Income	7,489 (51 percent)	679
Total Need	14,629	1,327

The Affordable Housing Assessment prepared for this Plan, estimates that the housing market will produce between 398 and 664 units by 2015 which represents 30%-50 percent of the ABAG Planning Area projections.

The Preferred Plan projects 3,600 to 5,560 housing units in the Planning Area by 2035. A range of between 540 to 1,350 of the new units will need to be affordable (555 units based on California Redevelopment Law Requirement of 15 percent of 3,600; 1,501 units based on ABAG projected need for very low and low-income units: 27 percent of 5,550).

AFFORDABLE HOUSING GOALS

The City of Oakland's commitment to providing affordable housing is set out in the Housing Element of the General Plan. The goals from the Housing Element are summarized below.

Housing Element Goals

- Goal 1: Provide Adequate Sites Suitable for Housing for All Income Groups
- Goal 2: Promote the Development of Adequate Housing for Low- and Moderate-Income Households
- Goal 3: Remove Constraints to the Availability and Affordability of Housing for All Income Groups
- Goal 4: Conserve and Improve Older Housing and Neighborhoods
- Goal 5: Preserve Affordable Rental Housing
- Goal 6: Promote Equal Housing Opportunity
- Goal 7: Promote Sustainable Development and Sustainable Communities

These goals are reinforced in the vision and goals developed for the Lake Merritt Station Area Plan. The community's vision for the Lake Merritt Station Area Plan is to increase the housing supply to accommodate a diverse community, especially affordable housing and housing around the BART station.

Lake Merritt BART Station Area Plan Affordable Housing Goals

- Accommodate and promote new rental and for sale housing within the Plan Area for individuals and families of all sizes and all income levels (from affordable to market rate housing);
- Prevent involuntary displacement of residents and strengthen tenant rights;
- Maintain, preserve, and improve existing housing in the project area and prevent loss
 of housing that is affordable to residents (subsidized and unsubsidized), and senior
 housing;
- Promote healthful homes that are environmentally friendly and that incorporate green building methods;
- Encourage development of family housing (i.e., larger than 2 bedroom units).

FUNDING OUTLOOK

Most affordable housing in the planning area will be funded with a mix of local and non local sources. Low income housing tax credits (LIHTC), Federal HOME funds, mortgage revenue bonds, and HUD funds. With few exceptions, non local subsidy sources are not adequate, even in combination, to fully subsidize the cost differential to make new housing development affordable to low and moderate income households.

Tax increment is currently the most important local source of funding for affordable housing. By policy,

Oakland normally dedicates 25 percent of the Redevelopment tax increment funds to affordable housing, or 5 percent more than required by the state law. The city has recently had \$10,000,000 to \$15,000,000 annually for its housing Notice of Funding Availability (NOFA). However, the estimated gap to finance affordable units is \$101,000 to \$141,000 per unit. Therefore, in a good year, local gap financing typically assists 100 new units annually, citywide (compared with ABAG's projected 648 units that are needed in the Planning Area by 2015).

Due to declining federal financial assistance for affordable housing, the uncertainty about the fate of the City's Redevelopment Agency given the state's recent decision to eliminate redevelopment agencies, and a lack of a citywide inclusionary housing requirement, a menu of creative options is required to meet the affordable housing needs for the Plan Area.

STATION AREA PLAN IMPLEMENTATION STRATEGIES

Affordable Housing Unit Types

Area residents, including members of the Chinatown Coalition, stress the need for additional affordable family housing in the Planning Area. The Planning Area has traditionally served as a port of entry for new Asian immigrants, who typically cannot afford market rate housing. While an accurate estimate of future immigration is not available, these families would be attracted to and simultaneously support the area's vibrant retail uses.

Affordable units should be sized to support the area's small households, as well as families requiring 2- and 3-bedroom units. Although some larger units are desirable, city sources report that the only persistent vacancies for Planning Area affordable housing projects are in four bedroom units, where developers have sometimes found that families will squeeze into a three bedroom unit rather than pay the incremental rental difference for a four bedroom unit.

The opportunity sites identified in the Plan could all theoretically be developed as housing, as the sites were adapted from the City's Housing Element Opportunity Site database.

Reduced Parking Requirements to Reduce Development Costs

The Planning Area has a high degree of transit dependence, given that 49 percent of area households do not own a car. Immigrants and other prime target populations for affordable housing in the Planning Area are particularly receptive to TOD housing solutions, and would be well served by affordable housing with lower parking ratios. Eliminating the construction

cost for a parking space, which generally ranges from \$25,000 to \$60,000, represents a significant reduction in the local cost burden for an affordable housing unit. Thus, reducing parking ratios for housing development in the Planning Area would extend the number of units that could be funded with available local housing funds. Lowered parking requirements (for the rehabilitation and new construction of multi-family housing, as well as new secondary units in the Planning Area's historic single-family neighborhoods), consistent with TOD standards and the needs of the local population, should be encouraged for the Planning Area. However, conventional lenders may resist efforts to reduce parking ratios.

Additionally, new parking should be unbundled from future units, allowing future residents the option to pay for a parking space. Rather than forcing all residents to pay for a parking space they may not need, future residents should be encouraged to use the rich transit network in the project area. Also, unbundled parking on a future development site would allow for a car-share program or extra space for bicycle parking. Parking is addressed in detail in Chapter 7.

Funding Sources

To close the \$101,000 to \$141,000 gap for which local funds have generally been needed to finance affordable units, additional funding sources have been identified. These funding sources will help to offset the funding gap, but are not the financial solution. The Station Area Plan will prime future use of the Proposition 1C and the Bay Area Transit-Oriented Affordable Housing Fund. Impact fees may also contribute to funding needed improvements.

- Proposition 1C money can be used for infrastructure and implementation (\$20-40 million). This money has been used to fund transit villages in the City, but significant City financial resources were still required to subsidize affordable housing. The longevity of this funding source may be relatively short lived if California voters do not support another bond to fund affordable housing.
- Bay Area Transit-Oriented Affordable Housing Fund is a \$50 million collaborative public-private initiative to encourage inclusive transit-oriented development. These funds can be used to finance the development of affordable housing, as well as critical services, such as childcare, near public transit hubs. Borrowers can access predevelopment, acquisition, construction, mini-permanent and leveraged loans for New Markets Tax Credit transactions.
- Establish impact fees explicitly tied to community benefits including affordable housing. Impact fees are imposed on new development to off-set or mitigate the effects of the development. The amount of the fee must be clearly correlated with the improvements that will mitigate the impact of development.

Land Banking

According to the *Affordable Housing Technical Memo* prepared for this Station Area Plan, many land owners in the Planning Area are patient investors, willing to hold sites (sometimes across generations) to achieve their long term objectives. Historically, site turnover has been infrequent in the Planning Area. Further, land values in Chinatown have historically been the

highest in downtown Oakland. Because of the Planning Area's strong economic vitality and constrained geography, high rents support strong property values.

Thus, acquiring and designating sufficient sites for affordable housing development in the Planning Area should be a public goal. In most parts of the Planning Area, affordable housing would be developed in higher density projects over ground floor retail uses. The current economic crises and relative absence of development pressure may represent an opportunity to acquire sites for affordable housing development in the Planning Area.

Possible options for assembling sites for affordable housing include:

- The City could purchase sites for use as affordable housing developments. However, the most important public funding sources have limits on land acquisition. Redevelopment housing funds cannot be used for land banking for more than 5 years and Federal HOME funds cannot be used for land banking. The Redevelopment Agency could use non-housing funds to buy land, then repay these funds when the project is funded (The future of the City's Redevelopment Agency is uncertain at present, so future availability of non-housing funds is unknown.).
- Non-profits and the Housing Authority could partner to assemble sites.
- Community Land Trust (CLT) are locally based non-profit organizations that create permanently affordable housing through community ownership of the land. CLT's separate the ownership of residential buildings from ownership of the land under those buildings. Residents own the units while the CLT owns the land under the buildings, thus reducing the cost of owning a building or house. So in exchange for inexpensive homes, residents agree to sell their homes back to the CLT, or another low to moderate income household, at a restricted price. It should be noted however, that CLTs still need subsidies to get started.

Incentivize Affordable Housing

Incentive programs may help to expand affordable housing opportunities (e.g., through MTC's Priority Development Area program and Transit-Oriented Development Policy). In addition, there are ways to create market-rate housing that is affordable by design (i.e., smaller units, resource efficiencies, reduced parking requirements, etc.), allowing for a more "affordable" market-rate unit.

Although the Market Feasibility Study conducted for this Station Area Plan concludes a relatively grim forecast for the likelihood of new housing being constructed in the next 5 to 10 years, this planning document has a planning horizon of 25 years, with ultimate build out forecast for 2035. Thus, incorporating a phased system of incentives once the market picks up should be a component of the Plan with an emphasis on building affordable housing during the first phase of the Plan.

One way to incentivize the provision of affordable housing is to relax development standards for developers who include affordable units in housing construction projects. In the Station Area, a developer could apply for increased density (Floor Area Ratio), building height, or reduced open space requirements in exchange for providing affordable housing. Concessions

would be proportional to the number of affordable units at various affordability levels included in the development.

Anti-displacement Strategy

The Condominium Conversion "Area of Primary Impact" could be extended to include the BART Station area and greater Chinatown Area which would help to ensure that rental housing that is converted to condos is replaced (in the area). This would help to ensure a balance between rental and ownership housing in the Plan Area where renters comprise the majority of residents (84 percent).

Another anti-displacement strategy in the Preferred Plan is related to the rationale for lowering the height limit to 45 feet along a portion of 7th Street. The existing lower density housing stock in this area is located in close proximity to the BART station, so lowering the height limit in this area is likely to have the secondary benefit of reducing development pressures on these existing residences.

Citywide Affordable Housing Policy

A citywide affordable housing policy (inclusionary zoning) could be an important component to providing affordable housing in the Planning Area. A comprehensive citywide policy will alleviate the concern that requiring community benefits, including affordable housing only in the Plan Area would over-burden developers and put this area at a disadvantage compared to the rest of the City.

Lake Merritt Station Area Plan Draft Preferred Plan

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9 Economic Development

The Station Area Plan will also include recommendations for policies and programs that promote economic development and support for existing businesses. An economic development strategy would work in tandem with new building construction, improvements to streets, parks and safety to improve quality of life to the benefit of existing and new businesses and residents. The following section will help outline goals to develop an economic development strategy for the Lake Merritt Station Area.

9.1 Defining an Economic Development Strategy

A coordinated economic strategy is essential to fostering investment and growth in the Station Area. Such a strategy should include a managed program of fiscal development, strategic public improvements, and a balanced approach to land use. The development strategy should build on and reinforce initiatives already undertaken by the City and Redevelopment Agency, and capitalize on technical assistance and grant funding provided by State and federal agencies. This element proposes the following key objectives:

- Actively highlight and enhance the economic asset of Oakland Chinatown. As one of the most vibrant and economically viable retail districts in Oakland, the economic development strategy should develop such that it supports and expands the Chinatown commercial core.
- Strengthen crime prevention efforts and improve public safety. A safe environment can create a favorable impression, instill confidence for investments, and ensure that visitors and customers are comfortable using public spaces. Conversely, a lack of public safety may cause businesses to skip the Station Area as an investment destination and cause customers to shop elsewhere. The City must work with the police department to strengthen crime prevention efforts, to assure businesses that it is a desirable place in which to work and live. Neighborhood watch programs and security cameras in public places and parks are a few examples of initiatives that can increase "eyes on the street" and contribute to increased public safety. Further, expansion of the Downtown Ambassador Program to Chinatown could help to ensure the actual and perceived safety of the area.
- *Marketing and Branding*. Marketing is more than just a mere promotion of place. Marketing could help define the Station Area's image and increase its visibility to potential investors and the world at large. In particular, the marketing program should highlight the added benefit of shopping in Chinatown as a vibrant experience, as opposed to relatively new suburban outlets for Chinese retail goods. The City should

create a larger web presence and put more information on-line, since this is the most economical way of marketing short of running advertisements or directly approaching potential investors. Additionally, the City should maximize opportunities to promote itself, in partnership with the local Chinatown Chamber of Commerce and/or the East Bay Economic Development Alliance.

- Improve quality of life to attract a diverse population to live in the Station Area. Many professionals, families, and local employees live outside of the Planning Area but would be interested in living in a vibrant urban center. The City should establish a goal to attract these non-resident population groups to move to the Planning Area in order to ensure the area includes a diverse population including a variety of age groups and household types. This diverse population will help support a range of businesses and ensure that the area is active at all hours. This can be accomplished through measures such as ensuring there are enough housing choices for families, partnering with local schools to improve school quality, and ensuring there are enough retail, entertainment, and recreation facilities that cater to families. Many of these topics are addressed in other elements of the Preferred Plan.
- Actively engage with multicultural communities in business and employment development. Oakland, and in particular the Station Area, has a tremendous resource in its richly diverse population, with many communities that all bring their own skills, unique cultural heritage, business connections, and market penetration capabilities. The City should actively strengthen and pursue relationships with these groups, connecting with established business organizations (such as the Oakland Chinatown Chamber of Commerce and the Oakland Vietnamese Chamber of Commerce) and support the creation of new organizations for communities that are less organized.
- Further develop the potential of Laney College. Laney College is an important asset in the Station Area, and can serve as a physical and economic anchor. The Plan seeks to foster greater synergies between the College, the Chinatown core, and Downtown Oakland in order to fully take advantage of its presence and contribute to workforce education. Opportunities include establishment of externships and mentorship programs with local businesses, coordination on employer recruitment efforts, and sharing of facilities.
- Develop a strategy for the City of Oakland's and BART's own real property assets. One of the public sector's firmest investments is in its own land. Using City- and BART-owned property for "catalyst projects" can be a key tool for enabling physical development of a desired type and spurring further development in the surrounding area.
- Create a targeted Façade Improvement Program. Some existing businesses and buildings in the Planning Area are somewhat run-down or in could improve their marketability through façade improvements. Improvement programs exist through the redevelopment agency, and these programs should be actively marketed for use in the Planning Area.
- Support business development and job creation. Supporting locally-run start-ups adds to the City's existing employment base and fosters innovation. Through policy

initiatives – such as the creation of an Enterprise Development Program to provide technical and, possibly, financial support for local start-up businesses – the City may be able to improve access to resources and capital for these enterprises, helping them overcome obstacles to establishment. Further, the City could support business retention by maintaining a revolving City loan program for local businesses needing temporary financial support.

- *Ensure adequate access*. Ensuring that the Planning Area is accessible for pedestrians, bicycles, by transit, and by car is essential to promoting economic vibrancy. Improved streetscape for a vibrant pedestrian realm is addressed in Chapter 6, while improved access by all modes is addressed in Chapter 7.
- Public/private partnerships. Promote more public/private partnerships to achieve
 catalyst development, business development, community engagement and other objectives. Examples include the potential for BART to work with an entity to redevelop property, and OUSD working with the local business community to connect students with local businesses.
- Complete a Comprehensive Economic Development Strategy. During the implementation phase of this Plan, a comprehensive economic development strategy should be completed (as a separate study), with an emphasis on international business development. The strategy should consider:
 - Strategies for expanding existing businesses;
 - Private sector corporate headquarters export and import business as an opportunity with an already strong institutional presence (particularly in regard to the Port of Oakland);
 - The unique opportunities of the Asian market;
 - Creation of an Immigrant Investor Program/EB-5 Regional Center, which will
 establish a lower barrier to entry and attract international investment that would
 be complimentary to the existing community and business mix.
- Establish Local Hire Goals. In collaboration with community stakeholders, establish reasonable local hiring goals, such as by defining what constitutes a local hire, identifying appropriate industries and sectors in which local hiring will be encouraged, and developing target numbers of local hires for those businesses or institutions. Local hiring in the Planning Area should be encouraged as a component of progress towards the overarching economic development goals. A local hiring-related service could also be part of a Community Benefit District formed in the plan area, whereby business owners can be connected with workforce development programs.

With all of these strategies, the Preferred Plan is encouraging local, multicultural, and cross-sector business and workforce development, which has the potential to leverage connections between public and private businesses and training programs and potential employees that reside in or near the Planning Area. This has the potential to increase local hiring and thus not only promote economic development, but also improve the health and health-related effects of residents, such as increased walking, social cohesion and street life and decreased stress, air pollution, and traffic.

Lake Merritt Station Area Plan Draft Preferred Plan

In addition, the Draft Plan will develop a system of incentives for economic and community benefits. This has the potential to further impact local hiring if a local hiring incentive is included in the program. For example, developers could be granted some sort of bonus in exchange for hiring local residents or a new or expanded Community Benefit District could be established that includes local hiring strategies.

9.2 Incentives for Economic and Community Benefits

Providing incentives or "bonus" programs can be a powerful business and development attraction tool. These are systems in which development is granted some sort of bonus, such as additional allowable height or FAR (as outlined in Chapter 4) or reduced parking requirements, in exchange for providing an item or feature desired by the City, such as open space or affordable housing units. The general idea is that providing the development bonus makes the provision of community benefits economically feasible.

However, it is important that the City develop a carefully crafted incentive program that results in clear community benefits for the city. The program must offer incentives that make sense in the marketplace so that they are actually used. Policies that can accomplish this goal include:

- Develop an incentive program to attract new businesses and desirable development to the Planning Area, incorporating clear measureable criteria that ensure community benefits are delivered to the City. Possible approaches to be evaluated as part of Preferred Plan include:
 - Creating a system of "tiers" of incentives given and benefits provided;
 - Numerically linking the financial value of the bonus given (defined by value of gross floor area added) to the cost of benefit provided; and
 - Establishing a "points" system to link incentives and benefits. For example, the
 City may devise a menu of civic or environmental benefits and assign points to
 each item. The points earned then determine the amount of height, density, or
 FAR bonus a development may claim.
- Create a monitoring program to track the progress of the incentives program, to adjust and fine-tune it as necessary to ensure that incentives offered make sense in the marketplace and deliver the desired benefits to the city.

9.3 Mechanisms to Implement an Economic Development Strategy

SAFETY

Improving safety in the Planning Area is a priority for the community. Strategies for enhancing the overall sense of security may include the addition of pedestrian-scaled lighting and provision of additional police or security services. A key element to safety is also ensuring that streets are active and vibrant, which is addressed in other sections of the Preferred Plan.

Landscape and Lighting District

Permitted by the Landscape and Lighting Act of 1972, local governments may form a Landscape and Lighting District to finance elements such as the landscaping and lighting public areas (e.g., parks and plazas).

Ambassador Program

The Downtown Oakland Association provides security and maintenance through the Ambassador program. The program's efforts improve the appearance of the district, while the presence of "Security Ambassadors" provides a sense of safety. The program is covered in more detail in the discussion below of the Downtown Oakland Community Benefit District.

BART Police Headquarters

Currently, BART's Police Headquarters are located underground at the Lake Merritt station. An idea under discussion is to relocate this use to the street level, where it will be more visible and accessible. BART police would provide "eyes on the street" and could help patrol the immediate surrounding area.

FACADE IMPROVEMENT PROGRAM

Both the "Central District" and "Central City East" Redevelopment Areas include façade improvement programs. Both programs provide matching grants to existing businesses for store-front and façade improvements. The Central District Façade Improvement Program has been used in the Planning Area, Chinatown, in the Jack London District, and by Laney College; and a significant number of façade improvements have also occurred in the Uptown district. Both Redevelopment Project Areas also include Tenant Improvement Programs, which provide a similar service for the interior improvements of commercial buildings that have been vacant for at least six months. Projects in both Redevelopment Areas are currently considered for funding a on a "first-come/first-served" basis. A more targeted program in the Planning Area could help to make area properties and businesses more vibrant, economically competitive and inviting. The city should approach property owners and businesses along each block face on the main pedestrian retail streets, and employ financing assistance, design consultation and city facilitation tools to encourage private investment in façade improvements.

These programs should be actively marketed within the Planning Area and supplemental façade improvement strategies and funding sources will also be identified as part of the Plan.

COMMUNITY BENEFIT DISTRICT/BUSINESS IMPROVEMENT DISTRICT

Business or property owners within a defined geographic area may agree to assess themselves annual fees, as part of a Community Benefit District (CBD) or Business Improvement District (BID). The CBD/BID may then fund activities and programs to enhance the business environment; these may include marketing and promotion, security, streetscape improvements, and special events. Once established, the annual CBD/BID fees are mandatory for business/properties located within the district. Generally, this mechanism is most frequently used to provide additional benefits in existing commercial or retail districts and is not used to fund infrastructure due both to the limited revenue base and the short-term nature of the BID structure, which makes issuance of debt infeasible.

Downtown Oakland Community Benefit District

A good example of a Community Benefit District (CBD) is the Downtown Oakland Community Benefit District, which overlaps with, and is adjacent to, the Planning Area. The CBD District is comprised of a 19-block area extending from 18th Street between Clay and Franklin to 8th Street between Franklin and Washington. In 2008, property owners in Downtown Oakland and the Lake Merritt/Uptown districts voted to support a 10-year voluntary property tax to fund additional services to improve the quality of life through the formation in March 2009 of two Community Benefit Districts, the Downtown Oakland Association and the Lake Merritt/Uptown District Association. The associations meet and function jointly. Services funded by the Districts include maintaining cleanliness and order in the public rights-of-way, improving district identity and advocating on behalf of the area property owners, business owners and residents.

Another key service provided by the Downtown Oakland Association is the Ambassador program, which provides security services and assists in maintenance efforts that improve the overall look of the district. Security Ambassadors serve as a direct liaison to the Oakland Police Department and their presence alone enhances public safety. Similarly, Maintenance Ambassadors ensure the area is clean and welcoming by providing services, such as sidewalk pressure washing, sweeping, recycling and trash management and graffiti removal.

The Downtown CBD could be expanded to include the Planning Area or a new CBD specific to the Planning Area could be established as part of the Plan. In addition to the services that are outlined above, additional services identified as priorities for the Planning Area could be added, such as a local-hire program.

PARKING DISTRICT AND IN-LIEU FEE

Local governments may form a special district to finance parking-related activities, including acquisition of land for parking facilities, construction of parking lots and garages, funding of operating costs, and issuance of bonds to fund similar activities. The majority of affected property owners must vote in favor of the district formation. A possible approach to funding is imposition of an in-lieu fee, whereby developers pay the fee (e.g., a uniform fee per space)

instead of providing on-site parking, thereby reducing the cost of development and potentially increasing the efficient use of development sites.

INFRASTRUCTURE FINANCE DISTRICT

Infrastructure Finance Districts (IFD) are financing entities created in order to fund regional public facilities and infrastructure. IFDs can divert property tax increment revenues for 30 years to finance highways, transit, water systems, sewer projects, flood control, child care facilities, libraries, parks, and solid waste facilities. IFDs may not be used to pay for maintenance, repairs, operating costs, and services. Although this is a tax increment financing tool, there is no blight test necessary; moreover, an IFD may not be part of a redevelopment project area. IFDs can be challenging to create, since they currently require two-thirds approval by the voters to form and issue bonds.

Community Facilities District

The Mello-Roos Community Facilities Act of 1982 enables the formation of Community Facilities Districts (CFDs) by local agencies for the purpose of financing the construction of needed community infrastructure. The CFD is empowered to levy additional property taxes on land located inside the district, thus creating a dependable revenue stream that can be used in issuing bonds to pay for new infrastructure. Formation of a new CFD requires approval by two-thirds of the District's property owners, but CFDs have proven to be an attractive option for many California developers as a means of financing improvements they would otherwise have to fund with their own resources.

10 Infrastructure Issues

This Chapter provides an assessment of existing utility systems, potential impacts to these systems to accommodate build-out, and identifies key infrastructure issues. The existing conditions and planned upgrades are assessed for current physical condition, capacity and compliance with updated regulations.

The City of Oakland provides a variety of infrastructure services including transportation, water, wastewater or sanitary sewer, recycled water and storm drainage to meet the demand of residents and businesses. The Plan Area, while completely serviced with existing utilities, will require upgrades of aging infrastructure or new utilities to meet the needs of the increased population and proposed retail and commercial development.

10.1 Water Service

EXISTING WATER SERVICE

The East Bay Municipal Water District (EBMUD) provides water service to the Planning Area. EBMUD is responsible for water treatment, supply and the network of distribution pipelines. The Planning Area is serviced by a network of transmission and distribution lines ranging in size from 4 inches in diameter to 24 inches in diameter. Distribution mains are located on every street throughout the Planning Area. See Figure 10.1.

EBMUD did not disclose if there are any known existing deficiencies in the physical conditions of the pipe network or the capacity of the system to provide potable water service or fire flow. Maintenance, capital repairs and upgrades are the responsibility of EBMUD and financed by new development connection fees and on-going customer service charges.

PROJECTIONS AND IMPROVEMENTS: ISSUES AND POTENTIAL IMPACTS

EBMUD is responsible for long-range water supply planning for its service area. Oakland is one of twenty (20) incorporated cities and 15 unincorporated communities receiving water from EBMUD. The City of Oakland is continuing to see revitalization of its downtown area and additional redevelopment in other parts of the City is forecasted. The City of Oakland accounts for the largest share of Alameda County's household growth. According to the Association of Bay Area Government's (ABAG's) Projections 2005, Oakland is projected to add almost 45,000 households between 2000 and 2030.

EBMUD's water supply is adequate to meet the needs of the District's 1.6 million customers (ABAG's projections 2030) during normal and wet years, but in prolonged droughts, custom-

ers may face severe rationing. In addition to long-term development and expansion projects, improvement programs and system upgrades, EBMUD's 2005 Urban Water Management Plan outlines drought protection measures, which include conservation, recycling, water banking (storing water in underground aquifers for use in dry years) and possible future sources of water using desalinated ocean or bay water.

Average daily system-wide demand is approximately 220 MGD (million gallons per day). Today's average daily per capita consumption is 162 gallons for all users within the EBMUD service area. However, with the new California State Building Codes, CalGreen, effective January 1, 2011 and the City of Oakland Sustainability Ordinance adopted in October of 2010, it is expected that per unit water consumption for residential and commercial customers will decrease on the order of 20% to 50%. This will reduce demand for increased capacity, as well as have the effect of taking out of service inefficient systems. The high end development for the Plan Area is within the future water supply projections for the City.

KEY ISSUES

Long-range water supply planning by EBMUD includes the future projected growth in Oakland. However California does experience severe droughts which impact available supply. The State of California and the City of Oakland have recently adopted building codes that greatly decrease the average demand for residential and commercial consumption in new development; however system-wide demands could impact building permits during an extended drought.

Aging pipes within the Planning Area will likely require repairs during the planning horizon. Upgrades to the water system network for new development are typically financed through new service connection fees.

Figure 10.1: POTABLE WATER SYSTEM



---- 4"-10" WATER MAIN

—— 12" WATER MAIN

— 16" OR GREATER WATER MAIN

FIRE HYDRANT (APPROXIMATE)

---- FOCUS AREA



10.2 Sanitary Sewer Service

EXISTING SANITARY SEWER SYSTEM

Oakland's sanitary sewer services are provided by both the City's collection network of mains and laterals, and connected to EBMUD's interceptor systems (larger diameter pipes) which deliver the raw sewage to its main wastewater treatment plant.

Most of the sewer system is over 60 years old – some as old as 100 years. A twenty-five year capital improvement program was initiated in 1987 to rehabilitate up to 30% of the sewer system to eliminate wet weather overflows, which are caused by rainwater and groundwater infiltrating into old, leaky sewer pipes. This program is mandated under the City's sanitary sewer discharge permit with the Regional Water Quality Control Board, and is due to be completed in 2014. This program does not address the remaining 700 miles of sewer system that continue to deteriorate with age. Only a small fraction of this remaining portion is rehabilitated on an as-needed basis each year.

Base maps for the Planning Area, obtained from the City of Oakland, indicate that the sewer pipes in the Plan Area are in poor condition. Many laterals are shown as "plugged" or "abandoned." Many pipes do not have any data associated (diameter, flow direction, material, etc.). Where information is available, sewer main pipe diameters are shown to range from 8 inches to 12 inches. See Figure 10.2.

EBMUD has two interceptor systems within the vicinity of the Planning Area. The South Interceptor system traverses east-west on 2nd Street (just outside the planning area limits). The Alameda Interceptor system begins at the pump station at the end of Alice Street. Most sewage in the Planning Area is collected at this point and conveyed to the Main Wastewater Treatment Plant through this system.

PROJECTIONS AND IMPROVEMENTS: ISSUES AND POTENTIAL IMPACTS

The existing system is currently in need of repair. A twenty-five year capital improvement program was initiated in 1987 to rehabilitate up to 30% of the City's sewer system to eliminate wet weather overflows, which are caused by rainwater and groundwater infiltrating into old, leaky sewer pipes. This program is mandated under the City's sanitary sewer discharge permit with the Regional Water Quality Control Board, and is due to be completed in 2014. This program does not address the remaining 700 miles of sewer system that continue to deteriorate with age. Only a small fraction of this remaining portion is rehabilitated on an asneeded basis each year.

There is currently a backlog of requests for cyclic replacement projects, with only the highest priority projects completed each year. These highest priority projects are those with ongoing overflows, backups and/or collapsed pipes, none of which are located in the Planning Area. They do not include those lines that have deteriorated but have not yet caused overflows. The City's Capital Improvement Program (CIP) identified over \$14M for cyclic sewer replacement and relief sewers for FY 2009 to 2011; however this amount also includes storm drainage upgrades.

Capacity to handle additional development from full build-out is unknown, but based on the general understanding of the existing condition of the collection pipe system, replacement of existing pipes will be required. The capacity of the replacement pipes is typically sized to handle future demand. Treatment plant capacity is not likely to be an issue as the build-out will be phased and is within the expected, incremental increases of the treatment plant system and within the maximum capacity of the treatment plants operated by EBMUD.

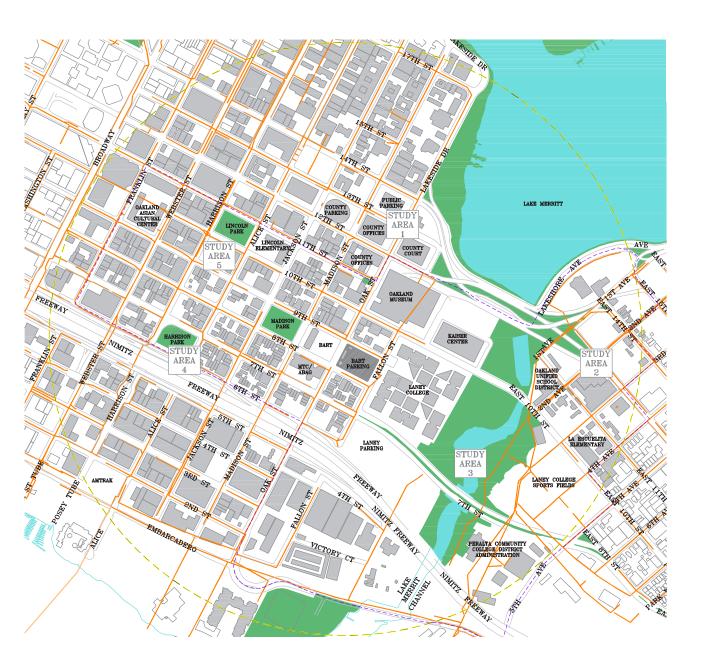
Because of the new California Building Code requirements and City of Oakland requirements for new development that will decrease the water use demand this will also have the affect of decreasing the waste water that enters the sewer collection system. Re-use of gray water is also strongly encouraged by the policies in the City's newly adopted building ordinance.

KEY ISSUES

The collection system has current deficiencies with respect to leaking pipes that result in inflow and infiltration and cause the pipe capacity to be exceeded. This problem is currently being addressed on a city wide basis but funding is limited and the City's funds and priorities are focused on the most urgent needs throughout the entire city owned system. New development will present the opportunity to have these pipes replaced. The key issues for development, regardless of the total number of residential units and square feet of commercial spaces are:

- Aging Infrastructure and unknown condition;
- State regulatory requirements for replacement;
- Improvement Costs of system wide upgrades;
- Local regulatory requirements for sustainable design.

Figure 10.2: SANITARY SEWER SYSTEM



--- SANITARY SEWER MAIN

— SANITARY SEWER INTERCEPTOR

FOCUS AREA



10.3 Recycled Water System Service

EXISTING WATER SERVICE

It is EBMUD's current practice to promote recycled water to its customers for appropriate non-potable uses. Recycled water use that meets a portion of water supply demands increases the availability and reliability of the potable water supply and lessens the effect of extreme rationing induced by a prolonged severe drought.

Within the study area, 12,500 linear feet of recycled water mains have been placed. The recycled system originates from a source further west on 7th Street, with the majority of the pipe runs flowing east-west on 9th Street and 11th Street. A "loop" was provided on Market Street to link the two lines. Further east, the 11th Street pipe rerouted onto 10th Street at Harrison Street, and extends all around Laney College Sports Fields and ends midblock on East 7th Street. A notable extension is the 8-inch recycled main on Oak Street (Lakeside Drive) servicing the irrigation requirements at the recently-renovated Lake Chalet and Lake Merritt Boathouse. See Figure 10.3.

PROJECTIONS AND IMPROVEMENTS: ISSUES AND POTENTIAL IMPACTS

EBMUD's Policy 8.01 (consistent with California Water Code, Section 13550) allows EBMUD to require the use of recycled water for non-domestic purposes when it is of adequate quality and quantity, available at reasonable cost, not detrimental to public health and not injurious to plant life, fish and wildlife. To date, however, EBMUD has been effective in providing incentives to use recycled water, rather than mandating its use. New development will provide an opportunity to install additional pipes for new park site areas as well as for new buildings where recycled water can be used as part of a new non-potable water system as encouraged by the City's new building ordinance.

Figure 10.3: RECLAIMED WATER SYSTEM



RECLAIMED WATER MAIN LINE

---- FOCUS AREA

10.4 Storm Drain

EXISTING STORM DRAIN

Like the sewer system, much of the system is old and approaching the end of its intended design life. The City of Oakland is responsible for the construction and maintenance of the local storm drainage system within Oakland's public areas and roads.

Stormwater runoff is collected from within the Planning Area through various storm drain systems and culverts, as well as direct surface flow to the San Francisco Bay, via the Oakland Estuary or by way of Lake Merritt. Fourteen (14) culverts and outfalls drain directly to Lake Merritt from the northern half of the Planning Area, and seven (observable) to the estuary from the southern half. See Figure 10.4.

Existing infrastructure around and serving the project site includes pipes ranging from 10 inches to over 30 inches in diameter. Several box culverts of various sizes serve as connectors in the east-west direction towards the southern half of the Planning Area. Following the natural drainage patterns of the terrain, most storm drain pipes run north to south, with the majority of the flow direction to the south. There are several (five observable) outfalls draining directly into the San Francisco Bay.

The City makes structural improvements as necessary to ensure that the system is able to reasonably handle stormwater flow. However, due to recent financial constraints, it is generally assumed that the storm drain system is aged and would not be able to handle increased runoff flows. Furthermore, there are new National Pollution Discharge Elimination System (NPDES) regulations effective by July 2010, enabling more stringent standards to be applied on new developments of 1-acre or greater.

KEY ISSUES:

Replacement of aging infrastructure will be required in many places. Because of new regulatory requirements that severely limit increased run-off from new development the capacity of the existing systems, if not in disrepair, should be adequate. New site development and redevelopment of existing sites and roadways will require typical, associated drainage improvements with features to enhance water quality prior to discharge into Lake Merritt, the estuary or the Bay. Because the amount of impervious surface area does not necessarily change as a result of increased, higher density, development, the pipe sizes and discharge facilities are similar.

Figure 10.4: STORM DRAIN SYSTEM



--- STORM DRAIN MAIN LINE

---- FOCUS AREA



Appendix A: Trip Generation Detail

Appendix A: Proposed High Residential Development Trip Generation Summary

Proposed High Residential Development Trip Generation Summary

Land Use	ITE Unit	Units	Quantity	Daily	AM Peak			PM Peak		
Edila 030	Code	Oilles	Quantity	Duny	In	Out	Total	In	Out	Total
Residential (Multi-Family)	220	DU	5,414	36,006	552	2,209	2,761	2,182	1,175	3,357
Reduction for Transit/Walk/Bike (5	0.9%) ⁽¹⁾			-18,327	-281	-1,124	-1,405	-1,111	-598	-1,709
Retail	820	KSF	334.11	14,347	204	130	334	612	636	1,248
Reduction for Retail Pass-by (Daily-15%,AM-15%,PM-34%) (2)			-2,152	-25	-25	-50	-212	-212	-424	
Reduction for Transit/Walk/Bike (17%) (3)				-2,439	-35	-22	-57	-104	-108	-212
Office	710	KSF	1,700.00	18,717	2,319	316	2,635	431	2,102	2,533
Reduction for Transit/Walk/Bike (17%) ⁽³⁾				-3,182	-394	-54	-448	-73	-358	-431
SUBTOTAL - UNADJUSTED TRIP GENERATION			69,070	3,075	2,655	5,730	3,225	3,913	7,138	
NET EXTERNAL TRIP GENERATION				42.970	2.340	1.430	3.770	1.725	2.637	4.362

Notes:

ITE Trip Generation Rates

Trip Generation Rate Details:			
Apartments (8th Edition)			
Daily (ITE 220)	T = 6.65 x (number of DU's)	50% In	50% Out
AM Peak Hour (ITE 220)	T = 0.51 x (number of DU's)	20% In	80% Out
PM Peak Hour (ITE 220)	T = 0.62 x (number of DU's)	65% In	35% Out
Shopping Center (ITE 8th Edition)			
Daily (ITE 820)	T = 42.94 x (1000's of SF)	50% In	50% Out
AM Peak Hour (ITE 820)	T = 1.00 x (1000's of SF)	61% In	39% Out
PM Peak Hour (ITE 820)	$T = 3.73 \times (1000's \text{ of SF})$	49% In	51% Out
General Office (ITE 8th Edition)			
Daily (ITE 710)	$T = 11.01 \times (1000's \text{ of SF})$	50% In	50% Out
AM Peak Hour (ITE710)	T = 1.55 x (1000's of SF)	88% In	12% Out
PM Peak Hour (ITE 710)	$T = 1.49 \times (1000's \text{ of SF})$	17% In	83% Out

⁽¹⁾ Source for Transit/Walk/Bike Mode Split Reduction for residential uses: Lake Merritt Station Area Plan Existing Conditions and Key Issues Report, Commute Patterns. The 2009 summary of commute characteristics for the Planning Area indicate the following transportation modes of residents: 25.1% public transportation, 24.3% walking, and 1.5% biking.

⁽²⁾ Retail Pass-by reduction percentages based on ITE Trip Generation Handbook, 2nd Edition. A max retail Pass-by percentage of 15% is assumed for Daily and AM Peak Hour scenarios, where no rate is given, per Caltrans TIA Standards, 2002.

⁽³⁾ Source of Transit/Walk/Bike Mode Split Reduction: City of Oakland Transportation Impact Study Guidelines (Transportation Services Division, March, 2007). Guidelines cite that recent mode splits of up to 83% vehicle trips have been approved for EIRs within the downtown area. Because the proposed development area is located within close proximity to the downtown, and within 1/2-mile of a major transit station (Lake Merritt BART), a 17 percent reduction for transit/walk/bike travel have been applied to the base trip generation estimates for retail and office trips.

Appendix A: Proposed Low Residential Development Trip Generation Summary

Proposed Low Residential Development Trip Generation Summary

Land Use	ITE	Units	Quantity	Daily	AM Peak			PM Peak		
	Code			,	ln	Out	Total	In	Out	Total
Residential (Multi-Family)	220	DU	3,738	24,858	381	1,525	1,906	1,507	811	2,318
Reduction for Transit/Walk/Bike (50.9%) (1)		-12,653	-194	-776	-970	-767	-413	-1,180		
Retail	820	KSF	334.11	14,347	204	130	334	612	636	1,248
Reduction for Retail Pass-by (Daily-15%,AM-15%,PM-34%) (2)			-2,152	-25	-25	-50	-212	-212	-424	
Reduction for Transit/Walk/Bike (1	7%) ⁽³⁾			-2,439	-35	-22	-57	-104	-108	-212
Office	710	KSF	1,700.00	18,717	2,319	316	2,635	431	2,102	2,533
Reduction for Transit/Walk/Bike (17%) ⁽³⁾			-3,182	-394	-54	-448	-73	-358	-431	
SUBTOTAL - UNADJUSTED TRIP GENERATION			57,922	2,904	1,971	4,875	2,550	3,549	6,099	
NET EXTERNAL TRIP GENERATION				37,496	2,256	1,094	3,350	1,394	2,458	3,852

Note:

- (1) Source for Transit/Walk/Bike Mode Split Reduction for residential uses: Lake Merritt Station Area Plan Existing Conditions and Key Issues Report, Commute Patterns. The 2009 summary of commute characteristics for the Planning Area indicate the following transportation modes of residents: 25.1% public transportation, 24.3% walking, and 1.5% biking.
- (2) Retail Pass-by reduction percentages based on ITE Trip Generation Handbook, 2nd Edition. A max retail Pass-by percentage of 15% is assumed for Daily and AM Peak Hour scenarios, where no rate is given, per Caltrans TIA Standards, 2002.
- (3) Source of Transit/Walk/Bike Mode Split Reduction: City of Oakland Transportation Impact Study Guidelines (Transportation Services Division, March, 2007). Guidelines cite that recent mode splits of up to 83% vehicle trips have been approved for EIRs within the downtown area. Because the proposed development area is located within close proximity to the downtown, and within 1/2-mile of a ging transit station (Lake Merritt BART), a 17 percent reduction for transit/walk/bike travel have been applied to the base trip generation estimates for retail and office trips.

ITE Trip Generation Rates

T = 6.65 x (number of DU's)	50% In	50% Out
T = 0.51 x (number of DU's)	20% In	80% Out
T = 0.62 x (number of DU's)	65% In	35% Out
$T = 42.94 \times (1000's \text{ of SF})$	50% In	50% Out
T = 1.00 x (1000's of SF)	61% In	39% Out
$T = 3.73 \times (1000's \text{ of SF})$	49% In	51% Out
$T = 11.01 \times (1000's \text{ of SF})$	50% In	50% Out
T = 1.55 x (1000's of SF)	88% In	12% Out
T = 1.49 x (1000's of SF)	17% In	83% Out
	T = 0.51 x (number of DU's) T = 0.62 x (number of DU's) T = 42.94 x (1000's of SF) T = 1.00 x (1000's of SF) T = 3.73 x (1000's of SF) T = 11.01 x (1000's of SF) T = 11.55 x (1000's of SF)	T = 0.51 x (number of DU's) 20% In T = 0.62 x (number of DU's) 65% In T = 42.94 x (1000's of SF) 50% In T = 1.00 x (1000's of SF) 61% In T = 3.73 x (1000's of SF) 49% In T = 11.01 x (1000's of SF) 50% In T = 1.55 x (1000's of SF) 88% In

Appendix A: Existing Land Uses to be Removed/Redeveloped - Trip Generation Summary

Existing Land Uses to be Removed/Redeveloped - Trip Generation Summary

Land Use	ITE	Units	Quantity	Daily	AM Peak			PM Peak		
Land OSE	Code	Oliks	Quantity	Daily	ln	Out	Total	ln	Out	Total
Residential (Multi-Family)	220	DU	40	266	4	16	20	16	9	25
Reduction for Transit/Walk/Bike (5	i0.9%) ⁽¹⁾			-135	-2	-8	-10	-8	-5	-13
Retail	820	KSF	117.55	5,047	72	46	118	215	224	439
Reduction for Retail Pass-by (Daily-15%,AM-15%,PM-34%) (2)				-757	-9	-9	-18	-75	-74	-149
Reduction for Transit/Walk/Bike (1	7%) ⁽³⁾			-858	-12	-8	-20	-37	-38	-75
Office	710	KSF	255.34	2,811	348	48	396	65	315	380
Reduction for Transit/Walk/Bike (17%) ⁽³⁾				-478	-59	-8	-67	-11	-54	-65
Hotel	310	Rooms	75.00	613	26	16	42	23	21	44
Reduction for Transit/Walk/Bike (0%) (3)				0	0	0	0	0	0	0
Medical Office	720	KSF	3.88	140	7	2	9	4	9	13
Reduction for Transit/Walk/Bike (1	7%) ⁽³⁾			-24	-2	0	-2	-1	-1	-2
Automobile Care Center	942	KSF	29.02	348	55	30	85	49	49	98
Reduction for Transit/Walk/Bike (0)%) ⁽³⁾			0	0	0	0	0	0	0
Elementary School	520	KSF	24.00	370	70	55	125	13	16	29
Reduction for Transit/Walk/Bike (0%) (3)				0	0	0	0	0	0	0
Light Industrial	110	KSF	15.04	105	12	2	14	2	13	15
Reduction for Transit/Walk/Bike (0%) (3)				0	0	0	0	0	0	0
SUBTOTAL - UNADJUSTED TRIP GENERATION				8,737	450	126	576	319	569	888
NET EXTERNAL TRIP GENERATION	ON.			6.509	368	93	461	188	398	586

Notes:

- (1) Source for Transit/Walk/Bike Mode Split Reduction for residential uses: Lake Merritt Station Area Plan Existing Conditions and Key Issues Report, Commute Patterns. The 2009 summary of commute characteristics for the Planning Area indicate the following transportation modes of residents: 25.1% public transportation, 24.3% walking, and 1.5% biking.
- (2) Retail Pass-by reduction percentages based on ITE Trip Generation Handbook, 2nd Edition. A max retail Pass-by percentage of 15% is assumed for Daily and AM Peak Hour scenarios, where no rate is given, per Caltrans TIA Standards, 2002.
- (3) Source of Transit/Walk/Bike Mode Split Reduction: City of Oakland Transportation Impact Study Guidelines (Transportation Services Division, March, 2007). Guidelines cite that recent mode splits of up to 83% vehicle trips have been approved for EIRs within the downtown area. Because the proposed development area is located within close proximity to the downtown, and within 1/2-mile of a major transit station (Lake Merritt BART), a 17 percent reduction for transit/walk/bike travel have been applied to the base trip generation estimates for retail and office trips.

ITE Trip Generation Rates

Trip Generation Rate Details:			
Apartments (8th Edition)			
Daily (ITE 220)	T = 6.65 x (number of DU's)	50% In	50% Out
AM Peak Hour (ITE 220)	T = 0.51 x (number of DU's)	20% In	80% Out
PM Peak Hour (ITE 220)	T = 0.62 x (number of DU's)	65% In	35% Out
Shopping Center (ITE 8th Edition)			
Daily (ITE 820)	$T = 42.94 \times (1000's \text{ of SF})$	50% In	50% Out
AM Peak Hour (ITE 820)	T = 1.00 x (1000's of SF)	61% In	39% Out
PM Peak Hour (ITE 820)	$T = 3.73 \times (1000$'s of SF)	49% In	51% Out
General Office (ITE 8th Edition)			
Daily (ITE 710)	$T = 11.01 \times (1000's \text{ of SF})$	50% In	50% Out
AM Peak Hour (ITE710)	$T = 1.55 \times (1000 \text{'s of SF})$	88% In	12% Out
PM Peak Hour (ITE 710)	T = 1.49 x (1000's of SF)	17% In	83% Out
Hotel (ITE 8th Edition)			
Daily (ITE 310)	T = 8.17 x (# rooms)	50% In	50% Out
AM Peak Hour (ITE 310)	T = 0.56 x (# rooms)	61% In	39% Out
PM Peak Hour (ITE 310)	T = 0.59 x (# rooms)	53% In	47% Out
Medical Office (ITE 8th Edition)			
Daily (ITE 720)	$T = 36.13 \times (1000 \text{ s of SF})$	50% In	50% Out
AM Peak Hour (ITE 720)	$T = 2.30 \times (1000's \text{ of SF})$	79% In	21% Out
PM Peak Hour (ITE 720)	$T = 3.46 \times (1000's \text{ of SF})$	27% In	73% Out
Automotive Care Center (ITE 8th Edition	on)		
Daily (ITE 942)	$T = 12.00 \times (1000 \text{'s of SF})^{(1)}$	50% In	50% Out
AM Peak Hour (ITE 942)	$T = 2.94 \times (1000's \text{ of SF})$	65% In	35% Out
PM Peak Hour (ITE 942)	$T = 3.38 \times (1000's \text{ of SF})$	50% In	50% Out
(1) Daily trip generation estimated base	d on peak volumes		
Elementary School (ITE 8th Edition)			
Daily (ITE 520)	$T = 15.43 \times (1000 \text{ s of SF})$	50% In	50% Out
AM Peak Hour (ITE 520)	$T = 5.20 \times (1000's \text{ of SF})$	56% In	44% Out
PM Peak Hour (ITE 520)	T = 1.21 x (1000's of SF)	45% In	55% P
General Light Industrial (ITE 8th Edition	<u>n)</u>		
Daily (ITE 110)	T = 6.97 x (1000's of SF)	50% In	50% Out
AM Peak Hour (ITE110)	$T = 0.92 \times (1000's \text{ of SF})$	88% In	12% Out
PM Peak Hour (ITE 110)	T = 0.97 x (1000's of SF)	12% In	88% Out

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