DRAFT ENVIRONMENTAL IMPACT REPORT

WEST OAKLAND REDEVELOPMENT PLAN

City of Oakland,
Oakland Redevelopment Agency

State Clearinghouse # 2002072065

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1

Executive Summary

1.1 Project under Review

The City of Oakland has designated a substantial portion of West Oakland as a new Redevelopment Project Area (Project Area), and is now considering adoption of a Redevelopment Plan for this Project Area. The Redevelopment Agency of the City of Oakland (Agency), in consultation with the West Oakland Project Area Committee (WOPAC) has prepared the *Redevelopment Plan for the West Oakland Project Area* (Redevelopment Plan). The Redevelopment Project Area is located in western Oakland, in the San Francisco Bay Area of California.

The City of Oakland is the Lead Agency for this EIR and will be responsible for considering its certification. The Oakland Redevelopment Agency, as a Responsible Agency, will also use the information contained in this EIR when considering adoption of the Redevelopment Plan. Other responsible agencies and interested agencies, groups and individuals will also review this Draft EIR.

This EIR will serve as a Program EIR under Section 15168 of CEQA. Subsequent specific redevelopment projects and actions that may be implemented within the Project Area over time may rely on this EIR, or this EIR may provide a basis for possible subsequent environmental review of these projects and actions that is deemed appropriate. As subsequent redevelopment activities proceed, they may require additional City permits or approvals, potentially including site-specific environmental review or supplements to this EIR.

The Redevelopment Plan is the Project to be evaluated in this Environmental Impact Report (EIR). The Redevelopment Plan itself is not a precise plan. The projects, programs and other activities to be undertaken in furtherance of the Redevelopment Plan (see Chapter 3: Project Description) do not contain specific proposals for the redevelopment of individual sites, nor does the Redevelopment Plan identify particular actions the Agency will take with regard to specific projects. Instead, the Redevelopment Plan presents a basic framework and a process within which specific redevelopment projects, programs and other activities will be established and implemented over time. Redevelopment implementation activities are anticipated to continue throughout a 30-year redevelopment period. For purposes of this EIR, implementation of the Redevelopment Plan is projected over an approximately 20-year planning horizon, to the year 2025.

1.1.1 Project Area

The proposed West Oakland Redevelopment Project Area (Project Area) is located on the western side of the City of Oakland**.** The Project Area lies to the northwest of Oakland's central business district, immediately southeast of the eastern landing of the Oakland-San Francisco Bay Bridge, and just inland of the Port of Oakland's maritime operations along the San Francisco Bay and Oakland Estuary.

The Project Area is approximately 1,546 acres in size, and includes all of the remaining portions of the West Oakland District not currently within a redevelopment area. The Project Area is bounded on the north by 40th Street and the Oakland/Emeryville city limits; on the east by I-980 and Union Street; on the south by 18th Street and Middle Harbor Road; and on the west by Pine and Wood Streets. The recently established Oakland Army Base Area Redevelopment Project Area is to the immediate west of the Project Area, the older Acorn and Oak Center Redevelopment Project Areas are to the east, and the Broadway/MacArthur/San Pablo Redevelopment Project Area is to the northeast.

For the purpose of Redevelopment Plan organization and implementation, the Project Area has been divided into three subareas. These subareas are distinct in their land use patterns and mix. They also differ from each other in terms of their blighted conditions and their opportunities for redevelopment and revitalization. These three subareas are:

- Prescott/South Prescott subarea
- Clawson/McClymonds/Bunche subarea
- Hoover/West MacArthur subarea

1.1.2 Project Objectives

The following are the Project goals and objectives of the Redevelopment Plan, as developed through public input and deliberations of the WOPAC. These goals and objectives are broadly drafted and address the blighting influences that hamper renewal. These project objectives are also intended to attain the purposes of the California Redevelopment Law.

1. Improve the quality of housing by assisting new construction, rehabilitation, and conservation of living units in the Project Area.

2. Maintain and improve the condition of the existing affordable housing in the Project Area.

3. Increase opportunities for home ownership in the Project Area.

4. Develop renter stabilization strategies that encourage and assist renters to remain in the Project Area.

5. Mitigate and reduce conflicts between residential and industrial uses in the Project Area.

6. Provide streetscape improvements, utility undergrounding, open-space and community facilities to enhance neighborhood quality and foster economic and neighborhood vitality.

7. Support recreation, education, healthcare and programs for all members of the Project Area community, especially youth, seniors and disabled persons.

8. Improve public safety for people living and working in the Project Area.

9. Restore blighted properties in the Project Area.

10. Assist neighborhood commercial revitalization, and attract more uses that serve the local community including neighborhood-serving retail.

11. Retain existing businesses and attract new businesses to Project Area locations designated for business activity; promote economic development of environmentally sound, light industrial and commercial uses.

12. Increase employment opportunities for Project Area residents.

13. Facilitate economic development by improving and rehabilitating substandard buildings and targeting infill on vacant lots on commercial corridors in the Project Area.

14. Minimize/eliminate environmental hazards within the Project Area.

15. Improve infrastructure, transportation, and public facilities throughout the Project Area.

16. Incorporate ongoing community participation in the redevelopment process so residents of all income and wealth levels, geographic areas, language groups and ages have opportunities to learn about and participate in the redevelopment decision-making process.

17. Promote equitable development that benefits the residents of the Project Area and minimizes the displacement of current residents and businesses.

18. Maintain the mixed-use character of the Project Area in a manner equally beneficial to both businesses and residents.

19. Preserve and enhance existing residential neighborhoods and core industrial and commercial areas.

20. Not encourage or support block-busting development, developments that demolish historically significant structures that can be rehabilitated, or developments which destroy the positive functioning character of existing areas.

21. Support and recognize the benefit of new residents and incomes that can be encouraged through market-rate development and done without displacing existing residents or businesses or destroying the existing cultural assets of the area.

22. Encourage and assist the rehabilitation of historically significant properties to avoid demolition or replacement.

23. Relocate displaced residents or businesses, whenever possible and feasible and with their consent, within the Project Area.

24. Not concentrate any affordable housing as stand-alone high density projects, but rather as infill projects on scattered sites and/or mixed-income projects.

25. Improve street configuration on main arterials and their relationship to the surrounding neighborhoods; implement urban design programs for street improvements such as center dividers, bulb-outs, tree planting, and landscape improvements.

26. Establish an ongoing communication with the Oakland Housing Authority concerning its role and responsibility to see that scattered sites undergo design upgrades, reconstruction, and improved general maintenance.

27. Promote sustainable development and "green building" practices.

28. Facilitate through technical assistance the implementation of the goals of the Redevelopment Plan.

29. Not relieve any governmental agency or department of its responsibilities.

1.1.3 Project Description

The Redevelopment Plan is designed to eliminate blight and blighting influences and revitalizes the community in terms of its housing resources, its employment opportunities, the economic well-being of its residents, and the condition of its public infrastructure, services, programs and facilities.

Potential Implementation Programs

The Redevelopment Plan identifies a range of potential redevelopment programs intended to achieve of the foregoing objectives. These programs can generally be grouped into the following four major categories:

- affordable housing and general housing improvements,
- public and civic infrastructure, and environmental improvements; and
- improvements to commercial and industrial areas and businesses activities, and increased opportunities to foster environmentally sound businesses; and
- incentive-based development programs.

Redevelopment Characteristics

The basis for future redevelopment activity within the Project Area will be to address community revitalization and to implement and conform to the City of Oakland General Plan. The General Plan policy direction for the Project Area is principally found in the Land Use and Transportation Element *(*LUTE*,* City of Oakland, March 1998); the Open Space, Conservation and Recreation Element (OSCAR, City of Oakland, June 1996); the Historical Preservation Element (City of Oakland, 1994; various sections updated in 1998); and the Housing Element (City of Oakland, 1994; update anticipated 2003).

Redevelopment will facilitate successful implementation of the General Plan by targeting public investments, programs and activities towards certain catalyst projects, infrastructure improvement projects and infill development projects that are consistent with the General Plan. These targeted specific investments and activities have not been identified at this time. Therefore, as a conservative assumption for use in the analysis required for this EIR, the Redevelopment Plan is anticipated to assist either directly or indirectly in the development and redevelopment of all projected growth within the Project Area that is consistent with the General Plan. Based on the City General Plan, the Redevelopment Plan is projected to assist either directly or indirectly in the development of:

- approximately 1,850 net new households,
- an increase in population of approximately 4,200 people, and
- approximately 3,185 net new employment opportunities during the 20-year planning horizon of this EIR.

These projections represent the aggregate of all development anticipated to occur within the Project Area, consistent with the General Plan LUTE, and thus form the basis of subsequent environmental analysis. Redevelopment is not expected to provide direct assistance to all such new development activity; however, any number of individual projects that comprise this overall development projection may receive direct or indirect benefits from redevelopment by virtue of their location within the Redevelopment Project Area.

A summary of projected growth and development within the Project Area by subarea is shown on **Table 1-1**.

Table 1-1: Summary of Projected Growth and Development within the West Oakland Redevelopment Project Area

Residential				**Units**	**Population**
Prescott/South Prescott				775	1,869
Clawson/McClymonds/ Bunche				860	1,863
Hoover/West MacArthur				210	477
Total				**1,830**	**4,209**
Non-Residential	**Retail**	**Service**	**Mfg.**	**Other**	**Total Employment**
Prescott/South Prescott	259	335	20	709	1,323
Clawson/McClymonds/ Bunche	387	750	160	386	1,683
Hoover/West MacArthur	116	115	-55	2	178
Total	**762**	**1,200**	**125**	**1,097**	**3,184**

Source: Hausrath Economics Group, 2002

1.2 Approach to the EIR

The *California Environmental Quality Act* (CEQA) requires that "all public and private activities or undertakings in furtherance of a redevelopment plan shall constitute a single project" (CEQA Guidelines Section 15180). CEQA also specifies that an EIR for a redevelopment plan shall be treated as a Program EIR (CEQA Guidelines Section 15180). Therefore this EIR examines, at a program level, the potential environmental effects associated with all projected growth and development within the Project Areas that may benefit from redevelopment actions. This EIR provides an assessment of all reasonably foreseeable aspects of the establishment of the Redevelopment Plan.

1.2.1 Intended Uses of this EIR

The City of Oakland is the Lead Agency for this EIR and will be responsible for considering its certification. The Oakland Redevelopment Agency, as a Responsible Agency, will also use the information contained in this EIR when considering adoption of the Redevelopment Plan. Other responsible agencies and interested agencies, groups and individuals will also review this Draft EIR.

This EIR will serve as a Program EIR under Section 15168 of CEQA. Subsequent specific redevelopment projects and actions that may be implemented within the Project Area over time

may rely on this EIR, or this EIR may provide a basis for possible subsequent environmental review of these projects and actions that is deemed appropriate. As subsequent redevelopment activities proceed, they may require additional City permits or approvals, potentially including site-specific environmental review or supplements to this EIR.

Areas of Controversy

During the public scoping process for this EIR, several specific areas of controversy were identified. These areas of controversy include environmental issues of:

- air quality and impacts on health,
- traffic impacts, illegal truck parking and travel truck travel on non-designated truck routes through Project Area neighborhoods,
- hazardous substances (i.e., diesel exhaust and acetaldehyde) that are generated within the Project Area, and existing hazardous wastes that are located within the Project Area and their effect on existing and future residents, and
- existing and potential land use incompatibilities between residential and industrial uses.

Comments from public agencies as to the scope of this EIR pertained to issues of traffic impacts (addressed in Chapter 5: Traffic), increased demands on transit services (also addressed in Chapter 5: Traffic), and toxic and hazardous materials (addressed in Chapter 8: Hazards and Hazardous Materials). It must be noted that responses to the NOP will be in the Appendix A.

Issues to be Resolved

The primary issue for consideration by the Oakland Redevelopment Agency is whether or not to adopt the Redevelopment Plan for West Oakland.

1.3 Summary of Impacts and Alternatives

This summary provides an overview of the analysis contained within the following chapters of this EIR. The California Environmental Quality Act (CEQA) requires that a summary include the following topics:

- significant impacts,
- recommended mitigation measures
- significant, unavoidable impacts, and
- alternatives to the proposed project.

1.3.1 Significant Impacts and Mitigation Measures

Under CEQA, a significant impact on the environment is defined as "a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by the project" CEQA Guidelines Section 15382). Implementation of the Redevelopment Plan has the potential to generate environmental impacts in a number of areas. At the end of this chapter, the **Summary Table of Potentially Significant Impacts and Mitigation Measures** identifies all environmental topics for which potentially significant environmental impacts have been identified, and lists those mitigation measures recommended to reduce or avoid such environmental impacts. Information in the Summary Table has been organized to correspond to environmental issues and significant impacts that are discussed in the Draft EIR. The table is arranged in three columns:

- description of potential impacts with level of significance prior to mitigation,
- recommended mitigation measures, and
- resulting level of significance after implementation of mitigation measures.

1.3.2 Significant and Unavoidable Impacts

Implementation of the Redevelopment Plan would result in, or would contribute to significant and unavoidable impacts, as summarized below and discussed more thoroughly in subsequent chapters of this EIR.

Compatibility of Project-Related Population Increases in Proximity to Air Emissions

The projected population growth rate within the Project Area is greater than the projected population growth rate citywide. This increase in population could result in a disproportionate increase in the number of residential receptors in proximity to existing toxic air contaminants, pollutants and odor emission sources, and would increase the potential for future land use conflicts. Such land use conflicts would be a *significant unavoidable impact* of the Project (**Potential Impact 6.4.6**).

Contributions to Significant and Unavoidable Cumulative Impacts

Implementation of the Redevelopment Plan's projects, programs and other activities in and of itself may generate insignificant impacts related to the following topics but, in combination with other related past, present and future projects, may contribute to the following cumulatively significant and unavoidable impacts:

- cumulative traffic impacts at the intersection of San Pablo Avenue/40th Street in Emeryville (**Cumulative Impact 5.4.2**),
- cumulatively inadequate supply of parking for trucks serving the Port of Oakland (**Cumulative Impact 5.4.7**),

- cumulatively exceeding the BAAQMD significance criteria for NO_x and PM_{10} (**Cumulative Impact 6.4.8**), and

- cumulative noise increases along local streets affecting sensitive receptors (**Cumulative Impact 7.4.5**).

1.3.3 Alternatives to the Proposed Project

Several project alternatives to the LUTE have been analyzed in the General Plan LUTE. Those analyses have been incorporated by reference into this EIR. Alternatives to the proposed Redevelopment Plan are analyzed in this Draft EIR, including:

- No Project Alternative, including a no-development scenario and a scenario assuming ongoing implementation of the General Plan without assistance from the Redevelopment Plan; and

- Three other alternatives that are defined as a narrowing-down of the range of financing, staffing and regulatory capabilities of the Redevelopment Agency within the Project Area to achieve greater implementation of one or more goals of the Redevelopment Plan, with potentially less implementation of other goals. These other alternatives include:

  - Alternative #1: Private Property Reinvestment and Revitalization,

  - Alternative #2: Public Infrastructure and Facilities Improvements, and

  - Alternative #3: Environmental Hazard Remediation.

The proposed Project (implementation of the Redevelopment Plan as proposed) is the only alternative that addresses alleviation of the full range of blighted conditions that exist within the Project Area. These blighted conditions include environmental hazards and toxic materials, public infrastructure and service deficiencies, and land use incompatibilities. Therefore, the proposed Project, including all mitigation measures recommended in this EIR, represents the environmentally superior alternative.

2

Introduction

2.1 Project Overview

The City of Oakland has designated a substantial portion of West Oakland as a new Redevelopment Project Area (Project Area), and is now considering adoption of a Redevelopment Plan for this Project Area. The Redevelopment Agency of the City of Oakland (Agency), in consultation with the West Oakland Project Area Committee (WOPAC) has prepared the *Redevelopment Plan for the West Oakland Project Area* (Redevelopment Plan). The Redevelopment Project Area is located in western Oakland, in the San Francisco Bay Area of California.

The Redevelopment Plan is the Project to be evaluated in this Environmental Impact Report (EIR). The Redevelopment Plan itself is not a precise plan. The projects, programs and other activities to be undertaken in furtherance of the Redevelopment Plan (see Chapter 3: Project Description) do not contain specific proposals for the redevelopment of individual sites, nor does the Redevelopment Plan identify particular actions the Agency will take with regard to specific projects. Instead, the Redevelopment Plan presents a basic framework and a process within which specific redevelopment projects, programs and other activities will be established and implemented over time. Redevelopment implementation activities are anticipated to continue throughout a 40-year redevelopment period. For purposes of this EIR, implementation of the Redevelopment Plan is projected over an approximately 20-year planning horizon, to the year 2025.

Public Planning Process

The proposed Redevelopment Plan has been drafted during a public process that has included:

- several workshops and meetings with the West Oakland Project Area Committee (WOPAC)[1] to discuss the Redevelopment Plan and to scope the EIR;
- interviews with representatives of the local service agencies and the City's Planning Department to determine the general condition of infrastructure, development opportunities and constraints, and other issues;

[1] Pursuant to CRL, Section 33385 the Agency called upon residents and existing community organizations to form a Project Area Committee to serve as an advisory body to the Agency concerning policy matters of the Redevelopment Plan.

- a review and consideration of all pertinent planning documents including the General Plan Land Use and Transportation Element (LUTE), the Historic Preservation Element (HPE) and the Open Space, Conservation and Recreation Element (OSCAR), with particular attention to the growth projections, policies and objectives that apply to the geographical areas contained within the West Oakland Project Area; and
- preparation of a *Draft Blight Study for the West Oakland Redevelopment Project Area* (Hausrath Economics Group, February 2002)[2] documenting the presence and effect of economic and physically blighted conditions in the Project Area and how these conditions may be corrected through the use of redevelopment.

2.2 Purpose of the EIR

This Draft Environmental Impact Report (DEIR) provides an environmental assessment of the potential impacts associated with implementation of the Redevelopment Plan's projects, programs and other activities. It is anticipated that, for the most part, environmental impacts resulting from implementation of the proposed Redevelopment Plan will be beneficial. Implementation of the Redevelopment Plan will reduce or eliminate blight in the Project Area. In addition, implementation of the Redevelopment Plan is anticipated to assist or facilitate in the gradual replacement of existing non-conforming land uses and their inherent land use incompatibilities in order to attain the most cohesive land use pattern as set forth in the City of Oakland General Plan LUTE.

However, the Redevelopment Plan's implementation projects, programs and other activities are also intended to promote and facilitate growth and development within the Project Area, provided that such growth and development is consistent with the City of Oakland General Plan. This growth and development will occur over an extended period of time (approximately 20-years) and will depend on market forces, property owner and business participation, and the availability of funding sources. CEQA Guidelines, Section 15180 provides that, "All public and private activities or undertakings pursuant to or in furtherance of a redevelopment plan constitute a single project, which shall be deemed approved at the time of adoption of the redevelopment plan by the legislative body." Accordingly, this EIR has been undertaken with the intent that all reasonably foreseeable activities and programs that may be initiated through the Redevelopment Plan, including those that facilitate or assist new growth and development within the Project Area, will be fully described and assessed for potential environmental effects. This assessment is based on the information known as of the publication of this document. Necessarily, the analysis has been conducted at a programmatic level of detail, as further described and provided for under CEQA Guidelines.

[2] The Blight Study prepared pursuant to Section 33344.5 of the California Community Redevelopment Law (CRL, Health and Safety Code, Section 33000) is one of the legally required documents leading to the adoption of a proposed Redevelopment Plan.

This program EIR provides citizens and decision-makers with a base of information to evaluate the potential environmental effects of the projects, programs and other activities that may result in physical impacts during implementation of the Redevelopment Plan.

2.2.1 Type of EIR

The City of Oakland prepared an Initial Study (July 2002) that identified environmental issues that should be addressed in this EIR, and environmental issues that could be excluded from further analysis. On July 17, 2002 the City sent a Notice of Preparation (NOP) together with the Initial Study to governmental agencies, organizations and persons interested in the project. The Initial Study and NOP are included as Appendix A. The NOP requested those agencies with regulatory authority over any aspect of the project to describe that authority and to identify relevant environmental issues that should be addressed in the EIR.

Pursuant to CEQA Guidelines Section 15063, the purposes of this Initial Study included the following:

- to provide the City of Oakland with information to use as a basis for deciding whether to prepare an EIR or a Negative Declaration, and to determine the type of EIR to be prepared;

- to identify whether "tiering" or another appropriate environmental process should be used for analysis of the project's environmental effects; and

- to assist in the preparation of the EIR by focusing on effects determined to be significant, identifying effects determined not to be significant, and explaining the reasons for determining that potentially significant effects could be reduced to a less than significant level through identified mitigation measures.

Program EIR

Based on the findings of the Initial Study, the City of Oakland determined that an EIR was appropriate and necessary for this project. The *California Environmental Quality Act* (Public Resources Code 21090 and CEQA Guidelines, Sections 15168 and 15180) provides that an EIR on a Redevelopment Plan (as is the case for this EIR) shall be treated as a "Program EIR". A Program EIR is intended addresses a series of actions that may be considered one large project. Typically these actions are related by geography, they form a logical part in a chain of actions in connection with a plan to be carried out under the same regulatory authority, and/or will have similar effects that can be mitigated in similar ways.

This Program EIR is intended to provide the City of Oakland, as Lead Agency, with an opportunity to address the potential environmental consequences associated with a broad range of actions pursuant to implementation of the Redevelopment Plan. This Program EIR also enables consideration of these cumulative effects as a whole, provides a discussion of broad policy alternatives, and enables a reduction in duplication of efforts and paperwork for subsequent projects (see further discussion below under Subsequent Projects). This Program EIR is not as detailed as an EIR on a specific construction project. The degree of specificity required in this EIR is more broad and general, and is focused on the secondary effects

associated with implementation activities expected to follow from adoption of the Redevelopment Plan. This level of specificity corresponds to the less precise nature of the Redevelopment Plan itself, and is consistent with CEQA Guidelines for preparation of a programmatic EIR as provided under Section 15146 of the Guidelines.

Tiering from Previously Prepared EIRs

CEQA Guidelines Section 15152 enables lead agencies to tier from, or use the analysis from a broader EIR (such as one prepared for a General Plan) with later EIRs on more narrowly defined projects, incorporating by reference the general discussions from the broader EIR. This allows for concentrating the analysis of the more narrowly defined project on the issues specific to that project. Tiering shall be limited to situations where the project is consistent with the general plan and zoning. As provided under Section 15152(d) of the Guidelines;

> "*When an EIR has been prepared and certified for [a large-scale planning approval], the lead agency for a later project pursuant to or consistent with the program, policy, plan or ordinance should limit the EIR on the later projects to effects which:*
>
> 1. *were not examined as significant effects on the environment in the prior EIR; or*
>
> 2. *are susceptible to substantial reduction or avoidance by the choice of specific revisions to the project, by the imposition of conditions or other means."*

Consistent with these CEQA Guidelines, this EIR tiers from, or relies upon several previously prepared and certified environmental documents. These previously certified documents have assisted in the description of general environmental setting information, the identification of potentially significant environmental effects and the recommendation of mitigation measures related to significant environmental effects. These previously certified environmental documents from which this EIR has been tiered are hereby incorporated by reference, and include the following:

- *Oakland General Plan Open Space, Conservation and Recreation (OSCAR) Element Mitigated Negative Declaration,* City of Oakland. October 1995;

- *Oakland General Plan Land Use and Transportation Element (LUTE) EIR* (SCH #97062089), prepared for the City of Oakland by Environmental Science Associates. June 1998; and

- *Oakland Army Base Area Redevelopment Plan EIR* (SCH #2001082058), prepared for the City of Oakland by Gail Borchard Associates, et.al. August 2002.

Each of these documents have been cited where applicable in this EIR, and are available for review at the City of Oakland Planning Department/Community and Economic Development Agency, 250 Frank Ogawa Plaza, Suite 3330, Oakland, California.

Scope of the EIR

The CEQA Guidelines for tiering of environmental documents as described above enable the Lead Agency to focus the scope of the later EIR on those issues that are specific to the project at hand. As provided under Section 15152(f) of the Guidelines:

> *"A later EIR shall be required when the initial study or other analysis finds that the later project may cause significant effects on the environment that were not adequately addressed in the prior EIR.*
>
> *1. Where a lead agency determines that a cumulative effect has been adequately addressed in the prior EIR, that effect is not treated as significant for purposes of the later EIR and need not be discussed in detail.*
>
> *2. When assessing whether there is a new significant cumulative effect, the lead agency shall consider whether the incremental effects of the project would be considerable when viewed in context of past, present and probable future projects. At this point, the question is not whether there is a significant cumulative impact, but whether the effects of the project are cumulatively considerable.*
>
> *3. Significant environmental effects have been 'adequately addressed' if the lead agency determines that:*
>
> *a) They have been mitigated or avoided as a result of the prior environmental impact report and findings adopted in connection with that prior environmental report;*
>
> *b) They have been examined at a sufficient level of detail in the prior environmental impact report to enable those effects to be mitigated or avoided by site specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project; or*
>
> c) *They cannot be mitigated to avoid or substantially lessen the significant impact despite the project proponent's willingness to accept all feasible mitigation measures, and the only purpose of including analysis of such effects in another environmental impact report would be to put the lead agency in position to adopt a statement of overriding considerations with respect to the effects."*

As indicated in the Initial Study prepared by the City of Oakland for this EIR (see Appendix A), several potentially significant environmental effects have been adequately analyzed in an earlier document prepared pursuant to applicable legal standards. These impacts have been addressed by mitigation measures based on this earlier analysis. These measures are more fully described in the Initial Study. Therefore, this EIR includes an analysis only of the effects that remain to be addressed. These remaining effects include:

- Land Use
- Transportation
- Air Quality
- Noise

- Hazards and Hazardous Materials
- Public Infrastructure
- Public Services
- Cultural and Historic Resources
- Other CEQA Considerations
- Alternatives

2.2.2 Intended Uses of This EIR

Consideration of the Redevelopment Plan

The City of Oakland and its Redevelopment Agency will consider the information in this EIR as part of its deliberations on the proposed Redevelopment Plan. This EIR is intended to enable City of Oakland decision-makers, public agencies and interested citizens to evaluate the broad environmental issues associated with implementation of the West Oakland Redevelopment Plan. In accordance with California law, the EIR on the Redevelopment Plan must be certified before the City and/or its Redevelopment Agency can take any action on the Redevelopment Plan or begin implementation of any of its projects, programs or other activities.[3]

Subsequent Discretionary Actions of the City

Further, this EIR is intended to address any and all subsequent discretionary actions[4] of the City including, but not limited to:

- property acquisition within the Project Area;
- any redevelopment project, program or other implementation activity consistent with the Redevelopment Plan;
- any other development project that falls within the framework of this EIR;

[3] Certification of the final EIR is a process prior to the approval of the Redevelopment Plan whereby the City of Oakland shall certify that: 1) the final EIR has been completed in accordance with CEQA; 2) the final EIR was presented to the decision-making body of the City and that the decision-making body reviewed and considered the information contained in the final EIR prior to the approving the project; and 3) the Final EIR reflects the City's independent judgement and analysis.

[4] "Discretionary action" means an action which requires the exercise of judgement or deliberation when the public agency decides to approve or disapprove a particular activity, as distinguished from situation where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations.

- any other discretionary actions including subdivisions, disposition and development agreements, and owner participation agreements consistent with the Redevelopment Plan; and

- any capital projects such as streetscape, landscape, park, street or other public projects consistent with the Redevelopment Plan and the City General Plan.

Permits or Approvals from other Jurisdictional Agencies

In addition, prior to undertaking demolition of structures, site preparation, or construction of any redevelopment-related improvements identified in the Redevelopment Plan, the City of Oakland Redevelopment Agency and/or private developers may be required to obtain permits or approvals from other jurisdictional agencies. Some of those potential discretionary regulatory requirements, and those agencies that may rely on the contents of this EIR to inform their discretionary decision making process, are identified below. This list may be modified from time to time, and the absence of an activity or an agency from the list does not preclude its use of this EIR for purposes of considering granting permits or approvals.

- Caltrans, in conducting CEQA review on projects that affect the state transportation system;

- Regional Water Quality Control Board (RWQCB) Region 2, for issuance of National Pollution Discharge Elimination System permits for individual or collective projects that may affect surface water quality from the discharge of site runoff; and General Permits for construction sites of 3 or more acres;

- California Department of Toxic Substances Control (DTSC), for approval of toxic remediation programs that may be developed for the area; and

- Bay Area Air Quality Management District (BAAQMD), for the granting of demolition permits and stationary source emission permits.

Subsequent Projects

All future projects, programs and other activities that may be used to implement the Redevelopment Plan will use this EIR, once certified, as a base of environmental information and analysis. No subsequent environmental review for individual implementation activities is required unless the City determines that one or more of the following conditions are present, as outlined in Sections 15162 of the CEQA Guidelines:

1) *Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*

2) *Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*

3) *New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:*

   a) *the project will have one or more significant effects not discussed in the previous EIR or negative declaration,*

   b) *significant effects previously examined will be substantially more severe than shown n the previous EIR,*

   c) *mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives, or*

   d) *mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the proponents decline to adopt the mitigation measure or alternative.*

Similarly, no supplement to this EIR is required unless the City determines that the following conditions are present, as outlined in Sections 15163 of the CEQA Guidelines:

1) *Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and*

2) *Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed circumstances.*

Once certified, this West Oakland Redevelopment Plan EIR will be used as a primary source of information upon which to evaluate the potential environmental impacts of future projects, programs and other activities implemented in furtherance of the Redevelopment Plan. As applicable, the mitigation measures identified in this EIR to mitigate potentially significant impacts will be required as part of the implementation of the project, program or other activity.

2.2.3 Public Review

During the public review period for this Draft EIR, interested individuals, organizations and agencies may offer their comments on the document's evaluation of impacts and alternatives. The comments received during this public review period will be compiled and presented together with responses to these comments. The Draft EIR and the Final EIR (including the response to comments) together will constitute the EIR for the West Oakland Redevelopment Plan. The Oakland Planning Commission will review the EIR documents and will determine whether or not the EIR complies with CEQA and provides a full and adequate appraisal of the Redevelopment Plan and its alternatives. The Planning Commission may certify the EIR if it finds that it complies with CEQA and makes other required findings.

This Draft EIR will be reviewed for a 45-day public review period. Comments on the Draft EIR should be submitted in writing during this review period to:

Ms. Elois A. Thornton
City of Oakland Community and Economic Development Agency
250 Frank Ogawa Plaza, Suite 3315
Oakland, California, 94550

Please contact Ms. Thornton at (510) 238-6284 if you have any questions.

After reviewing the Draft EIR and the Final EIR, and following City Planning Commission action to certify the EIR as adequate and complete, the City of Oakland Redevelopment Agency will be in a position to determine whether or not to approve the Redevelopment Plan. This determination will be based, among other considerations, upon information presented on the Redevelopment Plan's potential environmental impacts and probable consequences, and the possible alternatives and mitigation measures available.

2.3 Content and Organization of the EIR

Following this Introduction to the West Oakland Redevelopment Plan EIR, the document includes the following chapters:

Chapter 3: Project Description
Chapter 4: Land Use
Chapter 5: Transportation
Chapter 6: Air Quality
Chapter 7: Noise
Chapter 8: Hazards and Hazardous Materials
Chapter 9: Public Infrastructure
Chapter 10: Public Services
Chapter 11: Cultural and Historic Resources
Chapter 12: Other CEQA Consideration
Chapter 13: Alternatives
Chapter 14: EIR Preparation

In each of the Chapters 4 through 11, existing conditions are discussed in the Environmental Setting, followed by an evaluation of potentially significant impacts that may be associated with implementation of the Redevelopment Plan. Where potentially significant impacts are identified, appropriate mitigation measures are recommended.

Chapter 12 of this document presents an overview of the environmental impacts that may be associated with the Redevelopment Plan, including a discussion of unavoidable/irreversible effects, growth-inducing impacts and cumulative impacts. Cumulative effects are addressed in

each topic area within Chapters 4 through 10, and then summarized in Chapter 11; although some chapters may not contain a discussion of cumulative effects if they are not relevant.

Chapter 13 presents an evaluation of the environmental effects that may be associated with alternatives to the Redevelopment Plan, including the CEQA-mandated No Project alternative and other potential strategies for redevelopment within the Project Area.

The final Chapter 14 of this EIR lists the persons who prepared the Draft EIR, identifies persons and organizations contacted during the preparation of the document, and lists the reference materials used.

The Appendices include the Notice of Preparation (NOP), responses to the NOP that have been received by the City, and other background material.

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
Project-Specific Impacts and Mitigation Measures:		
Land Use		
No Potentially Significant Impacts Identified	None needed	*Less than Significant*
Transportation		
No Potentially Significant Impacts Identified	None needed	*Less than Significant*
Air Quality		
Potential Impact 6.4.5: Construction Emissions. Construction associated with the Redevelopment Plan's implementation projects, programs and other activities within the Project Area would generate dust (including the respirable fraction known as PM10) and combustion emissions.	**Mitigation Measure 6.4.5A: Construction Emission Controls.** Contractors for future development projects pursuant to implementation of the Redevelopment Plan shall implement BAAQMD dust control measures as outlined in BAAQMD *CEQA Guidelines* (1999) or any subsequent applicable BAAQMD updates. More details regarding this measure are included in Chapter 6 of the EIR.	*Less than Significant*
Potential Impact 6.4.6: Compatibility of Population Growth and Air Quality. Projected population growth in the Project Area would increase at a higher rate than projected citywide growth. This disproportionate increase could result in more residents being located in proximity to pollutant emission and odor sources, which could increase land use compatibility problems.	**Mitigation Measure 6.4.6A: BAAQMD TCMs.** Major new development projects pursuant to or in furtherance of the Redevelopment Plan shall fund on a fair share basis (as appropriate) some or all of the following BAAQMD-recommended feasible Transportation Control Measures (TCMs) for reducing vehicle emissions from commercial, institutional, and industrial operations. Alternatively, at the Redevelopment Agency's sole discretion, redevelopment funds could potentially be used to subsidize these fair-share funding contributions or to implements these measures. More details regarding this measure are included in Chapter 6 of the EIR. **Mitigation Measure 6.4.6B: CAP TCMs.** Major new development projects pursuant to or in furtherance of the Redevelopment Plan shall fund on a fair share basis (as appropriate) some or all of the following *Clean Air Plan's* transportation control measures. These measures have been identified by the BAAQMD as appropriate for local	*Significant and Unavoidable*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
	implementation. Alternatively, at the Redevelopment Agency's sole discretion, redevelopment funds could potentially be used to subsidize these fair-share funding contributions or to implements these measures. More details regarding this measure are included in Chapter 6 of the EIR. **Mitigation Measure 6.4.6C: Upgraded Ventilation Systems.** Future residential development within the Project Area shall be developed with upgraded ventilation systems to minimize exposure of future residents to odors and pollutant emissions. In addition, future development should limit outdoor use areas where these uses are located in proximity to emission sources.	
Noise		
Potential Impact 7.4.1: Construction Noise. Implementation of the Redevelopment Plan's projects, programs and other activities could generate short-term increases in noise and vibration due to construction. This would be a short-term adverse impact.	**Mitigation Measure 7.4.1: Construction Noise Reduction.** Compliance with the City Noise Level Standards for Temporary Construction or Demolition Activities would mitigate construction noise impacts associated with future development projects pursuant to implementation of the Redevelopment Plan to a less-than-significant level. More details regarding this measure are included in Chapter 7 of the EIR.	*Less than Significant*
Potential Impact 7.4.3: Exposure to High Ambient Noise. Depending on the precise location of new residential uses that may be constructed pursuant to or in furtherance of the Redevelopment Plan, future noise levels within some portions of the Project Area could be incompatible with such residential use.	**Mitigation Measure 7.4.3A: Noise Reduction Requirements**. The City of Oakland Land Use Compatibility Guidelines for Community Noise sets limits on the level of noise that new land uses may be subjected to, and requires analysis and mitigation should these noise levels be exceeded. In accordance with these guidelines, the following specific mitigation measures would apply to new development projects that may be in furtherance of implementation of the Redevelopment Plan. • Future residential development that may be proposed within approximately 2,000 feet of the I-580 freeway corridor and 1,400 feet of the I-880 freeway corridor (sections not protected by sound walls), along major arterials identified in the LUTE, adjacent to industrial or	*Less than Significant*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
	business uses that generate noise, or in the vicinity of BART facilities where noise levels exceed 60 dBA CNEL (if a direct line-of-sight is available) shall be required to complete a detailed analysis of noise reduction requirements. • A detailed analysis of noise reduction requirements shall also be required if any future business commercial uses are proposed within approximately 700 feet of the I-580 freeway corridor and 450 feet of the I-880 freeway corridor (sections not protected by sound walls), along major arterials identified in the LUTE, or in the vicinity of BART facilities where noise levels could exceed 67 dBA CNEL (if a direct line-of-sight is available). • Recommended noise insulation features shall be included in the designs of such future development. **Mitigation Measure 7.4.3B: Freeway Sound Walls**. The City of Oakland should coordinate with Caltrans to investigate the potential for constructing new sound walls along those portions of I-880 where no sound walls are currently provided to protect the adjacent neighborhoods. Redevelopment funding could potentially be used to supplement the costs for such walls. **Mitigation Measure 7.4.3C: BART Train Noise Reduction**. The City of Oakland should coordinate with BART to investigate potential techniques for reducing the noise generated by BART trains, especially near the West Oakland BART station. Redevelopment funding could potentially be used to supplement the costs associated with the investigation of such techniques and potentially to supplement the costs for implementation.	
Hazards and Hazardous Materials		
Potential Impact 8.4.1: Long-term Exposure. Currently, businesses within the Project Area handle hazardous materials as part of their operations. Implementation of the Redevelopment Plan's projects,	**Mitigation Measure 8.4.1: Technical Assistance - Hazardous Materials Business Plans and Risk Management and Prevention Plans**. Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance for	*Less than Significant*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
programs and other activities could result in the introduction of new businesses that handle hazardous materials. These existing and potential new businesses could cause a substantial hazard to the public or the environment as a result of an accidental release of hazardous materials or wastes.	existing and potential new businesses within the Project Area that handle hazardous or acutely hazardous materials. Such assistance may be in the form of loans, grants and/or technical assistance from the OES toward the preparation of required Hazardous Materials Business Plans and/or Risk Management and Prevention Plans.	
Potential Impact 8.4.2: Transport of Hazardous Materials. Currently, businesses within the Project Area include those which involve transport of hazardous materials as part of their operations. Implementation of the Redevelopment Plan's projects, programs and other activities could result in the introduction of new businesses that involve transport of hazardous materials. These existing and potential new businesses could cause a substantial hazard to the public or the environment as a result of an accidental release of hazardous materials or wastes during normal transport operations.	**Mitigation Measure 8.4.2A: Enforcement of Truck Prohibitions.** Implementation programs pursuant to the Redevelopment Plan should include projects, programs or other activities intended to increase or enhance the enforcement of prohibitions that limit truck travel to designated truck routes. **Mitigation Measure 8.4.2B: Preference for New Industrial Uses along Truck Routes**. Redevelopment assistance for new industrial development projects should be prioritized to give preference to those new or existing businesses located along approved truck travel routes, and whose primary access routes are well away from residential areas.	*Less than Significant*
Potential Impact 8.4.3: Exposure of Schools and Sensitive Uses. Currently, all of the schools within the Project Area are located within ¼ mile of a permitted hazardous materials use or an identified environmental case. Most of these schools are also located within ¼ mile of an area designated for "Business Mix" or "Community Commercial" land uses. Implementation of the Redevelopment Plan's projects, programs and other activities could result in the introduction of new businesses that involve hazardous materials within the Business Mix or Community Commercial area near schools and other sensitive uses.	**Mitigation Measure 8.4.3A: Preference for Industrial Uses away from Sensitive Receptors.** Redevelopment assistance for new industrial development projects should be prioritized to give preference to those new or existing businesses located further than ¼ mile away from a school sites, hospital, health clinic or residence. **Mitigation Measure 8.4.3B: Hazardous Materials Assessment Report and Remediation Plan Required.** Any project in furtherance of the Redevelopment Plan that proposes a business that handles hazardous materials within ¼ mile of a school, hospital, or residence shall be required to submit a Hazardous Materials Assessment Report and Remediation Plan (HMARRP) for review and approval by the City. **Mitigation Measure 8.4.3C: Technical Assistance - Hazardous Materials Assessment Report and Remediation Plan.** Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance for existing businesses within the	*Less than Significant*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
	Project Area that handle hazardous materials within ¼ mile of a school, hospital or residence. Such assistance may be in the form of loans, grants and/or technical assistance from the OES toward the preparation of a required Hazardous Materials Assessment Report and Remediation Plan.	
Potential Impact 8.4.4: Exposure from Prior Hazardous Materials Users. Implementation of the Redevelopment Plan's projects, programs and other activities could result in the redevelopment of older industrial areas with new land uses. Without measures to ensure adequate cleanup of closed facilities and cleanup of soil and groundwater to appropriate cleanup levels, future site occupants could be exposed to unacceptable levels of hazardous materials.	**Mitigation Measure 8.4.4A: Technical Assistance - Closure of Permitted Hazardous Materials Use Sites.** Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance for the proper closure of hazardous materials use sites in accordance with existing laws and regulations. Such assistance may be in the form of loans, grants or technical assistance, or the use of Polanco Act or other Redevelopment Agency authority to ensure closure of permitted hazardous materials use sites in accordance with an approved CUPA program and City of Oakland regulations. Requirements for closure of the facility include preparation of a closure plan. **Mitigation Measure 8.4.4B: Technical Assistance – Risk Management Plan.** Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance for the appropriate reporting of closures of hazardous materials use sites. Such assistance may be in the form of loans, grants and/or technical assistance toward the preparation of a required Risk Management Plan (RMP). **Mitigation Measure 8.4.4C: Permit Tracking Review.** Any project, program or other implementation activity in furtherance of the Redevelopment Plan proposed on a site that has been closed under the requirements of CUPA shall be reviewed pursuant to the City Permit Tracking System. Under this system, any redevelopment-related activity that might alter conditions of prior site closure would undergo special review by the City of Oakland Fire Department to ensure that proper actions are taken to prevent unacceptable exposure to hazardous materials as a result of changed site conditions.	*Less than Significant*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
Potential Impact 8.4.5: Contamination of Soil and Groundwater. Future construction activities pursuant to implementation of the Redevelopment Plan that involve excavation, grading, and/or de-watering could encounter hazardous materials in the soil and groundwater.	**Mitigation Measure 8.4.5A: Identification and Remediation of Hazardous Materials**. Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance in the identification and remediation of hazardous materials in accordance with existing laws and regulations. Such assistance may be in the form of loans, grants or technical assistance, or the use of Polanco Act or other Redevelopment Agency/City authority (e.g., CLERRA). These Agency/City authorities enable the Agency/City to require a site owner to conduct further investigations and, pending the results of a Phase I environmental assessment, to conduct remediation if a release of hazardous materials is indicated. This mitigation measure would implement state and federal regulations and processes to address chemical releases and reduce the potential threat to human health and the environment. **Mitigation Measure 8.4.5B: Underground Storage Tank (UST) Closure**. Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance in the removal of permitted or previously unidentified, abandoned or no longer used underground storage tanks in accordance with City of Oakland requirements. Such assistance may be in the form of loans, grants or technical assistance, or the use of Polanco Act or other Redevelopment Agency/City authority. This mitigation measure would implement state and federal regulations and processes to address underground storage tanks. **Mitigation Measure 8.4.5C: Disposal of Contaminated Soil or Groundwater.** Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance in the removal and disposal of contaminated soil or groundwater in accordance with City of Oakland requirements. Such assistance may be in the form of loans, grants or technical assistance, or the use of Polanco Act or other Redevelopment Agency/City authority. **Mitigation Measure 8.4.5D: Dewatering of Contaminated Groundwater.** Implementation programs pursuant to the Redevelopment Plan should include potential redevelopment assistance	*Less than Significant*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
	in the removal or dewatering of contaminated groundwater in accordance with City of Oakland requirements. Such assistance may be in the form of loans, grants or technical assistance, or the use of Polanco Act or other Redevelopment Agency/City authority. This mitigation measure would implement state and federal regulations. **Mitigation Measure 8.4.5E: Procedures for Protection of Workers.** Any project, program or other implementation activity in furtherance of the Redevelopment Plan that may be proposed on a site involving a site investigation, site remediation, underground storage tank removal, excavation, dewatering, and/or construction of improvements where a chemical release has occurred, shall be conducted according to legally required health and safety precautions. **Mitigation Measure 8.4.5F: Underground Utility Construction Process.** Any project, program or other implementation activity in furtherance of the Redevelopment Plan that may include construction of underground utilities shall require, through implementing contracts, the construction contractor to follow proper health and safety precautions and to dispose of contaminated soil and groundwater safely and legally.	
Potential Impact 8.4.6: Exposure to Hazardous Building Materials. Demolition and renovation of existing structures could result in potential exposure of workers or the community to hazardous building materials during construction. Without proper abatement procedures, future building occupants could be exposed if hazardous building materials are left in place.	**Mitigation Measure 8.4.6A: Hazardous Building Material Abatement Process**. All projects, programs or other implementation activities pursuant to the Redevelopment Plan that involve demolition or renovation to existing structures and facilities shall conduct a hazardous building material survey(s) or audit(s). **Mitigation Measure 8.4.6B: Hazardous Building Materials Abatement Assistance.** Implementation programs pursuant to the Redevelopment Plan should include potential redevelopment assistance in the removal or abatement of hazardous building materials from existing buildings within the Project Area in accordance with City of Oakland requirements. Such assistance may be in the form of loans, grants or technical assistance to individual property owners.	*Less than Significant*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
Public Infrastructure		
Potential Impact 9.4.2: Water Distribution and Wastewater Collection Infrastructure. Implementation of the Redevelopment Plan's projects, programs and other activities is expected to facilitate or assist in the construction of new residential, commercial and/or industrial development within the Project Area. Such new development may require localized improvements to the water delivery and wastewater collection systems to provide adequate pipeline capacity.	**Mitigation Measure 9.4.2: Infrastructure Improvements.** Major new development projects pursuant to or in furtherance of the Redevelopment Plan shall be reviewed to determine projected water and wastewater loads as compared to available capacity. Where appropriate, determine capital improvement requirements, fiscal impacts and funding sources prior to project approval. • These new projects should address the replacement or rehabilitation of the existing sanitary sewer collection system to prevent an increase in I/I in the sanitary sewer system. The main concern is the increase in total wet weather flows, which could have an adverse impact if the flows are greater than the maximum allowable flows from this sub-basin, as defined by the City of Oakland Public Works Department. • When capital improvement requirements for subsequent projects are being assessed, the project sponsor should contact the Wastewater Planning Section to coordinate with EBMUD for this work. • At the Redevelopment Agency's sole discretion, redevelopment funds could potentially be used to subsidize the costs for such improvements.	*Less than Significant*
Public Services		
No Potentially Significant Impacts Identified	None needed	*Less than Significant*
Cultural and Historic Resources		
Potential Impact 11.4.1: Discovery of Cultural Resource. During construction activities pursuant to implementing the Redevelopment Plan, cultural resources may be uncovered and damaged if not properly recovered or preserved.	**Mitigation Measure 11.1.1: Halt Construction/Evaluate Find**. In accordance with CEQA Section 15064.5, should previously unidentified cultural resources be discovered during construction, the Project sponsor is required to cease work in the immediate area and an immediate evaluation of the find should be conducted by a qualified archaeologist or qualified paleontologist. If the find is determined to be an historic or unique archaeological resource, contingency funding and a time allotment	*Less than Significant*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
	sufficient to allow for implementation of avoidance measures or appropriate mitigation to protect, preserve, remove or restore the artifacts uncovered should be available. Work may continue on part of the building site while historic or unique archaeological resource mitigation takes place.	
Potential Impact 11.4.2: Discovery of Human Remains. During construction activities pursuant to implementation of the Redevelopment Plan, it is possible that human remains may be uncovered.	**Mitigation Measure 11.4.2: Halt Construction/Evaluate Remains**. In the event that any human remains are uncovered within the Project Area during future construction activity associated with the implementation of the Project, there should be no further excavation or disturbance of the site or any nearby area until after the Alameda County Coroner has been informed and has determined that no investigation of the cause of death is required or such investigation has occurred and appropriate actions have been taken. If the remains are determined to be of Native American origin, the descendants from the deceased Native American(s) shall make a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.	*Less than Significant*
Potential Impact 11.4.3: Removal or Alteration of Historic Resources: The Redevelopment Plan, as an implementation tool of the General Plan, does not at this preliminary stage propose any specific removal or alteration of historic structures. However, future redevelopment activities may accelerate pressures to alter or replace existing buildings within the Project Area, likely including historic properties.	With adherence to the policies and implementation actions included in the HPE, potential impacts to historic resources in the Project Area may be avoided or substantially lessened to a level of *less than significant*. In order to provide more specific actions within the context of the West Oakland Redevelopment Plan, the following action items are recommended to be added to the Redevelopment Plan's subsequent Implementation Plan(s) to implement HPE provisions: 1. For any project receiving assistance from the Redevelopment Agency within the West Oakland Redevelopment Project Area, a standard requirement shall be instituted to complete an intensive historic survey of the project site and the surrounding area. 2. As part of the first Implementation Plan for the West Oakland Redevelopment Plan, the Agency shall identify potential sites to relocate historic resources that may be displaced by redevelopment	*Less than Significant*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
	projects or activities. 3. If redevelopment projects within the West Oakland Redevelopment Project Area involve the demolition of multiple historic resources, the Agency will consider acquiring a site for relocation of such structures. 4. As part of the first implementation Plan for the West Oakland Redevelopment Plan, the Agency shall fund a Mills Act study for the Redevelopment Project Area. 5. As part of the first Implementation Plan for the West Oakland Redevelopment Plan, a set of design guidelines shall be developed for the two districts (Oak Center and Oak Point) eligible for the National Register. 6. Revise, update and republish "Rehab Right". As part of this effort, incorporate residential design specifications and details that can be used as a template for cost-effective solutions for common repairs, additions and alterations to existing housing in the West Oakland Redevelopment Project Area. 7. As part of the first two 5-year Implementation Plans for the West Oakland Redevelopment Plan, design and implement a set of historic markers and other interpretive information demarcating the Oak Center District and Oak Point District, including monument signs on landmark buildings.	
Cumulative Impacts and Mitigation Measures:		
Transportation		
Cumulative Impact 5.4.2: Signalized Intersections. Traffic generated by new growth and development within the Project Area, in combination with traffic from past projects, other current projects, and probable future projects, would cause cumulative impacts at the intersection of San Pablo Avenue/40th Street in Emeryville.	No feasible mitigation measures have been identified that would reduce cumulative impacts at the San Pablo Avenue and 40th Street intersection to a level that is less than significant.	*Considerable and Unavoidable*.

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
Cumulative Impact 5.4.3: Non-Signalized Intersections. Traffic generated by new growth and development within the Project Area, in combination with traffic from past projects, other current projects, and probable future projects, would cause the intersection at 3rd and Market Streets to operate at unacceptable levels of service.	**Mitigation Measure 5.4.3: Convert the two-way-stop-control to all-way-stop-control at the 3rd Street & Market Street intersection.** Individual development projects pursuant to implementation of the Redevelopment Plan's programs or other activities within the Project Area shall fund a pro-rata fair share of the cost to convert the two-way-stop-control intersection to all-way-stop-control at the 3rd Street & Market Street intersection. Alternatively, at the Redevelopment Agency's sole discretion, redevelopment funds could potentially be used to subsidize these fair-share funding contributions or to implement this improvement.	*Less than Considerable*
Cumulative Impact 5.4.4: AC Transit Service. New growth and development within the Project Area, in combination with past projects, other current projects, and probable future projects, would be likely to increase average ridership on AC Transit by more than 3 percent.	**Mitigation Measure 5.4.4: Coordination with AC Transit.** The City of Oakland shall coordinate with AC Transit to ensure that the average load factor on any specific AC Transit line does not exceed 125 percent over a peak thirty-minute period. At the Redevelopment Agency's sole discretion, redevelopment financing capabilities could potentially be used to assist AC Transit in meeting this operational threshold.	*Less than Considerable.*
Cumulative Impact 5.4.5: BART Service. New growth and development within the Project Area, in combination with other past projects, current projects and probable future projects, would likely result in cumulatively significant impacts on BART service at fare gates.	**Mitigation Measure 5.4.5: Coordination with BART.** The City of Oakland shall coordinate with BART to ensure that adequate fare gate capacity is available at the West Oakland and MacArthur BART stations to accommodate anticipated increases in ridership associated with projected growth and development within the Project Area. To the extent that adequate capacity may be reliant on the addition of one or more new fare gates at the station, the Redevelopment Agency, at its sole discretion, may consider utilizing redevelopment financing capabilities to assist in the financing of such station improvements.	*Less than Considerable.*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
Cumulative Impact 5.4.7: Truck Parking. Redevelopment, in combination with past, other current, and probable future projects (including the Port of Oakland's Vision 2000 Program and the OARB Redevelopment Project) could result in a cumulatively inadequate supply of parking for trucks serving the Port of Oakland.	Any mitigation measures that might be recommended for the Project Area that would result in expansion of trucking operations and truck-related activities would be in conflict with the land use compatibility strategies embodied in General Plan policy and supporting land use ordinances. Therefore, no mitigation measures are recommended.	*Considerable and Unavoidable.*
Air Quality		
Cumulative Impact 6.4.8 Emissions of NO_X and PM_{10}: Implementation of the Redevelopment Plan, in conjunction with the Port's Vision 2000 Program and the adjacent OARB Area Redevelopment Project would cumulatively exceed BAAQMD significance criteria for NOx and PM10.	Most of the cumulative emissions in the Project Area are attributed to Port-related projects. The Port of Oakland is implementing the Vision 2000 AQMP, a program to mitigate the potential air quality impacts of the Port's Vision 2000 Program.	*Significant and Unavoidable*
Noise		
Cumulative Impact 7.4.5: Traffic Noise. New growth and development within the Project Area, combined with other past projects, other current projects and probable future projects would generate cumulative noise increases along local streets.	None identified.	*Significant and Unavoidable*
Public Services		
Cumulative Impact 10.4.1: Parks. On a cumulative basis the growth and development that may be facilitated by, or be in furtherance of the Redevelopment Plan would *contribute to a cumulatively considerable deficit* in existing parkland.	**Mitigation Measure 10.4.1A: Park Sites.** The City of Oakland Redevelopment Agency shall coordinate with the Office of Parks and Recreation to develop and initiate a land acquisition program for new parks in underserved areas. The biggest challenge will be to find available land in appropriate areas to serve new residents. The Redevelopment Agency may be able to assist through the use of redevelopment tools in the identification and acquisition of appropriate new park sites.	*Less than Considerable*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
	Mitigation Measure 10.4.1B: Joint Use. The City of Oakland Redevelopment Agency shall coordinate with the City Office of Parks and Recreation and the OUSD, local churches, private recreation providers and local non-profit agencies to promote joint use agreements and joint use partnerships that maximize the use of non-park recreational facilities. **Mitigation Measure 10.4.1C: Funding.** The City of Oakland and its Redevelopment Agency shall identify and pursue local funding opportunities to augment existing General Fund monies. At the Redevelopment Agency's sole discretion, redevelopment funds could potentially be used for parkland acquisitions and improvements.	
Cumulative Impact 10.4.2: Schools. On a cumulative basis, the growth and development that may be facilitated by, or be in furtherance of the Redevelopment Plan would *contribute to a cumulatively considerable deficit* in existing school capacity.	**Mitigation Measure 10.4.2A: Joint Use.** The City of Oakland, its Redevelopment Agency, and public and private land developers within the Project Area shall work with the OUSD to identify possible joint use opportunities. Examples of joint use may include the lease or sale of air rights above or below existing school grounds or facilities to private developers, or joint venturing with private developers, public entities or other parties in the development of surplus school property. Other joint use opportunities include joint ventures with the City parks department in the development of shared school grounds/public park space. Joint use agreements can result in opportunities for sharing costs for such items as maintenance and repair, thereby saving funds for other District needs. **Mitigation Measure 10.4.2B: Funding Opportunities.** The City of Oakland and its Redevelopment Agency shall coordinate with the OUSD to identify and pursue local funding opportunities to match potential state grants. At the Redevelopment Agency's sole discretion,	*Less than Considerable*

Summary Table Of Potentially Significant Impacts And Mitigation Measures		
POTENTIALLY SIGNIFICANT IMPACTS	MITIGATION MEASURES AND RESULTING LEVEL OF SIGNIFICANCE	
	local funds could potentially include the use of redevelopment funds.[1] **Mitigation Measure 10.4.2C: Real Estate Asset Management.** The City of Oakland and its Redevelopment Agency should coordinate with the OUSD in the management of the District's real estate assets. On a cumulative, District-wide basis the School District will continue to be challenged in its ability to find available land in appropriate areas to serve new student populations. The District may now own or control real estate outside of the Project Area where new schools may not be needed to serve student demands. Creative use and disposition of these real estate assets could help mitigate the costs of future facility needs. The City and Agency may be able to assist through the use of redevelopment tools in the identification, use and potential disposition of appropriate sites, even if these sites are not located within the Project Area.	

[1] California Redevelopment Law (Section 33607.5) establishes specific mechanisms and formulas for payments by redevelopment agencies to school districts. Section 33607.5 of the CRL also specifically provides that such payments are the exclusive payments required to be made by a redevelopment agency to a school district. A Redevelopment Agency shall not be required, as a mitigation measure or as part of any settlement agreement or judgement, to make any other payments to a school district.

3

Project Description

3.1 Introduction

The City of Oakland has designated a substantial portion of West Oakland as a possible new Redevelopment Project Area, and is now considering adoption of a Redevelopment Plan for this area. The *Redevelopment Plan for the West Oakland Project Area* (Hausrath Economics Group, February 2003), known hereafter as the "Redevelopment Plan," has been prepared by the City of Oakland Redevelopment Agency in consultation with the West Oakland Project Area Committee (WOPAC), with technical assistance from the Hausrath Economics Group. The Redevelopment Project Area is located in West Oakland, in the San Francisco Bay Area of California (see **Figure 3.1**).

The use of redevelopment as a strategy for implementation of economic improvements and neighborhood revitalization in western Oakland has included establishment of several prior redevelopment districts. These prior districts include the Acorn Redevelopment Project established in 1961; the Oak Center Redevelopment Project established in 1965; the Broadway/MacArthur/San Pablo Redevelopment Project established in 2000; and the Oakland Army Base Area Redevelopment Project established in 2000 (see **Figure 3.2).** Consistent with state law, the Redevelopment Agency is now considering expansion of redevelopment authority into the remaining portions of western Oakland not already included in a redevelopment project area to facilitate redevelopment activity consistent with the City's General Plan.

3.1.1 Prior Planning Efforts

Numerous prior planning efforts have been prepared in an effort to influence and stimulate development and revitalization within West Oakland. These efforts have included:

- *CWOR Visions and Strategies*, 1995, prepared by the City of Oakland and West Oakland residents and business owners;
- *San Pablo Avenue Corridor Market Assessment And Implementation Plan*, prepared by the Sedway Group for the Cities of Oakland and Emeryville (Sedway Group, October 1997);

Figure 3.1

Figure 3.2

- *Envision Oakland,* the City of Oakland General Plan: Draft Land Use and Transportation Element (LUTE) Volume 2: Supporting Information (City of Oakland, March 1998);
- *Mandela Parkway Corridor Plan,* prepared by the City of Oakland in April 1998;
- *West Oakland 2000, Transportation and Economic Development Study*, prepared by the City of Oakland Community and Economic Development Agency (City of Oakland, August 1998);
- *7th Street/McClymonds Corridor Neighborhood Improvement Initiative Community Plan*, dated May 1999; and
- *West Oakland Transit Village Action Report,* prepared as a collaborative public, private and agency planning (City of Oakland, February 2001).

These prior planning efforts have pointed to the need for removing and eliminating blighted conditions that affect the area, and for revitalizing neighborhoods. Each of these prior reports has proposed various strategies to achieve these goals. The actions, strategies and goals proposed in each of these documents are generally consistent with the actions, strategies and goals of redevelopment.

Specific efforts to establish the West Oakland Redevelopment Project Area began with the approval of the West Oakland Redevelopment Survey Area (City of Oakland, July 2000). This survey established the boundaries of those portions of West Oakland not already contained within an existing redevelopment project area. The survey provided background information to determine the feasibility of establishing a West Oakland Redevelopment Project Area in these neighborhoods.

The next step was preparation of the *Preliminary Redevelopment Plan for the Proposed West Oakland Project Area* (Preliminary Plan, Hausrath Economics Group, 2001). This Preliminary Plan is one of the legally required documents leading to the adoption of the Redevelopment Plan. It documents the key issues, goals and preliminary objectives and implementation strategies for redevelopment of the area, as compiled from various community meetings. Pursuant to California Redevelopment Law (CRL) Section 33385, a citizens Project Area Committee (WOPAC) was established in March 2002 to provide guidance and advice to the Redevelopment Agency on the Redevelopment Plan and subsequent 5-year implementation plans. The WOPAC is a 17-member committee of community-elected representatives from homeowners, residential tenants, business owners and community organizations that is advisory to the Oakland Redevelopment Agency on policy matters concerning redevelopment of the Project Area.

3.1.2 Overview of the Redevelopment Plan

The West Oakland Redevelopment Plan is the fundamental document that, if adopted, will govern the Oakland Redevelopment Agency's actions within the Project Area. It would establish long-term goals and objectives, policies, procedures and financing tools for the Redevelopment Project Area. The Redevelopment Plan would also set forth parameters on the Agency's authority to conduct activities within the Project Area. The Redevelopment Plan is a general

planning document, thereby providing the Agency with long-term flexibility to address issues, projects, programs and other activities over the 30-year term of the Plan. The programs and projects included in the Redevelopment Plan are further described in subsequent sections of this Project Description.

Redevelopment Plan in Relationship to the General Plan

The Redevelopment Plan has been developed to be fully consistent with the City of Oakland General Plan, including the Land Use and Transportation Element (LUTE), the Open Space, Conservation and Recreation Element (OSCAR), the Historic Preservation Element (HPE) and the Housing Element (HE). As such, the physical development that may occur in furtherance of the Redevelopment Plan will be based on, and will be fully consistent with the land use designations, development standards and other goals, objectives and policies of the City's General Plan. This consistency is further described in subsequent sections of this Project Description.

Redevelopment Plan and Environmental Effects

The Redevelopment Plan itself is not a precise plan, nor does it contain specific proposals for redevelopment of individual sites or identify particular actions the Redevelopment Agency will take with regard to specific projects. Instead,

> *"The Redevelopment Plan presents a basic policy framework and a process within which specific projects and programs will be established and implemented over time. Because of the long-term nature of redevelopment, there is the need to retain flexibility to respond to market and economic conditions, to community and property owner interests, and to opportunities presented from time to time for redevelopment."* (Hausrath Economics Group 2001, page 32*)*

The Redevelopment Plan, in and of itself, will not result in any physical impact on the environment. However, the programs, projects and other implementation activities authorized by the Redevelopment Plan and as generally described in subsequent sections of this Project Description may result in environmental impacts. These impacts fall within the framework of growth projections, assumptions and physical changes identified and analyzed in the *General Plan LUTE EIR* (City of Oakland, 1999) as also more fully discussed in subsequent chapters of this EIR.

Timeframe for Analysis, 2025

Although the Redevelopment Plan is proposed for a 40-year planning horizon, this Program EIR analyzes those impacts that would be expected to occur over an approximately 20-year period, or by the year 2025. The year 2025 analysis period has been selected for a number of reasons:

- Citywide and regional growth projections from various sources are available for this period.

- The traffic, noise and air quality modeling tools used in this EIR have been developed to provide an approximate 20-year projection of potential impacts. Projections of growth and development, and analysis of potential impacts beyond the 20-year forecasting period of these analytical tools are too speculative.

- The EIR's assumption that implementation of the Redevelopment Plan and the commensurate growth and development within the Project Area would occur by the year 2025 ensures that the aggregate effects of the Redevelopment Plan's implementation are fully and adequately disclosed.

- The 40-year timeframe for the Redevelopment Plan is primarily required under California Redevelopment Law for the financing of bonds and other financing indebtedness. Issues of financing are not directly related to the physical environmental impacts as analyzed in this EIR. Rather, the financing plan is a facet of the redevelopment plan itself.

3.2 Project Area Location

As shown on Figure 3.1, the proposed West Oakland Redevelopment Project Area (Project Area) is located on the western side of the City of Oakland**.** The Project Area lies to the northwest of Oakland's central business district, immediately southeast of the eastern landing of the Oakland-San Francisco Bay Bridge, and just inland of the Port of Oakland's maritime operations along the San Francisco Bay and Oakland Estuary.

The Project Area is approximately 1,546 acres in size, and includes all of the remaining portions of West Oakland not currently within a redevelopment area. The Project Area is bounded on the north by 40th Street and the Oakland/Emeryville city limits; on the east by I-980 and Union Street; on the south by 18th Street and Middle Harbor Road; and on the west by Pine and Wood Streets. The recently established Oakland Army Base Area Redevelopment Project Area is to the immediate west, the older Acorn and Oak Center Redevelopment Project Areas are to the east, and the Broadway/MacArthur/San Pablo Redevelopment Project Area is to the northeast.

The Project Area's boundaries are similar to, but not coincidental with the West Oakland neighborhood planning area as developed for the City's General Plan Land Use and Transportation Element. These boundaries are shown on **Figure 3-3.**

3.2.1 Subareas

For the purpose of development and implementation of the Redevelopment Plan, the Project Area has been divided into three subareas. Each of these subareas is distinct in its land use development pattern and mix of land uses. They also differ from each other in terms of their blight conditions and their opportunities for redevelopment and revitalization. These three subareas, as shown also on Figure 3-3, are more fully described below.

Figure 3-3

Prescott/South Prescott Subarea

This subarea is located in the southern portion of the Project Area and is generally bordered by Mandela Parkway on the east, Wood Street on the west, and Middle Harbor Road to the south. A large share of the land in this subarea (approximately 60% of the total area and on properties generally located in the southern portion of this subarea) is owned and used by utilities, government and institutional uses including the Union Pacific Railroad (UPRR) right-of-way. The central portion of this subarea is primarily residential, and the northern portion is primarily industrial, connecting to the larger industrial areas further to the north.

Clawson/McClymonds/Bunche Subarea

This subarea is located in the central portion of the Project Area and is generally bordered by San Pablo Avenue on the east, the Oakland Army Base on the west, and the Oakland/Emeryville city limits on the north. Industrial and residential uses mix throughout this subarea, without a clear transition from one use to another. Approximately 41% of this subarea is devoted to older industrial uses concentrated in the southwest portion along Grand Avenue, Mandela Parkway and Peralta Street. Approximately 30% of the subarea is devoted to residential uses. Commercial, auto, and trucking-related uses are located throughout this subarea, primarily along the major arterial streets.

Hoover/West MacArthur Subarea

This subarea is located in the northern portion of the Project Area, and is generally bordered by I-980 on the east, San Pablo Avenue on the west, and 40th Street on the north. This subarea is predominately residential in character (nearly 68% of the total), with commercial, institutional and government uses occupying the remainder.

3.2.2 Existing Population and Employment

Currently the entire Project Area contains approximately 6,820 households with a household population of approximately 20,305 people. The Project Area also contains employment opportunities that provide for a total of approximately 13,085 jobs, as show in **Table 3.1**.

Table 3.1: Subarea Demographic Characteristics within the West Oakland Redevelopment Area

Subarea	Households	Total Population	Employment
Prescott/South Prescott	2,000 (29%)	6,095 (30%)	3,855 (30%)
Clawson/McClymonds/Bunche	2,380 (35%)	7,045 (35%)	7,605 (58%)
Hoover/West MacArthur East	2,440 (36%)	7,165 (35%)	1,625 (12%)
Total Project Area	6,820	20,305	13,085

Source: Hausrath Economics Group (2002), as derived from the U.S. Census for Year 2000.

3.3 Purpose and Need for the Redevelopment Plan

3.3.1 Purpose of Redevelopment

The primary purpose of the Redevelopment Plan is to alleviate the physical and economic burdens caused by blighted conditions in the area. Blight prevents full utilization of the Project Area and creates a burden on the local community.

3.3.2 Community Needs and Issues

The following includes a discussion of the purpose and need for establishing a redevelopment project area in West Oakland. This discussion is supplemented with key issues and concerns as expressed by West Oakland residents during a series of community meetings held in January and March of 2001, and as supplemented, reorganized and modified by input from the West Oakland Project Area Committee (WOPAC). Key issues pertaining to the need for redevelopment include removal of blight, community revitalization, increased affordable housing and home ownership opportunities, elimination of land use conflicts, increased funding for capital investments and increased public participation and awareness.

Removal of Blight

A number of blight-related conditions affect the vitality of the West Oakland Project Area and its potential for revitalization. Blighted conditions exist in many sections of the Project Area in the form of deteriorated and dilapidated structures, and obsolete, underutilized and vacant properties. Other issues that need to be addressed include functionally obsolete facilities, seismically substandard structures, industrial facilities that lack on-site parking and storage space, and brownfield sites with soil and groundwater contamination problems that are costly to remediate. Also, infrastructure deficiencies are found throughout the area.

Blight-Related Community Objectives:

The following list summarizes key objectives that the West Oakland Project Area Committee has identified as crucial in order to eliminate blight:

- Blighted properties should be renovated and debris that adversely affects neighborhood conditions should be removed.
- A baseline of public services should be established so that services do not diminish further.
- Safety and security should be improved.
- High construction standards for housing development and rehabilitation programs should be upheld.
- Deficiencies in sidewalks, curbs and gutters, utilities and other infrastructure in the area should be addressed.

Community Revitalization

The western section of the proposed Project Area is located in close proximity to the I-880 freeway. This freeway was reconstructed and relocated to the west of the Project Area after the 1989 Loma Prieta earthquake, to help reunite and restore parts of West Oakland that had been bisected by the former Cypress Freeway. Establishment of the proposed Project Area would further support and facilitate community restoration and revitalization efforts needed to reunite those portions of West Oakland previously divided by the former Cypress Freeway. Restoration of the properties within the former freeway corridor, much of which are underutilized or vacant, can benefit from redevelopment that will assist in reinvestment and physical improvements. Additionally, redevelopment can assist with the revitalization of currently blighted portions of the formerly active commercial corridors along 7th Street, San Pablo Avenue and West Grand Avenue.

Community Revitalization Objectives:

The following list summarizes key community revitalization objectives that need attention in West Oakland, as derived from input by the West Oakland Project Area Committee and the community at large:

- The number and availability of shops, eating-places and local services should be increased in West Oakland, and the negative influences associated with a preponderance of liquor stores, particularly near sensitive uses such as schools and residences, should be reduced.
- The Mandela Parkway corridor and surrounding properties should be restored and redeveloped to reunite parts of the community separated by the former Cypress Freeway.
- Revitalization of former commercial corridors along 7th Street, San Pablo Avenue and along West Grand Avenue needs assistance.
- Employment opportunities in West Oakland should be increased through business and economic development.
- Community facilities for recreation, education and community uses should be increased and improved.

Affordable Housing and Home Ownership

Housing in West Oakland includes a mix of older Victorian housing stock built around the turn of the century, and newer subsidized housing built since the 1960s. The area has a high percentage of subsidized and affordable units, many of which are in poor physical condition. The area also has many older residents and people on fixed-incomes whom are unable to make necessary home repairs. The following information about general housing conditions in the Project Area has been derived from technical information prepared by Vernazza Wolfe Associates as contained in the *Blight Study* (Hausrath, 2000). The large majority of housing units (nearly 74%) is renter occupied. Although housing vacancy rates are low given the overall tight housing market conditions, the poor physical condition of some housing in West Oakland results in somewhat higher vacancy than in other parts of the City. Residential sales prices in West Oakland are below median sales prices for the city overall, but tight market conditions have resulted in appreciation of housing prices in the last several years. The recent increase in housing prices and rents has not necessarily led to neighborhood revitalization. Property appreciation has not been uniform throughout the area, and problem locations remain. Further, those paying the higher prices do not always have the additional resources necessary improve their property. There is concern about increasing housing prices and rents in West Oakland, particularly among long-time residents who are renters with few other housing opportunities. Part of this concern is that redevelopment will result in dislocation of these and other residents.

Housing Objectives:

The following list summarizes key housing objectives for West Oakland, as derived from input by the West Oakland Project Area Committee:

- Affordable housing opportunities, particularly attractive, good-quality housing affordable to people with incomes similar to those of most West Oakland residents, should be increased.
- Financial resources necessary to rehabilitate and improve the quality of housing in West Oakland, particularly older housing, should be enhanced.
- There is a strong need for renter assistance programs and first time homebuyers programs that are targeted to assist tenants. These programs should also address money management issues.
- Housing should be made affordable to the most needy of West Oakland residents.
- Code deficiencies need to be addressed, and seismic retrofitting and replacement of brick foundations should be undertaken.
- More home ownership should be encouraged and assisted in the area.
- New affordable housing should be in-fill, scattered site, or in mixed-income projects.

Land Use Conflicts

The proposed Project Area includes a mix of older residential, industrial and commercial uses and structures, often in close proximity to each other. Residential uses that are adjacent to industrial uses have had adverse impacts on nearby properties. Industrial uses, particularly those that generate high volumes of truck traffic, are particularly problematic due to noise, traffic, safety and air quality impacts on nearby residences. These impacts have adversely affected

residential property values and investment in surrounding residential properties. Conversely, residential uses adjacent to or nearby to industrial uses have reduced investment in, and the development and operation of those industrial uses. The majority of land use conflicts or incompatible land uses exist within the Prescott/South Prescott and the Clawson/McClymonds /Bunche subareas, along 24th, 26th, 28th, Adeline, Poplar and Peralta Streets (Hausrath Economics Group, 2002, page III-17).

Land Use Objectives:

The following list summarizes key land use objectives for West Oakland as derived from input by the West Oakland Project Area Committee:

- Land use conflicts need to be addressed; in particular the interface between residential and industrial uses in the area should be improved.
- Truck traffic in neighborhood areas and associated environmental hazards and pollution should be addressed.

Funding Capabilities

The construction of basic public improvements is necessary to improve the Project Area, enhance property values and ensure proper utilization of existing properties. In addition expensive site development costs, such as those required for toxic remediation, create barriers to improving properties and converting and developing space for new uses. Other needed investments in the community include improved affordable housing opportunities, streetscape improvements, business reinvestments and other types of economic development activity. The City's capital budget does not include funding for all of these types of expenditures, and additional funding is required above what can be covered by the values of adjacent properties (Hausrath Economics Group, 2001). Redevelopment can provide funding for capital investment beyond the capabilities of either Project Area property owners or the City of Oakland General Fund through the mechanism known as tax increment financing. California Redevelopment Law allows redevelopment agencies to capture the increase in property taxes that arise over a 40-year time period from properties within a designated redevelopment area, starting from the year the project is designated, and to use the increase in tax revenues for implementation of the Redevelopment Plan.

Funding Objective:

The following list summarizes key funding objectives for West Oakland as derived from input by the West Oakland Project Area Committee:

- Streetscape and community beautification improvements, including improved lighting, landscaping, cleaner streets, improved parks and open space, and traffic-calming devices should be funded.
- Financial resources necessary to rehabilitate and improve commercial and industrial properties and for business development and expansion should be identified.

Public Participation

Local residents have indicated that the Redevelopment Plan should also provide an opportunity for increased public participation and awareness of community issues. The following list summarizes key community participation and awareness objectives for West Oakland as derived from input by the West Oakland Project Area Committee:

- All affected property owners within the Project Area should be notified regarding land use decisions.
- Ongoing public participation in, and comment on, the redevelopment process is desired to monitor how Project is affecting West Oakland citizens.
- The potential for redevelopment to result in displacement of certain types of locally owned, neighborhood-oriented, afro-centric businesses should be addressed.
- The distribution of the economic and social benefits between businesses and residents should be equitable to ensure that the current residents actually benefit from the Project.

Summary

For all of the above reasons, the Redevelopment Agency desires to develop and implement a single comprehensive strategy for the overall rehabilitation, revitalization and redevelopment of the Project Area.

3.3.3 Project Goals and Objectives

The following are the Project goals and objectives of the Redevelopment Plan, as developed through public input and deliberations of the WOPAC. These goals and objectives are broadly drafted and address the blighting influences that hamper renewal. These project objectives are also intended to attain the purposes of the California Redevelopment Law.

1. Improve the quality of housing by assisting new construction, rehabilitation, and conservation of living units in the Project Area.
2. Maintain and improve the condition of the existing affordable housing in the Project Area.
3. Increase opportunities for home ownership in the Project Area.
4. Develop renter stabilization strategies that encourage and assist renters to remain in the Project Area.
5. Mitigate and reduce conflicts between residential and industrial uses in the Project Area.
6. Provide streetscape improvements, utility undergrounding, open-space and community facilities to enhance neighborhood quality and foster economic and neighborhood vitality.

7. Support recreation, education, healthcare and programs for all members of the Project Area community, especially youth, seniors and disabled persons.

8. Improve public safety for people living and working in the Project Area.

9. Restore blighted properties in the Project Area.

10. Assist neighborhood commercial revitalization, and attract more uses that serve the local community including neighborhood-serving retail.

11. Retain existing businesses and attract new businesses to Project Area locations designated for business activity; promote economic development of environmentally sound, light industrial and commercial uses.

12. Increase employment opportunities for Project Area residents.

13. Facilitate economic development by improving and rehabilitating substandard buildings and targeting infill on vacant lots on commercial corridors in the Project Area.

14. Minimize/eliminate environmental hazards within the Project Area.

15. Improve infrastructure, transportation, and public facilities throughout the Project Area.

16. Incorporate ongoing community participation in the redevelopment process so residents of all income and wealth levels, geographic areas, language groups and ages have opportunities to learn about and participate in the redevelopment decision-making process.

17. Promote equitable development that benefits the residents of the Project Area and minimizes the displacement of current residents and businesses.

18. Maintain the mixed-use character of the Project Area in a manner equally beneficial to both businesses and residents.

19. Preserve and enhance existing residential neighborhoods and core industrial and commercial areas.

20. Not encourage or support block-busting development, developments that demolish historically significant structures that can be rehabilitated, or developments which destroy the positive functioning character of existing areas.

21. Support and recognize the benefit of new residents and incomes that can be encouraged through market-rate development and done without displacing existing residents or businesses or destroying the existing cultural assets of the area.

22. Encourage and assist the rehabilitation of historically significant properties to avoid demolition or replacement.

23. Relocate displaced residents or businesses, whenever possible and feasible and with their consent, within the Project Area.

24. Not concentrate any affordable housing as stand-alone high density projects, but rather as infill projects on scattered sites and/or mixed-income projects.

25. Improve street configuration on main arterials and their relationship to the surrounding neighborhoods; implement urban design programs for street improvements such as center dividers, bulb-outs, tree planting, and landscape improvements.

26. Establish an ongoing communication with the Oakland Housing Authority concerning its role and responsibility to see that scattered sites undergo design upgrades, reconstruction, and improved general maintenance.

27. Promote sustainable development and "green building" practices.

28. Facilitate through technical assistance the implementation of the goals of the Redevelopment Plan.

29. Not relieve any governmental agency or department of its responsibilities.

3.4 Detailed Project Description

For purposes of this EIR, the proposed "Project" is the adoption and implementation of the Redevelopment Plan for the geographical area described as the West Oakland Redevelopment Project Area. Redevelopment plans are authorized under the *California Community Redevelopment Law* (or CRL).[1] Redevelopment Plans are designed to eliminate blight and blighting influences and restore the fabric of a community in terms of its housing resources, its employment opportunities, the economic well-being of its residents, and the condition of its public infrastructure, services, programs and facilities. The definition of redevelopment includes:

> *"Planning, development, re-planning, redesign, clearance, reconstruction, or rehabilitation (or any combination of these) of all or part of a survey area, and the provision of residential, commercial, or industrial structures or spaces as may be appropriate or necessary in the interest of general welfare*." (CRL, 33020)

The Redevelopment Plan does not contain specific development proposals for individual sites, nor does it mandate particular actions the Redevelopment Agency will take with regard to specific projects. The Redevelopment Plan does include a broadly defined list of potential programs and projects intended to reduce blight, and a funding mechanism via tax increment financing. These potential programs and public and private projects are consistent with the

[1] California Redevelopment Law is found in the California Health and Safety Code, Division 24, 33000 et.seq

adopted Oakland General Plan and are intended to enhance the Project Area's function, appearance, and economic vitality in ways that would not be possible through the normal workings of government or the private sector alone.

3.4.1 Potential Redevelopment Programs

The Redevelopment Plan identifies a range of potential redevelopment programs intended to achieve the foregoing objectives. These programs can generally be grouped into the following four major categories:

- affordable housing and general housing improvements,
- public and civic infrastructure, and environmental improvements; and
- improvements to commercial and industrial areas and businesses activities, and increased opportunities to foster environmentally sound businesses; and
- incentive-based development programs.

These programs, as more fully described below, are intended to be general and conceptual in nature and, due to the lengthy time frame for implementation of the Redevelopment Plan, are intended to be flexible and provide the capacity to change in response to the realities of the marketplace. Additional programs will likely be developed over time as opportunities arise. The general strategy for each of these programs is to use public investment to attract and stimulate private investment. The Agency is authorized to use legal agreements to form public/private partnerships leading to development of new uses. These programs are intended to serve as a catalyst to remove blighted conditions, to aid in revitalization efforts, and to spur the preservation, improvement and creation of affordable housing opportunities.

Affordable Housing and General Housing Improvements

As required by state law and increased under Redevelopment Agency resolution, 25% of the gross tax increment funds received by the Agency must be deposited into a restricted fund for the purpose of developing housing affordable to low, moderate income households.[2] This fund, potentially together with other redevelopment funds, is to be used to assist in the production and preservation of affordable housing opportunities, and to make home ownership available to more low- and moderate-income residents in the Project Area. Redevelopment funds may be used to support a variety of programs designed to increase the supply of housing, make housing more affordable, and improve existing housing stock.

- *Housing Improvement Programs*. These programs may be used to offer low interest or no interest loans or grants to assist low- and moderate-income homeowners in making repairs to existing residences, thereby preserving the current stock of affordable housing. Such repair and improvement programs may include rehabilitation and seismic retrofit programs

[2] City of Oakland Resolution, 2000.

especially for older homes and homes owned or occupied by seniors; preservation and restoration programs for Victorian housing stock and historic homes; support for energy efficiency improvements; and improving and correcting problems at existing public housing sites. These programs may also include residential neighborhood improvements such as community restoration programs that purchase and/or rehabilitate vacant and/or deteriorated residential properties; removal of blight and debris from residential areas; and acquisition and relocation of properties contributing to conflicts between residential areas and adjacent industrial uses.

- *Increased Housing Supply Programs*. These programs may include Redevelopment Agency participation in land acquisition, land cost write-down, developer recruitment, credit enhancement and other forms of participation resulting in development of additional supply of affordable housing. This increased housing supply may consist of artist housing especially for low-income artists; construction of additional owner-occupied housing on residentially-zoned vacant sites; replacement of condemned, unsafe properties or properties beyond cost-effective repair; and/or the provision of additional senior housing and housing for disabled persons.

- *Affordable Housing Programs*. These programs are intended to provide direct assistance in increasing the affordability of housing in the Project Area. They may include providing direct subsidies to developers to lower the cost of producing housing. Additionally, first-time homebuyer programs may assist very low- to moderate-income families with down payments and closing costs for the purchase of a home; and renter-to-owner assistance programs.

Public Infrastructure, Civic, Neighborhood and Environmental Improvements

The Project Area has deficiencies in many basic public infrastructure systems, most noticeably sidewalks, curbs and gutters, and street paving. Additionally, utility poles line nearly all streets, in contrast with the City policy of under-grounding electrical utility supplies. Although the Project Area does have many civic facilities intended to support the quality of life in West Oakland, other facilities are lacking. Many neighborhoods within the Project Area suffer from blighted conditions that could potentially be removed or reduced through neighborhood improvement programs. Identified public infrastructure, civic and neighborhood improvement programs that may be funded in part or in whole via redevelopment include:

- *Infrastructure Improvement Program*. Infrastructure improvements may cover a variety of public works projects including correcting utility and communication system deficiencies; under-grounding utilities; improving sidewalks and curbs and gutters; and providing streetscape amenities and streetscape installations such as lighting, signage, fencing, street furniture and landscaping. This program may also include traffic and transportation improvements such as improving access to public transit; enhancing bicycle and pedestrian facilities; funding street, roadway, and freeway ramp improvements; increasing and enforcing restrictions on truck traffic within neighborhoods; and providing new traffic lights, signals and signage where needed. By improving the public infrastructure this program is designed to improve the quality of life for existing residents and to attract development to the area by eliminating or reducing

costs that would otherwise have to be borne by the private sector or the public sector alone.

- *Community/Civic Facilities Program.* This program would provide Agency funds, potentially together with other city, state and/or federal funding programs to provide new or improved community facilities. Such facilities may include community centers, recreation facilities, libraries, schools, parks, planting strips along roadways, open spaces and public spaces. It may also include new playgrounds, day-care centers and cultural/education/community resource centers. Other potential projects under this program may include providing more small-scale medical facilities and/or better access to healthcare for West Oakland residents. Community improvements such as these can increase the quality of life within the Project Area and stimulate private investments and rehabilitation efforts.

- *Neighborhood Improvement Program.* This program would provide Agency funds, potentially together with other city, state and/or federal funding programs to improve the condition of Project Area neighborhoods. This program may include such projects as the removal of abandoned or unused railroad tracks; increasing noise abatement efforts; enhancing neighborhood security and safety through efforts such as community policing; initiating tree planting campaigns; and supporting and encouraging art activities in West Oakland neighborhoods. These types of investments can encourage further investment in the neighborhoods and make them more desirable places to live and visit.

- *Environmental Improvement Program.* This program would provide Agency authority and/or funds, potentially together with other city, state and/or federal funding programs to remediate environmental hazards, hazardous materials and waste. This program may include such projects as identifying and eliminating and expediting the cleanup of "brownfield" sites. A key regulatory program available to the Agency is the Polanco Redevelopment Act, which authorizes a redevelopment agency to take action to require the investigation and clean-up of an identified release of hazardous materials, and includes cost recovery provisions to pursue cost reimbursement for responsible parties.

Improvements To Commercial and Industrial Areas and Businesses Activities, and Increased Opportunities to Foster Environmentally Sound Businesses

Generally, business improvement programs are designed to assist and encourage private business owners to undertake property rehabilitation and redevelopment efforts, potentially including providing capital (through loans, grants or other funding mechanisms), and developing public programs to assist and support private businesses. The City has also made it a goal to link the citywide comprehensive economic development strategy to community and economic development efforts in neighborhoods, transit-oriented districts, and corridors (LUTE, page 175). Thereby targeting certain corridors and activity centers for future investment of limited resources. Identified business improvement programs include:

- *Desirable Business Recruitment/Retention Program*. This program may provide low or no-interest loans, grants and technical assistance to business owners trying to improve or make additions to the types of businesses that meet neighborhood goals. Business assistance may be in the form of business retention and attraction programs; programs in

support of neighborhood commercial revitalization; providing capital for business expansion, equipment replacement or modernization; and marketing and client attraction programs. The types of businesses that may qualify for such assistance may include neighborhood serving shops and stores, businesses willing to locate into mixed use projects with housing above commercial space; businesses that provide neighborhood jobs and needed services to the community; and neighborhood business incubator industries. Assistance may also be provided to those businesses attempting to remain in, or willing to locate to preferred sites. Such sites may include locations that would develop and/or revitalize commercial corridors, that would support the Mandela Transit Village near the West Oakland BART station, and that would help establish community connections west of the freeway to the MacArthur Transit Village near the MacArthur BART station. The primary purposes of this program is to attract businesses to the area to provide a wider range of retail and commercial uses in the Project Area, and to attract new business tenants to underutilized and vacant buildings.

- *Façade and Building Improvement Program*. This program would provide matching grants to businesses for storefront improvements and façade treatments to enhance the attractiveness and visibility of the area. Improvements may include general building repair/rehabilitation, landscaping, providing handicap access, installing security improvements, redevelopment of vacant and/or blighted property, and litter removal and graffiti eradication programs. By eliminating physical deterioration and improving the appearance of buildings, this program is designed to increase patronage, improve sales, slow business closures and increase property values.

- *Employer Incentive Program*. Under this program the Agency would give loans, grants or tax rebates as incentives to employers who would either reuse and rehabilitate existing buildings within the Project Area, or would reduce neighborhood impacts and/or relocate to a better location those polluting or detrimental businesses and uses. This program may also include land acquisition, environmental assessment, site cleanup, site preparation and/or land write-down to facilitate the reuse of obsolete and/or vacant properties. These incentives are designed to overcome impaired investment properties that may not otherwise be rehabilitated due to a lack of an adequate rate of return on investments.

Incentive-Based Developer Programs

Redevelopment authority may also be used to augment and enhance current City development requirements on those private, public-private and/or community-owned commercial or business projects that may seek redevelopment assistance. Programs within this category might include Agency-identified developer incentive programs for projects that meet certain community-based criteria. A preliminary list of such criteria may include development projects that:

- set-aside funds for neighborhood planning activities and neighborhood studies;

- set-aside a portion or percentage of new construction costs for public art executed by West Oakland artists, youth, and/or community groups;

- set-aside increased areas for “green” open space,

- include a West Oakland resident job-training and hiring component, or that
- include West Oakland residents in their design process.

3.4.2 Implementation Plans and Strategies

The Redevelopment Plan's potential implementation programs and projects described above provide the framework for subsequent and more detailed implementation plans. These implementation plans will lay out the specific projects to be implemented within the Project Area and will target the financial and other resources necessary for implementation. While the City of Oakland Redevelopment Agency is not required to carry out specific projects as may be identified in the implementation plans, the implementation plans will identify the manner in which the Redevelopment Agency proposes to target its resources in 5-year increments. The Redevelopment Agency is required to update the implementation plans every five years to allow for regular evaluation of new and existing opportunities for redevelopment.

Subsequent discretionary actions that may be included within these implementation plans may include:

- Property acquisitions within the Project Area,
- Financial assistance for development projects that are consistent with the Redevelopment Plan,
- Other types of redevelopment projects that fall within the framework of the Redevelopment Plan,
- Subdivisions, disposition and development agreements, and owner participation agreements, and
- Other capital projects such as streetscape improvements, park facilities, landscaping, or other public projects that are consistent with the Redevelopment Plan and the General Plan.

3.5 The Redevelopment Plan as Implementation of the General Plan

The Redevelopment Plan does not contain specific development proposals for individual sites or identify particular actions the Redevelopment Agency will take with regard to specific redevelopment projects. Instead, the basis for future redevelopment activity within the Project Area will be to implement and conform to the City of Oakland General Plan. The General Plan's policy directions regarding development and redevelopment within the Project Area are primarily included in:

- the *Land Use and Transportation Element (*LUTE*,* City of Oakland, 1998);
- the *Open Space, Conservation and Recreation Element* (OSCAR, City of Oakland, December 1996);
- the *Housing Element* (City of Oakland, 1994; anticipated update 2003); and
- the *Historic Preservation Element* (City of Oakland, 1994 as amended in 1998).

Additionally, the Redevelopment Plan is intended to comply with all of the City's land use plans and programs, including consistency with adopted or established population and employment projections.

The policies and objectives of these General Plan elements are then implemented through existing or future specific plans, the City's zoning ordinance, and if adopted, the Redevelopment Plan.

Redevelopment activities are anticipated to include targeting investments and activities towards certain catalyst projects, infrastructure improvement projects and infill development projects that are consistent with, and assist in, implementation of the General Plan. These targeted investments and activities have not been specifically identified at this junction, but rather are described in broad, programmatic terms. Therefore, in order to be conservative in this EIR, this EIR assumes that the Redevelopment Plan would assist either directly or indirectly in the development and redevelopment of all projected growth within the Project Area, consistent with General Plan land use and population projections. To the extent feasible, all public and private activities or undertakings pursuant to or in furtherance of the Redevelopment Plan are evaluated at a programmatic level in this EIR. All future redevelopment actions will be evaluated against this Program EIR to determine consistency and conformance with the growth projections and assumptions contained herein.

3.5.1 Consistency with, and Implementation of the Land Use and Transportation Element (LUTE)

The LUTE outlines several central improvement strategies for the Project Area (see LUTE Figure 5: Improvement Strategies for West Oakland and LUTE Figure 10: Improvement strategies for North Oakland). These improvement strategies are anticipated to guide future redevelopment programs, projects and other activities and form the basis for future growth and development (see **Figure 3-4**).

Target Areas

An important part of the implementation strategy contained in the LUTE is identification of "target areas" for community and economic development. These target areas are identified for purposes of focusing public investment and encouraging private investment to follow. In West Oakland, both residential and commercial areas are in need of targeted improvement. These target areas and strategies, as derived from the LUTE, are more fully described below.

Figure 3-4

West Oakland BART Station/Mandela Parkway Area (LUTE, pages 190-91)

- Encourage and support beautification of the Mandela Parkway corridor.[3]

- Offer business support and public improvements toward establishment of a "Transit Village" near the BART station. Preliminary ideas for this "Transit Village" include the creation of an afrocentric marketplace and community center that takes advantage of both BART and the new Mandela Parkway.[4]

San Pablo Avenue Corridor (LUTE, page 191)

- Implement the *San Pablo Avenue Corridor Study* recommendations, where possible, that apply to the Project Area.[5]

- Improve the appearance of San Pablo Avenue itself, especially as it travels through Emeryville to Oakland.

- Improve the connection of West MacArthur Boulevard to San Pablo Avenue.

West Grand Avenue from the New Freeway (LUTE, page 191)

- Position West Grand Avenue as the new direct route into West Oakland, and to and from San Francisco.

- Take steps to market and promote West Grand Avenue's commercial and urban housing potential.

Raimondi Park (LUTE, page 191)

- Make capital improvements to Raimondi Park, including improved security.

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[3] The *Mandela Parkway Corridor Plan* (City of Oakland 1997) provides an overall vision and detailed design guidelines for establishment of a grand landscaped boulevard along Mandela Parkway from 8th Street to 32nd Street. Anticipated improvements include landscaping and sidewalks, trees, bike lanes, street furniture and other amenities.

[4] These preliminary ideas are contained in the *West Oakland Transit Village Action Report (Action Report)*, a conceptual plan completed for the Transit Village area near the existing West Oakland BART station (Michael Willis Architects *et. al*., 2001). This conceptual plan has not been officially adopted as policy by the City, but is used by the City as a guide for specific public and private projects. There are also other community-based plans for a "Mandela" Transit Village incorporating and surrounding the West Oakland BART station. For purposes of this EIR, the City's *West Oakland Transit Village Action Report* is used as the basis for assumptions of growth and development at this target area. The emphasis of the *Action Report* is to establish a compact, visually defined, pedestrian-oriented district centered on the West Oakland BART station. The district's walkable access to the BART station supports a high density of mixed-use development, including approximately 600 dwelling units; 8,000 to 12,000 square feet of new retail space; a new parking facility; and a mixed-use cultural entertainment area. The *Action Report* also provides an optimum sequencing for new development that maximizes the catalyst-effect of new projects to influence this projected level of growth and investment. Another major goal is to manage the housing mix to maximize affordability. Other physical improvements include a City-initiated streetscape master plan for the 7th Street corridor between Peralta and Union Streets.

[5] The *San Pablo Corridor Market Assessment and Implementation Plan* (Cities of Oakland and Emeryville, 1997) includes a variety of revitalization strategies and specific development projects for revitalizing this area and providing needed retail uses to meet the unmet demand of neighborhood residents and businesses. Although the *San Pablo Corridor Plan* study area was actually north of the West Oakland Redevelopment Project Area, revitalization along the entire San Pablo Avenue corridor, including the southern extension into the Project Area is envisioned.

Transportation and Planning Links (LUTE, page 191)

- Establish strategically located business centers, target economic development support, and create direct freeway access routes for industry and business.

- Completion of the *West Oakland Transportation and Economic Development Study* is expected to establish policies to address these issues.[6]

Trucking Impacts in Neighborhoods (LUTE, page 192)

- Work with the Port of Oakland to locate new businesses that require trucking services away from residential neighborhoods.[7]

- Expand and continue educational and enforcement efforts addressing illegal truck parking and operation that occur in residential areas.

MacArthur BART (LUTE, page 223 and page 54)

These policies pertain primarily to land use immediately adjacent to the Project Area, but also influence land use and transportation within the Project Area.

- This target area has enormous opportunity for improvement. The MacArthur BART area is an important transit hub with transit village potential. Current efforts are being made to develop housing and other uses at this location and to apply transit village zoning.

- New development around the MacArthur BART station should capitalize on its maximum access potential to create business and residential revitalization, enhance the safety of the neighborhood, provide secure parking, improve station access, and encourage pedestrian activity and the use of public transportation.

Wood Street, Pine Street, and Frontage Road Improvements (LUTE, page 19)

These policies do not pertain specifically to land use within the Project Area, but do influence land use and circulation within the Project Area.

- Create a Frontage Road to take heavy haul truck and auto traffic to the new Cypress Freeway, thereby avoiding truck impacts to local streets.[8]

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[6] The *West Oakland 2000, Transportation and Economic Study,* (City of Oakland, 1998) was completed by the City in August 1998. It identifies and recommends opportunities for economic development created by the changes in circulation patterns pursuant to the realignment of the Cypress Freeway. The study pinpoints several sites in West Oakland as development opportunity sites. As such, these sites were targeted with specific transportation and market related improvements to increase economic activity. The sites within the Project Area are clustered, and as such were grouped into nodes which include the area adjacent to the new Cypress Freeway Frontage Road, the area around the West Oakland BART station, and the area around the intersection of West Grand Avenue and Mandela Parkway. The study also recommended several transportation and circulation improvements. These recommendations included not connecting the new Freeway Frontage Road to Wood Street via 10th and 14th Streets, and the second recommendation was proposing a preferred truck circulation pattern prohibiting trucks from many of the residential streets.

[7] Pursuant to the Oakland Army Base Area Redevelopment Plan EIR, the City and the Port have agreed to designate a total of 105-acres of land within that Redevelopment Area for "ancillary maritime support uses", including businesses that require trucking services.

- Improve Wood and Pine Streets, including installation of curbs, gutters, sidewalks, lighting, and landscape to buffer the New West neighborhood from truck traffic and freeway noise.

7th Street and Acorn Shopping Center (LUTE, page 191)

- Revitalize 7th Street and the Jack London Gateway shopping center. Take advantage of new Cypress Freeway exit at Adeline to attract business into West Oakland.

- Consider a mix of urban housing and commercial uses surrounding the potential "Transit Village" at the area near Mandela Parkway and 7th Street (page 191).[9]

Growth and Change Areas

In addition to the target areas for focusing public investment identified above, the LUTE also identifies a number of locations within the Project Area for "growth and change." These growth and change areas apply to major transportation corridors within the Project Area including Mandela Parkway, 7th Street, West Grand Avenue, San Pablo Avenue, MacArthur Boulevard and Martin Luther King Jr. Way from 40th Street to I-580. Policy direction for certain "grow and change" areas within the Project Area are as follows:

West Grand Avenue, San Pablo Avenue and 7th Street

Many of the growth and change concepts for these corridors are described above under the "target areas".

Mandela Parkway

- Landscape and beautify the median.

- Retain general industrial areas toward the core, away from residential areas.

- Work to develop hybrid housing types and to fill vacant commercial areas.

MacArthur Boulevard and Martin Luther King Jr. Way

Both MacArthur Boulevard and Martin Luther King Jr. Way are identified in the LUTE as corridors with significant opportunities for growth and change. Land uses along these corridors are designated under the General Plan as "Community Commercial" to provide opportunity and encouragement for additional commercial or urban-density housing development. Law

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[8] Although not located within the West Oakland Redevelopment Project Area, Frontage Road has since been designated a truck route.

[9] A streetscape master plan for the 7th Street corridor between Peralta and Union Streets was prepared pursuant to the *West Oakland Transit Village* conceptual plan. The streetscape master plan includes improvements at Adeline and the Cypress Freeway exit, along 7th Street south of the Union Street, and within the Acorn Shopping Center. The Acorn Shopping Center is located within in the Acorn Redevelopment Project Area to south of the proposed West Oakland Project Area.

enforcement issues in the motel district on MacArthur Boulevard are identified as a land use concern.

City of Emeryville Border (LUTE, page 186)

- Collaborate on planning and implementation of new development.

The City recognizes the influence of how development within the City of Emeryville affects development in northern West Oakland and of how working together may produce policies beneficial to residents and businesses of both cities. The area located generally south of I-580 between Mandela Parkway and San Pablo Avenue, and extending as far south as 28th Avenue functions as the gateway to West Oakland from Emeryville. As Emeryville continues to grow as a major high-technology hub and retail destination center, it has increased the local market for housing, commercial and other land use investments in the area. The LUTE identifies those areas along Mandela Parkway, San Pablo Avenue and West Grand Avenue for growth and change.

Maintain and Enhance Areas

The remaining portions of the Project Area not identified in the LUTE as either "target areas" or "growth and change" areas have been identified as "maintain and enhance" areas. The primary land use objectives within these areas are to maintain and enhance established neighborhoods, resolve existing land use conflicts, and improve the overall appearance of the community. Key "maintain and enhance" strategies for the Project Area include the following.

South Prescott LUTE, page 188)

- Create performance-based zoning for the South Prescott neighborhood. This zoning will permit a wide variety of "live-work" and other home based businesses that meet "good neighbor" criteria.[10]

- As part of this effort, clearer definitions and standards for live-work development need to be established, and non-conforming uses addressed.

West Clawson (LUTE, page 187)

West Oakland is a community with a number of persistent land use conflicts between residential and business uses. The area of the community most affected by these issues has historically been the West Clawson neighborhood. In this area, land uses are mixed with no clear dominance of one use over another. The LUTE seeks to address these longstanding conflicts through collaborative efforts between business, community, and city representatives.

[10] The City of Oakland adopted an S-15 Transit-Oriented Development Zone for this area in 2000. According to Section 17.100.010 of the Oakland Planning Code, the intent of the S-15 Transit-Oriented Development Zoning is to "create, preserve and enhance areas primarily to serve multiple modes of transportation." This zoning district is intended to "feature high-density residential, commercial, and mixed-use developments to encourage a balance of pedestrian-oriented activities, transit opportunities, and concentrated development."(City of Oakland, 2003).

- The "Housing and Business Mix" (land use) classification becomes the first initiative or building block that can be used in places such as West Clawson.[11]

- In addition, a number of additional mechanisms are to be provided in these areas which can become "good neighbor" criteria.[12]

Infill Development

Infill development projects can also assist in maintaining and enhancing neighborhoods, as anticipated under the LUTE. Such infill development can provide opportunities to develop or redevelop vacant, underutilized of blighted properties and increase investment opportunities in the neighborhoods.

3.5.2 Consistency with, and Implementation of the Open Space, Conservation and Recreation Element (OSCAR)

The OSCAR Element is the City of Oakland's official policy document addressing the management of open land, natural resources and parks in Oakland. A major theme of the OSCAR element is the protection of Oakland's open spaces and natural resources, and bringing these resources into closer proximity to neighborhoods where they do not currently exist. The OSCAR Element demonstrates where recreational and open space needs exist in the City and identifies the types of funding sources that may be used to address these needs. One of the action items included in the OSCAR Element (Action REC-10.5.1) promotes the use of tax increment funds for parks, plazas and open space improvements within redevelopment areas. A wide range of parks and open space improvements are eligible for tax increment financing including street trees, landscaping, streetlights, and new open spaces and refurbished park facilities.

The Redevelopment Plan proposes programs that focus on the need for new or improved community facilities such as parks, community centers, libraries, open space and cultural facilities (as noted earlier). Such facilities may be developed using Redevelopment Agency and/or other funds from the City, state or federal governments. Such projects would encourage further investment within Project Area neighborhoods.

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[11] Land use designations on and adjacent to the corridors within the proposed Project Area focus on increased "Business Mix" uses. The Business Mix concept allows existing industrial uses to remain towards the core of these areas, although the predominant land uses are intended to be a mix of commercial businesses and offices. Live/work space is encouraged at the edge of the Business Mix and in Housing and Business Mix areas.

[12] These "good neighbor" programs include programs to address dis-investment, mediation of disputes between neighbors, organization of neighborhood clean-up, investment and maintenance of infrastructure, establishment and enforcement of development guidelines and City codes, development of new codes specific to the various types of conditions found on each block, targeted relocation of specific high impact or heavy industry away from residences, a shift to businesses with low impacts on surrounding community, encouragement for adaptive reuse of vacant buildings and development of compatible infill projects, and residences that abut remaining industry can be better protected against impacts by a range of treatments that include landscaping, lighting, and fencing.

New or Improved Parks and Community Facilities

The provisions for new or improved community facilities included in the Redevelopment Plan are consistent with, and assist in implementation of the goals, objectives and policies of the OSCAR Element, including the following:

- Accommodate pedestrian and bicycle travel from West Oakland BART to Emeryville via the Mandela Parkway Median.
- Improve access to the shoreline. This should include construction of the Bay Trail, along with spur trails along Maritime and 7th Street/Middle Harbor Road.
- Where feasible, incorporate connections (arcades, landscaped easements, and pathways etc.) to parks is West Oakland (DeFremery, Lowell, Raimondi) as old industrial sites along Mandela Parkway are redeveloped.
- Pursue schoolyard "greening," particularly in the northeast part of West Oakland (Hoover/Foster), where there are no neighborhood parks. McClymonds High School is located in an area with relatively little open space and its field could be a more accessible community resource.
- Include provisions for a public plaza in any redevelopment plan or urban design plan for the West Oakland BART station.
- Continue street tree planting efforts and other programs to "green" West Oakland.
- Explore opportunities to restore natural landscape features, including oak trees and drainage ways.

3.5.3 Consistency with, and Implementation of the Housing Element

A major overall theme of the Oakland General Plan Housing Element is to encourage the growth of new residential development in Oakland. Pursuant to the strategies of the LUTE, new residential growth is projected to occur along the City's major corridors, within the downtown, at transit-oriented districts near BART stations, along the waterfront, and infill sites that are consistent with the neighborhood character of surrounding areas. The City of Oakland *Housing Element* (City of Oakland 1994; anticipated update 2003) includes an inventory of such sites throughout the City suitable for residential development. It identifies that the housing potential on land suitable for residential development is very large, and that there is more than adequate land available to meet identified housing needs. The inventory of suitable sites for future housing includes sites within housing projects recently completed or under construction, sites with housing projects currently in the review process, and additional housing opportunity sites. The inventory of housing opportunity sites focuses on larger sites suitable for multiple-unit housing development. Many of these opportunity sites envisioned for development are along the City's major corridors, in the BART transit village projects and in higher-density and mixed-use developments downtown as part of the City's 10K Housing Initiative.

All housing sites within the Project Area that are either recently completed or under construction, housing projects currently in the review process, or sites identified as housing opportunities under the Housing Element have been included in the projected growth and development within the Project Area.

3.5.4 Consistency with, and Implementation of the Historic Preservation Element

The Oakland General Plan Historic Preservation Element provides a broad, multi-faceted historic preservation strategy. This strategy includes mechanisms to identify historic properties that warrant, or may warrant preservation. It also sets forth a system of preservation incentives and protective regulations for designated historic properties. The strategy also incorporates historic preservation into the full range of City programs and activities, and identifies ways to improve public and City staff awareness and appreciation of older properties.

The Redevelopment Plan proposes programs, such as the preservation and restoration program for Victorian housing stock and historic homes (as noted earlier), that are consistent with the Historic Preservation Element. Portions of the Project Area that include significant historic buildings can be made into viable retail, commercial or residential properties through Agency-sponsored efforts such as a historic façade improvement program, unreinforced masonry grant program and other forms of Agency assistance. Rehabilitation of historic buildings provides for the reuse of valuable properties that may be vacant or underutilized and helps to preserve the character of neighborhoods. These objectives of the Redevelopment Plan are consistent with, and assist in implementation of the goals, objectives, policies and actions of the Historic Preservation Element.

3.5.5 Consistency with Population and Employment Projections

Based on the growth projections and land use designations contained in the City General Plan[13], the Redevelopment Plan is projected to assist either directly or indirectly in the following amount of population and employment growth by 2020:

- approximately 1,838 net new households,
- an increase in population of approximately 4,209 people, and
- approximately 3,184 net new employment opportunities.

The projected net growth in population and households accounts for anticipated infill development opportunities as well as construction of new, more dense housing opportunities replacing existing blighted properties. Net growth in employment opportunities represents infill commercial/industrial development, intensification of uses within existing commercial/industrial space, and construction of new employee-generating uses to replace existing blighted properties.

[13] Including the Land Use and Transportation Element; the Housing Element; the Open Space, Conservation and Recreation Element; and the Historic Preservation Element.

These projections represent the aggregate of all development anticipated to occur within the Project Area and form the basis of subsequent environmental analysis. Redevelopment is not expected to provide direct assistance to all such new development activity; however, any number of individual projects that comprise this overall development projection may receive direct or indirect benefits from redevelopment by virtue of their location within the Redevelopment Project Area.

A summary of projected households, population and employment growth within the Project Area by subarea is as shown on **Table 3.2**. As shown on this table, the number of net new households, population and employment opportunities is expected to increase by approximately one-fifth within the Project Area. The greatest growth is predicted for the Prescott/South Prescott subarea.

Table 3.2: Summary of Projected Household, Population and Employment Growth within the West Oakland Redevelopment Area, 2000 to 2020

Subarea	2000	2020	Predicted Change
Households			
Prescott/South Prescott	2,000	2,775	+775 (28%)
Clawson/McClymonds/Bunche	2,380	3,240	+860 (26%)
Hoover/West MacArthur	2,440	2,650	+210 (8%)
Total Project Area	6,820	8,650	+1,830 (21%)
Population Growth			
Prescott/South Prescott	6,095	7,964	+1,869 (23%)
Clawson/McClymonds/Bunche	7,043	8,906	+1,863 (21%)
Hoover/West MacArthur	7,165	7,642	+477 (6%)
Total Project Area	20,303	24,512	+4,209 (17%)
Employment			
Prescott/South Prescott	3,853	5,176	+1,323 (26%)
Clawson/McClymonds/Bunche	7,605	9,288	+1,683 (18%)
Hoover/West MacArthur	1,626	1,804	+178 (10%)
Total Project Area	13,084	16,268	+3,184 (20%)

Source: Hausrath Economics Group (2002b), as derived from Census 2000 and the City of Oakland's Cumulative Growth Scenario, 12/17/02.

Although the Redevelopment Plan is proposed for a 40-year planning horizon, this Program EIR analyzes those impacts associated with the growth and development projected to occur over a 20-year period, or by approximately the year 2025. This approach was taken because traffic model projections are not calculated beyond the year 2025 and analysis of other environmental effects beyond the year 2025 was considered too speculative. Therefore, this EIR assumes that buildout

of the growth projections presented above would occur by year 2025 within the Project Area. This approach assures that the aggregate effects of redevelopment within the Project Area are adequately disclosed for this approximately 20-year period. The 40-year time frame for the Redevelopment Plan is primarily a time frame required by the California Community Redevelopment Law, and used for financing bonds and other financial indebtedness.

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4

Land Use

4.1 Introduction

This chapter of the EIR describes existing land uses within the West Oakland Redevelopment Project Area as well as its surrounding areas, and identifies relevant land use planning policies and regulations applicable within the Project Area. It also provides an analysis of the consistency of the Redevelopment Plan with adopted plans and policies of the City and other agencies with jurisdiction within the Project Area. The information contained in this chapter of the EIR has been derived from the following primary sources:

- Oakland General Plan Land Use and Transportation Element (LUTE), City of Oakland, March 1998;
- *Oakland General Plan Land Use and Transportation Element Draft EIR* (LUTE EIR), prepared by ESA for the City of Oakland, October 31, 1997; and
- *Preliminary Redevelopment Plan for the Proposed West Oakland Project Area* (Preliminary Redevelopment Plan), prepared by Hausrath Economics Group for the City of Oakland Redevelopment Agency, June 2001.

4.2 Environmental Setting

4.2.1 Historical Land Use

The land use history of West Oakland is intimately tied to its prominent central waterfront location on the San Francisco Bay. West Oakland's proximity to the water and San Francisco made it the focal point for a regional, and later national, rail and maritime transportation network.

When settlement began in the Bay Area, West Oakland was mostly marshland and oak groves. Population growth and demand for convenient access to points around the Bay changed that. In 1862, a wharf was built at Oakland Point at the foot of 7th Street for regular ferry service to San Francisco. Daily local trains began running down 7th Street to connect downtown Oakland to the new ferry, leading to the development of 7th Street as a major commercial corridor. In 1869, Oakland Point was chosen as the western terminus of the transcontinental railroad. This turned

Oakland into a transportation node of national importance. Later improvements to the wharf at Oakland Point led to the proliferation of heavy industrial activities on and near the water due to the easy access provided by the railroad.

In 1916, the Nabisco Shredded Wheat Plant was built at 14th and Union Streets, away from the main rail line. This was the first of a proliferation of industrial sites throughout West Oakland on land that was previously an unbuildable part of the West Oakland marshes. Development in the outer harbor brought about reclamation and subsequent industrial use of these marshy areas. Since the historic land areas were by that time fully built-up residential neighborhoods, the location of industrial sites on former marsh areas began the land use pattern of industrial sites located next to residential sites that is still prevalent in the area today.

This land use pattern was exacerbated by the activities brought to West Oakland by both World Wars. Heavy industrial activities needed for the war efforts were concentrated in West Oakland because of its port and rail facilities. During both wars West Oakland became one of the major shipbuilding centers for the United States, and during Word War II Army and Navy bases were built along the West Oakland shoreline. The war effort relocated thousands of workers from across the country to the area, and the Oakland Housing Authority built major new housing developments to house them near their work.

After World War II an economic decline hit the region and was particularly felt in West Oakland. The City of Oakland targeted the neighborhood for urban renewal. Huge civic projects such as the Grove-Shafter Freeway, BART, the Acorn Housing Project, the Cypress Freeway and the Main Post Office were built in West Oakland during this period. However, these projects resulted in the displacement of hundreds of families, the destruction of many historic homes, and the decimation of much of the local commercial activities, especially on 7th Street (OCCUR, 1988).

4.2.2 Surrounding Land Uses

West Oakland continues today as the nexus of road, rail, and sea connections for the entire East Bay. Transportation and transportation-related industries generally shape and define the Project Area, and in many instances isolate it from the surrounding city. The Port of Oakland, the fourth largest port in the United States, fronts the Bay and the Oakland Estuary to the west and south of the Project Area. Southern and Union Pacific Rail Yards that serve the Port run just inland from the Port to the west and south. A regional freeway system including I-880 serves the Port as well as commuter needs, and surrounds West Oakland to the south and east. Interstates I-980 and I-580 divide the Project Area from downtown Oakland to the east and the City of Emeryville to the north. The eastern terminus of the Bay Bridge is just to the northeast of the Project Area.

Because the Project Area is at the center of so much transportation and commerce activity, there are a substantial number of land uses that surround the Project Area and influence adjacent land use. Starting in the northwestern corner and moving clockwise around the Project Area, the major surrounding land uses include the following, as also shown on **Figure 4-1**:

Figure 4-1

- The northern end of the Project Area is bounded by the City of Emeryville. Emeryville has recently become, through neighborhood redevelopment, a hub of major commercial development that contains several large, regionally oriented commercial retailers.

- Interstate 580 runs near the northern boundary of the Project Area.

- The northeastern boundary of the Project Area transitions into the North Oakland planning area. The MacArthur BART station is located to the northeast, just outside of the Project Area.

- Interstate 980 and State Highway 24 form the eastern boundary of the Project Area. Downtown Oakland is to the east of I-980.

- To the southeast are the older Oak Center and Acorn Redevelopment Project Areas.

- The Union Pacific rail yard and Middle Harbor Road bound the southern end of the Project Area. Immediately south of the rail yard and Middle Harbor Road lies the Port of Oakland. Interstate 880 runs through the Project Area slightly inside the southern boundary.

- The 16th and Wood Streets portion of the Oakland Army Base Area Redevelopment Project abuts the western boundary of the Project Area. Interstate 880 runs just outside this western boundary.

- The northwestern edge of the Project Area abuts the Oakland Army Base (OARB) Area Redevelopment Project. Three sub-districts within the OARB Redevelopment Area have been designated. The City of Oakland Gateway sub-district would include future development of approximately 2.3 million square feet of new "flex" uses, including light industrial, office, R&D, ancillary and possibly regional retail, and warehouse/distribution uses. The Maritime sub-district anticipates expansion of the Port of Oakland's maritime facilities consistent with the Port's Vision 2000 Program and construction of the Port of Oakland's New Intermodal Facility (NIF). The 16th/Wood sub-district would include approximately 375 units of live/work space and approximately 1.4 million square feet of commercial, office, R&D, and retail space.

- East Bay Municipal Utilities District operates its Main Wastewater Treatment Facility to the northwest of the Project Area, near the I-80/I-580/I-880 interchange.

- The eastern terminus of the San Francisco/Oakland Bay Bridge is just to the north of the Army Base.

4.2.3 Existing Land Use, Project Area

The Project Area encompasses approximately 1,546 acres of land. The Project Area is bounded on the north by the Oakland/Emeryville city limits and 40th Street, on the east by I-980 and Union Street, on the south by 18th Street and Middle Harbor Road, and on the west by Pine and

Wood Streets. These boundaries capture all of the remaining parts of West Oakland not currently within a redevelopment project area. The recently established Oakland Army Base Area Redevelopment Project Area is on the west side, the older Acorn and Oak Center Redevelopment Project Areas are on the east, and the MacArthur/San Pablo Redevelopment Project Area is to the north as shown on Figure 3.2.

Excluding streets and public right-of-way, the Project Area encompasses approximately 4,945 parcels of land on 966 acres. As indicated in **Table 4-1** below, the Project Area currently contains many different types of land uses. Among the many land use types, some of the most prevalent are single and small multifamily residential units (29.5%), and industrial/warehouse uses (21.3%). Utility owned uses, including railroad tracks and adjacent property, along with East Bay Municipal Utilities District property, also occupy a large share of land (19.7%). Other prevalent uses include institutional/government owned property (12.4%), which includes the federally-owned Post Office, BART property, state property, land for public parks and community centers, and land for churches and schools. Also, the Project Area contains a large number of vacant lots (6.5%).

Table 4-1: Existing Land Use in the West Oakland Redevelopment Project Area

Land Use Classification	Parcels [1]	Acres	% of Total Land
Residential: 1-4 units	3,146	276.9	29.5%
Residential: 5+ units	163	53.6	5.7%
Commercial [2]	256	31.8	3.4%
Auto Service/Repair	62	10.8	1.2%
Parking	17	2.9	0.3%
Industrial/Warehouse	395	199.7	21.3%
Utilities	61	184.5	19.7%
Institutional/Govt. Owned [3]	211	116.4	12.4%
Vacant Lots	505	60.4	6.5%
N/A [4]	129	29.0	--
Total	**4,945**	**966.0**	**100.0%**

Notes: [1] Distribution excludes parcels with incomplete records (N/A).

[2] Includes all commercial uses except auto-related commercial.

[3] Includes churches, schools, parks, Post Office, BART, and state property.

[4] Records incomplete; use not identified.

Source: Preliminary Redevelopment Plan , page 9

Urbanized Land

According to California Redevelopment Law criteria[1], the entire Project Area is defined as predominantly urbanized, with a wide variety of long-established residential, commercial and industrial land uses.

Vacant Land

According to County Assessor's data and as shown in Table 4-1, there are a total of 505 vacant lots in the Project Area and 129 additional parcels that do not have any assessed value attributed to buildings or structures. This data can be interpreted as meaning that there are as many as approximately 634 vacant lots or highly underutilized properties within the Project Area. These properties are scattered throughout the Project Area and are not grouped into any one individual sub-area. The vacant and/or underutilized parcels account for 89.4 acres of property, or about 9% of the total Project Area. Together with those parcels in utility and parking uses, the amount of land in very low intensity use or vacant totals 276.8 acres and represents a substantial share (approximately 29%), of the Project Area.

4.2.4 Existing Land Use by Project Subarea

The Project Area has been divided into three subareas, each with its own distinct land use patterns and land use mix. Generally, existing land uses within each of the three subareas can be described as follows:

Prescott/South Prescott Subarea

A large share of land within this subarea is owned and used by utilities, government, and institutional uses (around 60% of the total subarea) with most located primarily to the south of this subarea. Prominent land uses included the Main U.S. Post Office, the West Oakland BART station and the Union Pacific Rail Road's tracks. Generally, the central portion of this subarea is residential, and the northern portion is largely industrial. Often, residential and industrial uses are within close proximity. This subarea currently contains about 2,000 households and employment opportunities that provide for about 3,853 jobs.

Clawson/McClymonds/Bunche Subarea

The largest share of the land in this subarea is devoted to older industrial uses (about 41%). These industrial uses are concentrated in the southwestern portion of the subarea in the vicinity of West Grand Avenue, Peralta Street, and Mandela Parkway. A large share of the subarea is also devoted to residential uses (about 31%). However, the residential areas are interspersed throughout the industrial areas, and there is a general lack of transition to reduce conflicts between these uses. Commercial and auto-related uses appear scattered throughout the subarea, with most concentrated along the major arterials. This subarea currently contains about 2,377 households and employment opportunities provide for about 7,605 jobs.

[1] California Health and Safety Code, Division 24, 33320.1

Hoover/West MacArthur Subarea

The land use character of this subarea is predominately residential, with residential uses occupying 68% of the total subarea. Commercial and institutional/government-owned uses also have a noticeable presence, occupying about 20% of the subarea. This subarea currently contains 2,439 households and employment opportunities provide for about 1,626 jobs.

4.3 Regulatory and Policy Setting

4.3.1 The San Francisco Bay Conservation and Development Commission

San Francisco Bay Plan

The McAteer-Petris Act of 1965 established the San Francisco Bay Conservation Development Commission (BCDC) to ". . . prepare an enforceable plan to guide the future protection and use of San Francisco Bay and its shoreline." The outcome of that legislation, *The San Francisco Bay Plan* (Bay Plan), was adopted by BCDC in 1968, and has been amended several times, most recently in April 2001 (BCDC 2001). The Bay Plan guides BCDC in its protection of the Bay and in its exercise of permit authority over development adjacent to the Bay.

Seaport Plan

BCDC also recognizes the importance of maritime commerce to the Bay Area, and the necessity of modern facilities to meet current and future maritime commercial needs. As such, the BCDC has prepared the *San Francisco Bay Area Seaport Plan* to coordinate the planning and development of port terminals in the Bay. The *San Francisco Bay Area Seaport Plan* (Seaport Plan) constitutes the maritime element of the Metropolitan Transportation Commission's (MTC) *Regional Transportation Plan*, and is incorporated into the Bay Plan, where it forms the basis of that Plan's port policies. The *Seaport Plan* promotes the following goals related to the Project Area:

- Ensure continuation of the San Francisco Bay port system as a major world port and contributor to the economic vitality of the San Francisco Bay region.
- Provide for efficient use of finite physical and fiscal resources consumed in developing and operating marine terminals through 2020.
- Provide for integrated and improved surface transportation facilities between San Francisco Bay ports and terminals and other regional transportation system.

Priority Uses

The Bay Plan defines five special land use designations called "priority uses" that are appropriate to be located at specific limited shoreline sites. The priority use designations are ports, water-related industry, airports, wildlife refuges, and water-related recreation. If properties are designated a priority use area in the Bay Plan, then those properties are intended to be reserved

for that use. In this manner, BCDC exerts limited land use authority in priority use areas through the Bay Plan through its regulatory program.

Existing UPRR railroad tracks and adjacent properties, known as the UP Intermodal Facility, are located within the Project Area south of the I-880 Freeway. Consistent with the Seaport Plan goals, these facilities have been designated under the Bay Plan for Port Priority Use (see **Figure 4-2**), and have been identified as necessary for the efficient movement of cargo through the Port of Oakland.

4.3.2 City of Oakland General Plan

The City of Oakland General Plan provides the primary policy direction for land use and development within the Project Area. The General Plan is comprised of several elements, each providing policy direction regarding certain issues. The primary policies regarding development and redevelopment within the Project Area are included in the following components of the General Plan:

- Land Use and Transportation Element (LUTE*,* City of Oakland, March 1998),
- Open Space, Conservation and Recreation Element (City of Oakland, June 1996),
- Housing Element (City of Oakland, 1994, anticipated update 2003); and the
- Historic Preservation Element (City of Oakland, 1994 as amended 1998).

The general policy direction established for the Project Area is more fully described in Chapter 3: Project Description of this EIR. The following comprises an overview of the General Plan land use designations and their locations within the Project Area, as also shown on **Figure 4-3.**

Mixed Housing Type Residential

This classification allows for development of a mix of single family homes, townhouses, and small multi-unit buildings. It is intended to create, maintain and enhance residential areas typically located along major arterial roads. It applies to the central part of the Prescott/South Prescott subarea, as well as the eastern portion of the Clawson/McClymonds/Bunche subarea, in addition to almost all of the Hoover/West MacArthur subarea.

Urban Residential

This classification allows for multi-unit, mid-rise or high-rise residential structures in locations with good access to transportation and other services. It is intended to create, maintain and enhance areas of the City appropriate for these types of multi-unit residential structures, and applies to most of the San Pablo Corridor, MacArthur Boulevard, and around Martin Luther King Jr. Way in the Hoover/West MacArthur subarea. In addition, there is a small area designated Urban Residential in the southeast corner of the Prescott/South Prescott subarea near 7th Street and Mandela Parkway.

Figure 4-2

Neighborhood Center Mixed Use

This classification allows for commercial or mixed uses that are pedestrian-oriented and serve nearby neighborhoods. It applies in and around the West Oakland BART station in the Prescott/South Prescott subarea.

Community Commercial

This classification is intended to create, maintain and enhance areas suitable for a wide variety of larger-scaled commercial and institutional operations along major corridors and in shopping districts. This land use classification applies to 7th Street corridor in the Prescott/South Prescott Subarea, to West Grand Avenue corridor east of Chestnut in the Clawson/McClymonds/Bunche subarea, and to San Pablo Avenue corridor between 27th Street and Brockhurst in the Hoover/West MacArthur subarea.

Housing Business Mix

The Housing Business Mix classification allows mixed housing, live-work, low-impact light industry, commercial and service business uses. This land use classification applies to portions of the Clawson/McClymonds/Bunche subarea south of I-580 west of Adeline, east of Mandela Parkway, and north of 28th Street.

Business Mix

This classification is a flexible "economic development zone", which strives to accommodate older industries and anticipate new technologies, including light industrial, R&D, low-impact manufacturing, and commercial operations. It is intended to create, preserve and enhance areas of the City that are appropriate for a wide variety of businesses and related commercial and industrial establishments while buffering nearby residential districts from the heavier industrial uses. This land use classification applies to the southwest portion of the Clawson/McClymonds/ Bunche subarea, the northern section of the Prescott/South Prescott subarea, and portions of the Prescott/South Prescott subarea north of I-880 and south of 7th Street.

General Industrial/Transportation

This classification allows for a wide variety of uses including heavy industrial and manufacturing, transportation, rail yards, maritime terminals, distribution and warehousing, food processing, heavy impact research and development facilities, and other uses of similar or supporting character. It is intended to recognize, preserve and enhance areas of the City where businesses and related establishments may have the potential for offsite impacts such as noise, light/glare, truck traffic and odor. It applies to the southern end of the Prescott/South Prescott subarea below I-880.

Regional Commercial

This Classification is intended to maintain, support, and create areas of the City that serve as region-drawing centers of activity. It allows for a mix of commercial, office, entertainment, arts, recreation, sports, and visitor serving activities, residential, mixed use development and other uses of similar character or supportive of regional drawing power. It applies to the northwestern end of the Clawson/McClymonds/Bunche subarea between I-580 and the Emeryville city limits.

Figure 4-3

Figure 4-3 back

Institutional

This land use classification allows for educational, cultural, health, and medical uses in locations where they currently exist in the Project Area.

Urban Open Space

This land use classification applies to each of the urban parks and open spaces located throughout the Project Area, including schoolyards.

A summary of General Plan land use designations by Project subarea is shown in the following **Table 4-2**:

Table 4-2: Existing General Plan Land Use Designations in West Oakland Project Area by Subarea (acres)

Land Use Classification	Prescott/South Prescott	Clawson/McClymonds/Bunche	Hoover/West MacArthur	Total
Mixed Housing Type Res.	176	175	182	**533**
Urban Residential	21	14	115	**150**
Neighborhood Center Mixed Use	18	-	-	**18**
Community Commercial	7	33	9	**49**
Housing/Business Mix	-	42	-	**42**
Regional Commercial	-	142	-	**142**
Business Mix	88	235	-	**323**
General Industrial/Transportation	242	-	-	**242**
Institutional	8	13	-	**21**
Urban Open Space	22	4	-	**26**
Total	**582**	**658**	**306**	**1,546**

Source: City of Oakland

4.3.3 City of Oakland Zoning Ordinance

City General Plan policy directions are principally implemented through the City's zoning ordinance. The zoning ordinance translates the General Plan land use classifications and policy framework into a regulatory framework. The current zoning regulations in the Oakland Planning Code are found in the Oakland Municipal Code, Title 17.

The City of Oakland is in the process of a comprehensive revision of its planning and zoning regulations to make them consistent with the General Plan and to make them more streamlined

and tailored to reflect community needs. Changes in zoning and related regulations are anticipated in West Oakland. Existing zoning has been in place since the 1970's and generally reflects the historic development pattern.

4.3.4 Port of Oakland

The Port of Oakland is an agency of City government given the responsibility by the Oakland City Charter[2] to own, develop and manage lands within a specified Port jurisdiction. In its development role the Port acts as a landlord, offering sites to lease to the private development community and taking an active role in project development. The Port has the authority to undertake its own land use planning, project planning and project approval. It reviews and approves building projects on private property within its jurisdiction and undertakes its own environmental review and certification process. Figure 4-2 shows those portions of the Project Area under Port of Oakland jurisdiction (i.e., within the Port Area). Land use within the Port Area is not subject to City of Oakland zoning or development regulations, but the City Planning Director reviews new uses for consistency with the City General Plan, and makes a written determination.

4.4 Potential Impacts and Mitigation Measures

Significance Criteria

According to the CEQA Guidelines published by the State Office of Planning and Research and the City of Oakland's environmental review criteria, the Project would have a significant environmental impact if it would result in:

- The physical division of an established community
- A fundamental conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project, including but not limited to the General plan, specific plans, Local Coastal Program or zoning ordinance adopted for the purpose of avoiding or mitigating an environmental effect
- A conflict with any applicable habitat conservation plan or natural community conservation plan
- A fundamental conflict between adjacent or nearby land uses.

[2] Section 706(3) of the City of Oakland Charter vests in the Board of Port Commissioners "complete and exclusive power over all the waterfront properties and lands adjacent thereto or under water, structures thereon, and approaches thereto, storage facilities, and other utilities, and all rights and interests belonging thereto, which are now or may hereafter be owned or possessed by the City, including all salt or marsh or tidelands and structures thereon granted to the City in trust by the State of California for the promotion and accommodation of commerce and navigation."

The following discussion provides the information and analysis for concluding that none of the above thresholds would be met as a result of implementation of any of the programs, projects or other activities included in the Redevelopment Plan.

4.4.1: Division of an Established Community

Future redevelopment programs, projects or other activities within the Project Area would not result in the division of an established community. For the reasons discussed below, this is *not an environmental impact* of the Redevelopment Plan.

Discussion

The Redevelopment Plan is implementation programs, projects and other activities are to be consistent with, and assist in further implementation of specific improvement strategies identified in the LUTE. As more fully described in Chapter 3: Project Description, the improvement strategies as contained in the LUTE are intended to maintain and enhance established neighborhood areas, encourage business expansion, and resolve land use conflicts between businesses and residents. Open space strategies include providing additional parks and recreational space for use by Project Area residents. None of the improvement strategies identified in the LUTE, and as may be facilitated through implementation of the Redevelopment Plan's programs, projects or other activities would result in the development of new land uses that would divide established communities within the Project Area.

Benefits of Redevelopment

The Loma Prieta earthquake of 1989 destroyed a section of what was then the I-880 Cypress Freeway structure, along with portions of the surrounding West Oakland community. When the California Department of Transportation (CalTrans) announced that the freeway would be rebuilt, the local community voiced strong opposition and proposed that an alternative freeway route be selected to go around West Oakland neighborhoods. Ultimately, CalTrans developed a new route for I-880 that bypasses most of the residential districts (CalTrans 1997). What remains of the former Cypress Freeway right-of-way is now the Mandela Parkway, a boulevard of approximately 1.5 miles in length with a center median containing approximately 480,000 square feet of land area.

One of the key land use objectives for West Oakland as contained in the LUTE is the revitalization, beautification and redevelopment of, and along Mandela Parkway. Among the redevelopment strategies contemplated for this parkway is the *Mandela Parkway Corridor Plan* (WOCA 1999), a community-based plan that recommends use of the median as a multi-use pedestrian/bicycle path with open space areas, landscaping and benches. Implementation of the *Mandela Parkway Corridor Plan* or similar improvements may be facilitated through projects, programs or other implementation activities of the Redevelopment Plan. Such improvements would assist in re-connecting and re-establishing those neighborhoods that were formerly divided by the Cypress Freeway structure, and would be a beneficial effect of the Project.

4.4.2: Conflict Between Adjacent or Nearby Land Uses

The Redevelopment Plan programs, projects or other implementation activities could facilitate new development projects. These projects could assist in the transition of those portions of the Project Area designated as "Housing/Business Mix' and "Business Mix" into a land use pattern that provides for the compatible co-existence of low impact light industrial and other businesses, with residential development. For the reasons discussed below, this is a *less than significant* environmental impact of the Redevelopment Plan.

Discussion

As noted in the LUTE and its associated EIR, "as a result of historic zoning patterns, many blocks in West Oakland contain a mix of residential, industrial and commercial uses." This current mix of land uses results in portions of the Project Area containing land uses that are in conflict with adjacent or nearby uses. Examples of such existing land use incompatibilities include:

- housing units that are exposed to noise and air pollution associated with industrial-related traffic on adjacent roadways;
- nuisances such as odors and noise arising from existing commercial businesses operating in close proximity to residences;
- existing heavy industrial uses that are subject to complaints from neighboring uses regarding noise, dust, odor, visual quality, hours of operation, truck traffic, and various other industrial processes and operations;
- exposure of residences to on-going industrial activities; and
- manufacturing, wholesale and business uses that are located in close proximity to existing residential uses, exposing existing residents to incompatible land use.

These existing land use incompatibilities were identified in the LUTE EIR (pages III.A-24 through –27). That EIR concluded that such potential land use incompatibilities could be avoided in the future or reduced to less than significant through implementation of General Plan policies.

City General Plan Policies

The LUTE contains specific policies regarding compatibility of land uses that must be implemented throughout all of the City's neighborhoods, including those neighborhoods within the Project Area. A list of such applicable policies includes, but is not limited to the following:

Policy I/C4.1: Existing industrial, residential and commercial activities and areas which are consistent with long-term land use plans of the City should be protected from potentially incompatible uses.

Policy I/C4.2: The potential for new or existing industrial or commercial uses, including seaport and airport activities, to create nuisance impacts on surrounding residential areas should be minimized through efficient and appropriate implementation and monitoring of environmental and development controls.

Policy D10.7: Location and performance criteria should be developed for all live-work developments.

Policy W1.2: Land uses and impacts generated from such activities should be sensitive to one another and appropriate buffering should minimize the incompatibility of uses.

Policy W2.2: Appropriate buffering measures for heavy industrial uses and transportation uses on adjacent residential neighborhoods should be developed.

Policy W7.1: Outside the seaport and airport, land should be developed with a variety of uses that benefit from the close proximity to the seaport and airport and…which can buffer adjacent neighborhoods from impacts related to such activities.

Policy N1.5: Commercial development should be designed in a manner that is sensitive to surrounding uses.

Policy N2.7: Site Design, architecture, and operating practices of community facilities should be compatible with the area's desired character.

Policy N3.9: Residential units should be encouraged to orient their units to desirable sunlight and views, while avoiding unreasonably blocking sunlight and views for neighboring buildings, respecting the privacy needs of residents of the development and surrounding properties, providing for sufficient conveniently located on-site open space and avoiding undue noise exposure.

Policy N5.1: Residential areas should be buffered and reinforced from conflicting uses through the establishment of performance-based regulations, the removal of non-conforming uses, and other tools.

Policy N8.2: The height of development in Urban Residential and other higher density residential areas should step down as it nears lower density residential areas so that the interference between the two types of development are compatible.

Policy N12.6: Prior to submitting required permit applications, project sponsors of medium and large scale housing developments should be encouraged to meet with established neighborhood groups, adjacent neighbors, and other interested local community members, hear their concerns regarding the proposed project, and take those concerns into consideration.

General Plan Land Use Designations

In addition to these policies, the City General Plan designates substantial portions of the Project Area as either "Housing/Business Mix" or "Business Mix". These land use designations are specifically intended to address portions of the City where a complex mix of residences and businesses have evolved over time, and may require special attention to address potential land use incompatibilities. These land use designations which apply to portions of the Project Area as shown on Figure 4.3, are more fully described below.

- Housing/Business Mix. This land use classification recognizes the equal importance of both housing and business. This classification is intended to guide a transition from heavy industry to low impact light industrial and other businesses that can co-exist compatibly with residential development. Respect for environmental quality, coupled with opportunities for additional housing and neighborhood-friendly business is desired.

Also desired is a transition from industry that generated impacts that are detrimental to residences. Future business development within this classification should be compatible with housing, and development should recognize the mixed business nature of the area. Development of site-specific buffers are essential, as are specific conditions under which businesses and housing will co-exits. This classification allows a mix of housing densities, live-work housing, low-impact light industry, commercial and service businesses, and compatible community facilities.

- Business Mix. The Business Mix classification is a flexible "economic development zone" which strives to accommodate older industries and anticipate newer technologies, including both commercial and industrial operations. High impact industrial uses including those that have hazardous materials on-site, may be allowed provided that they are adequately buffered from residential areas.

Special City Zoning Overlay Requirements

In addition to these General Plan policies and land use designations, several special studies were fast-tracked by the City to respond to immediate land use compatibility needs, particularly in West Oakland. In October 2000 the Oakland City Council adopted interim zoning controls for West Oakland. This action was in response to ongoing concerns regarding land use compatibility in West Oakland and the impacts of truck activity in the area. The West Oakland overlay zones (S-4, S-15, and S-16) are now applied in combination with the existing underlying zoning. These overlay zones are shown on **Figure 4-4** and described below.

- S-4 Design Review Combining Zone.[3] The S-4 Design Review Combining Zone applies to areas of special community, historical, or visual significance and covers a substantial portion of the proposed Project Area on either side of Mandela Parkway. The S-4 zone is intended to create, preserve, and enhance the visual harmony and attractiveness of areas which require special treatment and the consideration of relationships between facilities, and is typically appropriate to areas of special community, historical, or visual significance. In the S-4 zone no building, sign, or other facility shall be constructed or established, or altered or painted a new color in such a manner as to affect exterior appearance, unless plans for such proposal shall have been approved pursuant to design review procedures.
- S-15 Transit-Oriented Development Zoning District.[4] The S-15 Transit-Oriented Development Zoning District overlays the blocks surrounding the West Oakland BART station, covering parts of the 7th Street commercial district north of Mandela Parkway, as well as the light manufacturing district on the south of Mandela Parkway. The S-15 District encourages concentrated development with pedestrian amenities near transit stations. The district allows a mix of medium density residential development, civic, commercial, and light industrial activities.

[3] Title 17.80.000 et.seq of the Oakland Zoning Code.

[4] Title 17.80.000 et.seq of the Oakland Zoning Code.

Figure 4-4

- S-16 Industrial-Residential Transition Combining Zone.[5] A new S-16 Industrial-Residential Transition Combining Zone was created to buffer residential uses from heavier industrial uses allowed under existing zoning. It also is designed to promote lighter industrial and commercial business activities in West Oakland. The district prohibits new or expanded industrial uses of the following types: transport and warehousing, scrap operation, general and heavy manufacturing, and small-scale and industrial transfer/storage of hazardous waste. It specifically prohibits any new or expanded truck or truck-related uses as well as business operations that have three or more trucks with a gross weight over 4.5 tons as an accessory use and that are close to residential areas. Existing non-conforming uses are allowed to remain, but cannot be expanded.

- Truck Regulation Ordinance.[6] This ordinance was passed to establish special regulations applying to truck-related activities in West Oakland. Under this ordinance, a conditional use permit is required for expansion of any truck or truck-related use. It is likely that this ordinance, in combination with the S-16 Combining District will limit industrial uses with truck-related activity in West Oakland in the future. The limits on the expansion of truck and truck-related activity refer to both building/facility expansion and expansion of truck activity from an existing facility (i.e. as increases in the number of truck trips without expansion of the building facilities).

City Zoning Ordinance

In addition to the special zoning overlay districts for West Oakland described above, the City of Oakland is undertaking an update to its zoning ordinance. One of the fundamental purposes of the updated zoning ordinance will be to provide land use regulations that are consistent with, and assist in implementation of General Plan policy, particularly those policies as contained in the Land Use and Transportation Element (LUTE). As recommended in the LUTE EIR, these new zoning ordinances are anticipated to provide land use regulations that provide for:

- Design requirements for large-scale commercial developments that ensure adequate buffers for residential uses. The uses of open spaces, recreation spaces, or transit facilities as buffers are recommended as tools in this effort.

- Distinct definitions for home occupation, live/work and work/live operations; the definition of appropriate locations for these activities; and the establishment of performance criteria for such uses.

- Guidelines that ensure that new commercial structures and sites are designed in an attractive manner, and that they harmonize with or enhance the visual appearance of the surrounding neighborhood.

[5] Title 17.101.000 of the Oakland Zoning Code

[6] Title 17.102.380 et.seq. of the Oakland Zoning Code

- Guidelines that provide performance-based standards that designate appropriate levels of noise, odor, light/glare, traffic volumes and other such characteristics for industrial activities located near commercial or residential areas.

Potential Benefits of Redevelopment

If adopted, the Redevelopment Plan would become an additional tool available to the City toward implementation of General Plan policies and objectives, together with new land use regulations as contained in the zoning update. Implementation of these General Plan policies and zoning ordinance provisions would avoid the potential for creating new land use incompatibilities within the Project Area.

Additionally, the Redevelopment Agency could assist in the relocation of illegal non-conforming industrial or commercial businesses from West Oakland residential neighborhoods. Such assistance may be in the form of financial incentives for such uses to move to more appropriate locations in the City or the Port area. As part of the Oakland Army Base Redevelopment Project, approximately 105 acres of land have been designated for Ancillary Maritime Support uses. The relocation of Port-related trucking and truck-dependent businesses from West Oakland to these sites within the former Oakland Army Base could be part of subsequent future implementation programs pursuant to the Redevelopment Plan.

Specific discussion regarding land use compatibility of existing and future land uses with projected noise levels, projected air quality emissions and hazardous substances are included in Chapters 6, 7 and 8 of this EIR, respectively.

4.4.3: Consistency with Land Use Policy

Redevelopment programs, projects or other implementation activities would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project Area adopted for the purpose of avoiding or mitigating an environmental effect. For the reasons discussed below, this is *not an environmental impact* of the Redevelopment Plan.

Discussion

Oakland General Plan

As noted in Chapter 3: Project Description of this EIR, the Redevelopment Plan does not contain specific proposals for redevelopment of individual sites, or identify particular actions the Redevelopment Agency will take with regard to specific redevelopment projects. Instead, the basis for future redevelopment activity within the Project Area will be to implement and conform to the City of Oakland General Plan. The General Plan's policy directions regarding development and redevelopment within the Project Area are included in the Land Use and Transportation Element (LUTE), the Historic Preservation Element, the Open Space, Conservation and Recreation Element and the Housing Element. These General Plan policy directions are then more fully implemented through existing or future specific plans and the City's zoning ordinance. Redevelopment implementation programs and projects are anticipated to include targeting investments and activities towards certain catalyst projects, infrastructure

improvement projects and infill development projects that are consistent with, and assist in the implementation of the General Plan.

Since all of the Redevelopment Plan's implementation programs, project and other activities are required to be consistent with the land use designations and planning policy of the City of Oakland General Plan, the potential for local policy inconsistency this is not considered to be an impact of the Project.

Port of Oakland, BCDC and MTC Bay and Seaport Plans

The Port of Oakland proposes to construct a New Intermodal Facility (NIF) to facilitate more efficient movement of cargo through the Port. This new facility is an integral part of the adjacent Oakland Army Base Area Redevelopment Project.[7] A portion of the planned NIF is located within the boundaries of the West Oakland Redevelopment Project Area, specifically on approximately 14 acres in the western section of the Prescott/South Prescott subarea (see previous Figure 4-2). This portion of the Project Area is designated under the City General Plan for General Industry/Transportation. The Port's planned use of this property for Port-related transportation use is consistent with the BCDC Port Priority Use designation under the Bay Plan.

Additionally, the existing UP Intermodal Facility located adjacent to the Port's planned NIF is also located within the Project Area (as also shown in previous Figure 4-2), and is anticipated to remain in operation, potentially in tandem with the Port's NIF. The UP Intermodal Facility is also designated for General Industry/Transportation under the City of Oakland General Plan. Continued use of the UP Intermodal Facility is consistent with the BCDC Port Priority Use designation under the Bay Plan, and is consistent with applicable regional planning policy.

4.4.4: Consistency with Habitat or Community Conservation Plans

The Redevelopment Plan's implementation programs, projects and other activities would not conflict with any applicable habitat conservation plan or natural community conservation plan. For the reasons discussed below, this is *not an environmental impact* of the Redevelopment Plan.

Discussion

The Redevelopment Plan is required to be consistent with the Oakland General Plan. The EIR for the General Plan found the General Plan to be consistent with all applicable conservation plans including the Federal and State Endangered Species Acts, wetland policies, California Department of Fish and Game policies, the San Francisco Bay Basin Plan, the Countywide Clean Water Program, BCDC policies and ABAG regional plans. Therefore, the Redevelopment Plan and its implementation programs, projects and other activities would also be consistent with these plans, policies and programs and not considered an environmental impact.

[7] All potential environmental impacts and mitigation measures pertaining to the Port's NIF have been fully documented in the City of Oakland-certified Oakland Army Base Area Redevelopment Plan EIR.

5

Transportation

5.1 Introduction

Transportation analysis provided in this chapter of the EIR includes:

- freeways;
- local roadways;
- transit;
- motor vehicle, bicycle, and pedestrian safety; and
- parking.

Significance thresholds for transportation systems would be reached if the Project would result in an increased traffic demand that cannot be met by existing or planned transportation infrastructure or if the Project conflicts with adopted policies supporting transportation alternatives to the single-occupant automobile.

5.2 Environmental Setting

5.2.1 Project Study Area

The Project Study Area includes freeways surrounding or leading to the Project Area. The freeways included are I-80, I-580, I-880, I-980, and State Route (SR) 24. Other potentially affected regional state routes include SR 123 (San Pablo Avenue). This regional roadway system is shown in **Figure 5-1**. The Study Area was selected to encompass areas within the regional transportation network that could be potentially affected by traffic generated by growth and development as projected for the Project Area. The Study Area also includes local access routes leading to and from the Project Area that are expected to serve as many as fifty peak hour trips generated by growth projected to occur within the Project Area, as more fully discussed below.

Figure 5-1

5.2.2 Regional Setting

Regional Highway System

I-80

I-80 is an eight- to ten-lane freeway serving San Francisco and the West Bay as well as East Bay destinations in West Contra Costa County, Sacramento, and points north and east. I-80 is connected to the redevelopment district by freeway ramps that terminate at the West Grand Avenue/I-880 Frontage Road intersection. I-80 east has recently been widened to provide High Occupancy Vehicle (HOV) lanes and improved ramp connections to I-580 and the Bay Bridge.

I-880

I-880 is an eight-lane freeway that serves West Alameda County, the South Bay and southern peninsula, and San Jose. I-880 connects to west I-80 at the Bay Bridge Toll Plaza. Interchange ramps connect I-880 to Maritime, 7th, Union, Adeline, and Market Streets. A connection to I-80 east is provided at the north end of a frontage road that extends from 7th Street to West Grand Avenue.

I-580

I-580 is an eight-lane freeway serving Northern Alameda County, Livermore, Stockton, Marin County north and I-5 south. Access to the Project Area is provided via interchanges at West MacArthur Boulevard and Market Street. The City of Oakland has placed a heavy truck (over 4.5 tons) restriction on I-580 between Grand Avenue and 106th Avenue.

I-980

I-980 is a six- to eight lane freeway that provides access to the Oakland downtown area. I-980 becomes State Route 24 (SR-24) at the northern end, providing access to Contra Costa County via the Caldecott Tunnel, and provides a direct connection between I-580 and I-880.

State Routes

SR 24 is an eight-lane freeway that connects the East Bay area with central and east Contra Costa County. SR 24 extends from I-980 to I-680 through the Caldecott tunnel.

SR 123 (San Pablo Avenue) is a four-lane arterial roadway that extends from West MacArthur Boulevard north to Cutting Boulevard in El Cerrito.

Freeway Conditions

The following discussion of regional freeway conditions was taken from the 2000 Level of Service Monitoring Report prepared by the Alameda County Congestion Management Agency (CMA 2000). The CMA monitors congestion on freeways in the region by measuring the average travel speed during the p.m. peak period (4:00 to 6:00 p.m.). Freeway traffic conditions are then described in terms of level of service (LOS), a standard measure for traffic operations

defined by the average number of seconds of delay per vehicle, with LOS A representing free-flow conditions and LOS F representing gridlocked conditions.

According to the CMA, traffic speeds of 49 miles per hour (mph) or higher on the freeway indicate LOS A through C. At LOS D, traffic operating conditions become unstable and speeds can drop as low as 41 mph. At LOS E, there are virtually no usable gaps in the traffic stream and speeds can drop as low as 30 mph. Below 30 mph, stop-and-go traffic operations often occur and the LOS is F.

As shown in **Table 5-1**, in 2000 during the p.m. peak hour, traffic congestion occurred on most routes leading away from the major employment centers. I-880 southbound is congested south of I-980. I-580 operates at LOS D or better within the Study Area. Eastbound SR 24 operates at LOS E from I-580 to the Caldecott Tunnel.

During the a.m. peak period (7:00 to 9:00 a.m.), bottlenecks occur on many of the freeways leading to the major employment centers. SR-24 is congested at its southbound connection to I-580. Congestion regularly occurs on westbound I-80 at the I-580 split and on the approach to the Bay Bridge toll plaza. On I-580, slowing occurs regularly in both directions between I-80 and I-980. I-980 is congested southbound from the 12th Street off-ramps to I-880.

Table 5-1: Freeway Operations In 2000

	A.M. Peak Hour [a]		P.M. Peak Hour	
Freeway Segment	**LOS**	**Speed (mph)**	**LOS**	**Speed (mph)**
I-80 at the Bay Bridge				
Eastbound	-	-	F	22.1
Westbound	F	4.7	F	26.3
I-80 East of I-80/I-580 Split				
Eastbound	-	-	E	37.0
Westbound	F	24	D	43.4
I-580 East of I-980/SR-24				
Eastbound	-	-	C	54.5
Westbound	-	-	C	53.9
I-580 West of I-980/SR-24				
Eastbound	-	-	A	64.0
Westbound	-	-	B	58.7
I-880 south of I-980				
Northbound	D	42.2	C	49.3
Southbound	-	-	E	40.3
I-980				
Northbound	-	-	C	52.1
Southbound	-	-	D	47.7
SR-24 East of I-580				
Eastbound	-	-	E	33.4
Westbound	-	-	B	57.2

Note: [a] Missing values (designated with a dash "-") were not reported in the source document from the Alameda County Congestion Management Agency.
Source: Alameda County Congestion Management Agency 2000 Level of Service Monitoring Report

5.2.3 Local Setting

This section describes the local transportation setting within the transportation Study Area.

The Local Roadway System

The Project Area is well served by an extensive local roadway system as shown on **Figure 5-2**. The circulation system for West Oakland is characterized by several four-lane arterial streets, many collector and local streets, transit services and rail lines. Most of the arterials provide on-street parking on both sides of the street, with prohibitions that allow for street cleaning. The following provides a general description of the local street network.

West Grand Avenue is an east/west arterial providing direct access to the downtown and San Francisco Bay Bridge. This four to six-lane facility has a median island and left-turn lanes.

14th Street runs east/west from West Oakland to the downtown area. It is a four-lane arterial from Mandela Parkway to I-980, with a landscaped median from Kirkham to Brush Street. West of Mandela Parkway, 14th Street is classified as a collector. Traffic signals and left-turn lanes are provided at major intersections.

7th Street is a four-lane east/west arterial which provides direct access to the West Oakland BART Station, the Port of Oakland, and the former Oakland Army Base. A substantial amount of traffic along 7th Street consists of truck traffic. 7th Street is designated as a local transit arterial.

3rd Street is a two-lane arterial from Mandela Parkway to Brush Street, and a two-lane collector elsewhere. Currently, 3rd Street is discontinuous at the Cypress Freeway. However, the freeway is being constructed to accommodate a connection at Mandela Parkway.

Mandela Parkway runs north/south from 3rd Street to just south of I-580 primarily as a four-lane arterial road, with a 60 to 100 feet wide median. Mandela Parkway is a two-lane roadway south of 8th Street and east of Horton Street. Parallel parking is provided on both sides of the roadway, and the intersections at major cross streets are signalized. Mandela Parkway is designated as a local transit arterial north of 7th Street.

Adeline Street runs north/south from Berkeley to 3rd Street near the Port of Oakland, where it becomes Middle Harbor Road. The segment within the West Oakland area is a four-lane arterial street with signals at major intersections. Between 7th Street and 3rd Street, Adeline serves as a major access road for the Port of Oakland.

Market Street is an arterial which runs north/south throughout West Oakland, Emeryville and later becomes Sacramento Street in Berkeley. Market Street is a six-lane road with left-turn lanes at major intersections, and a landscaped median throughout West Oakland.

San Pablo Avenue is a four-lane arterial roadway which begins in downtown Oakland and extends north to the Carquinez Bridge in Contra Costa County. Within West Oakland, San Pablo Avenue is designated as State Route 123 north of MacArthur Boulevard.

Figure 5.2

Martin Luther King, Jr., Boulevard is a north/south six-lane arterial road which extends from West Oakland into Berkeley.

Brush Street is a four to six-lane one-way arterial street which runs southbound west of I-980. Southbound off-ramps from I-980 are provided at 12th and 18th Streets.

Castro Street, a four to six lane one-way/northbound arterial, parallels Brush Street east of I-980. It provides northbound access to I-980 at 14th Street. An on-ramp to both I-980 and I-580 is located at 22nd Street.

Level of Service (LOS) Analysis

The efficiency of traffic operations at Study Area intersections was evaluated for existing and baseline conditions. Forty-eight intersections, identified as having the greatest potential for traffic impacts due to growth and development within the Project Area, were selected for study (also shown on Figure 5-2). LOS at Study Area intersections was analyzed for the a.m. and p.m. peak hours, using methodologies described in the Highway Capacity Manual (Transportation Research Board 1998).[1] The LOS for signalized and unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, and lost travel time.

Delay is a complex measure and is dependent upon a number of variables, including the number of vehicles in the traffic stream. For signalized intersections, delay is also dependent on the quality of signal progression, the signal cycle length, and the "green" ratio for each approach or lane group. For intersections with one or two stop signs, delay is dependent on the number of gaps available in the uncontrolled traffic stream.

All the studied intersections within the Study Area except five are controlled by traffic signals. The Hollis St / Mandela Extension intersection is controlled by stop signs facing the Mandela Parkway Extension. The Mandela Pkwy / 32nd Street intersection is controlled by stop signs at all approaches. The Peralta St / 26th Street intersection is controlled by stop signs facing 26th Street. The 3rd/Adeline Street intersection has a traffic signal that displays flashing red signal indications in all directions and functions as an all-way stop controlled intersection. The 3rd/Market Street intersection is controlled by stop signs facing Market Street traffic.

Existing a.m. and p.m. peak-hour traffic turning movement counts were collected at all of the Study Area intersections within the past three years. The intersection traffic volumes are contained in Appendix C.

Existing Conditions

The existing levels of service at Study Area intersections were determined for the a.m. and p.m. peak hours and are provided in **Table 5-2**. Detailed LOS calculation worksheets are available on

[1] This version of the Highway Capacity Manual was prepared in 1997 and is commonly referred to as the 1997 Highway Capacity Manual.

file with the City of Oakland. All intersections operate at or above the City of Oakland's LOS standard (LOS D outside of downtown and LOS E within downtown).

Table 5-2: Existing Intersection Operations

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay
1. Hollis St / 40th St	C	29	C	30
2. San Pablo Av / 40th St	D	51	C	33
3. Hollis St / Mandela Extension (TWSC)	A/B	2/13	A/C	5/18
4. San Pablo Av / Adeline	B	18	B	20
5. W. MacArthur Blvd / Market St	B	16	B	17
6. Market St / 36th St / I-580 Ramp	B	14	B	17
7. Market St / 35th St / I-580 Ramp	B	16	B	18
8. Market St / San Pablo Av	A	9	A	9
9. Hollis St / Peralta St	B	16	B	16
10. Mandela Pkwy / 32nd St (AWSC)	A	7	A	7
11. Peralta St / 26th St (TWSC)	A/B	1/11	A/B	2/15
12. Market St / 26th St	B	12	B	12
13. San Pablo Av / 27th St	B	16	B	15
14. 27th / SR 24-580 Off Ramp	B	12	B	16
15. 27th / SR 24-580 On Ramp	A	10	C	20
16. W Grand Av / Maritime St	C	34	C	30
17. W Grand Av / Frontage Rd	C	30	D	35
18. W Grand Av / Mandela Pkwy	A	10	B	11
19. W Grand Av / Adeline St	B	11	B	10
20. W Grand Av / Market St	A	10	B	11
21. W Grand Av / San Pablo Av	B	11	B	12
22. W. Grand Av / MLK Jr Way [a]	B	14	B	17
23. W. Grand Av / Northgate Av [a]	C	24	C	22
24. Brush St / 18th St [a]	B	12	B	18
25. Castro St / 18th St [a]	A	9	B	17
26. Brush St / 17th St [a]	A	10	B	14
27. Castro St / 17th St [a]	C	26	C	28
28. 14th St / Mandela Pkwy	A	9	A	8
29. Adeline St / 14th St	B	15	B	16
30. Market St / 14th St	B	15	B	15

Table 5-2: Existing Intersection Operations

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay
31. Brush St / 14th St [a]	B	15	B	15
32. Castro St / 14th St [a]	A	10	B	11
33. Brush St / 12th St [a]	F	82	B	19
34. Castro St / 12th St [a]	B	12	B	15
35. Brush St / 11th St [a]	A	7	A	9
36. Castro St / 11th St [a]	B	18	C	24
37. 7th St / I-880 SB Ramp	A	5	A	8
38. 7th St / I-880 North Ramp	C	29	C	31
39. 7th St / Peralta St	A	9	A	9
40. 7th St / Mandela Pkwy	B	15	B	17
41. 7th St / Union St	A	9	B	12
42. 7th St / Adeline St	B	11	A	10
43. 7th St / Market St	B	15	C	21
44. 5th St / Union St / I-880 Ramps	C	32	C	27
45. 5th St / Adeline St	C	30	C	29
46. I-880 Off Ramp / Market St	B	20	C	23
47. 3rd St / Adeline St (AWSC)	B	11	B	12
48. 3rd St / Market St (TWSC)	A/B	3/14	A/B	3/13

Source: Dowling Associates 2003

Notes: TWSC = Two-way stop control; AWSC = All-way stop control
For all intersections, the average LOS and average control delay in seconds are provided for all vehicles entering the intersection. For TWSC intersections, these values are followed by the LOS and delay in seconds for the movement with the highest control delay.
[a] Defined as a downtown intersection.

Pedestrian and Bicycle Facilities

The Project Area is located in a densely populated area where residents depend on walking and transit. There are numerous schools within the Project Area serving many students whose primary means of transportation is on foot. Pedestrian facilities (sidewalks and crosswalks) are commonplace within the Project Area. Sidewalks exist along most streets, and signalized crossings are provided at major intersection. Nevertheless, pedestrian travel in an area where motor vehicle traffic volumes are high can be challenging.

Bicycle facilities throughout the Project Area are limited. Class II bike lanes are provided along West Street from W. Grand Avenue to MacArthur Boulevard. The City of Oakland Bicycle Master Plan calls for Class II bike lanes along Mandela Parkway and 3rd Street, Peralta Street

north of Mandela Parkway, Market Street, W. Grand Avenue, 14th Street, and 7th Street. Few streets provide bike lanes or wide curb lanes for bicyclists. Diagonal streets, such as San Pablo Avenue and Peralta Street, create many offset and sharply angled intersections. At-grade railroad crossings create a safety concern for bicyclists.

Public Transit

Transit service in the Study Area is provided primarily by the Alameda-Contra Costa Transit District (AC Transit) and the Bay Area Rapid Transit (BART).

BART

The BART system provides the Project Area with direct links to San Francisco and the metropolitan areas of Contra Costa and Alameda counties. BART operates between 4:00 a.m. and 1:30 a.m. Monday through Friday; 6:00 a.m. to 1:30 a.m. on Saturdays; and 8:00 a.m. to 1:30 a.m. on Sundays and major holidays. Two BART stations are located in or near the Project Area. The West Oakland BART is located just south of 7th Street and west of Mandela Parkway. The MacArthur BART station is located just outside the northeast corner of the Project Area.

AC Transit

AC Transit provides bus service to residents and visitors along the east shore of the San Francisco Bay Area with an extensive network of local transit lines and trans-Bay service. Weekday service is provided on most routes about every 15 minutes during peak periods and 30 minutes other times from 5:30 a.m. to 7:00 p.m. Evening and weekend service is provided on a more limited schedule. More frequent service is provided along San Pablo Avenue, which is designated as a regional transit street. Transbay service for the Project Area is provided along I-880, I-580, W. MacArthur Boulevard, W. Grand Avenue, and Adeline Street.

5.3 Regulatory Setting

5.3.1 Federal

The Federal Highway Administration (FHWA) is the agency of the U.S. Department of Transportation (DOT) responsible for the federally funded roadway system, including the interstate highway network and portions of the primary state highway network. FHWA funding is provided through the Transportation Equity Act for the 21st Century (TEA-21). This act's legislation can be used to fund local transportation improvement projects, such as projects to improve the efficiency of existing roadways, traffic signal coordination, bikeways, and transit system upgrades.

5.3.2 State

The California Department of Transportation (Caltrans) is responsible for planning, design, construction, and maintenance of all state highways. Caltrans jurisdictional interest extends to improvements to roadways at the interchange ramps serving area freeways. Any federally funded

transportation improvements would be subject to review by Caltrans staff and the California Transportation Commission.

5.3.3 Local and Regional

The Metropolitan Transportation Commission

MTC is the regional organization responsible for prioritizing transportation projects in a Regional Transportation Improvement Program (RTIP) for federal and state funding. The process is based on evaluating each project for need, feasibility, and adherence to TEA-21 policies and the local Congestion Management Program (CMP). The CMP requires each jurisdiction to identify existing and future transportation facilities that would operate below an acceptable service level and provide mitigation where future growth would degrade that service level.

The Alameda County Congestion Management Agency

The Alameda County Congestion Management Agency (CMA) is responsible for ensuring local government conformance with the CMP: a seven-year program aimed at reducing traffic congestion. The CMA has review responsibility for proposed development actions expected to generate 100 or more p.m. peak-hour trips than otherwise would occur. The CMA reviews the adequacy of California Environmental Quality Act (CEQA) transportation impact analyses and measures proposed to mitigate significant impacts. The CMA maintains a Countywide Transportation Model, and has approval authority for the use of any local or subarea transportation models.

The City of Oakland

The City of Oakland has responsibility for constructing and maintaining non-state transportation facilities within and surrounding the Redevelopment Project Area.

5.4 Impacts and Mitigation Measures

Project Impact Analysis Methodology

The methodology for determining traffic impacts of projected growth and development within the Project Area is based on the analytical procedures described in the previous section. The analysis of traffic operations at intersections was performed using the 1997 Highway Capacity Manual methodologies. For freeways, the analysis was performed using the methodologies described in the 1984 Highway Capacity Manual, as required by the Alameda County CMA.

Trip Generation

As described in Chapter 3: Project Description, the growth projections for the Project Area as contained in the City General Plan include the following:[2]

- approximately 1,280 net new households,
- an increase in population of approximately 2,300 people, and
- approximately 2,310 net new employment opportunities.

Implementation of the Redevelopment Plan's projects, programs and other activities is anticipated to assist either directly or indirectly in achieving these population and employment growth projections. Although implementation of the Redevelopment Plan is not expected to provide direct assistance to all such new development activity, any number of individual projects that comprise this overall growth projection may receive direct or indirect benefits by virtue of their location within the Redevelopment Project Area. Therefore, as a conservative approach for analysis in this EIR, these projections of the aggregate growth and development projected to occur within the Project Area form the basis for the following traffic impact analysis.

The methodology for determining the number of trips that would be generated by the aggregate of all growth and development within the Project Area is based on use of the Alameda County Congestion Management Agency Countywide Transportation Model. The Countywide Model was used to forecast traffic conditions for the year 2025, both with and without the amount of growth and development projected for the Project Area. The difference between these two traffic forecasts represents traffic generated by growth and development within the Project Area. Based on the traffic model results, future growth and development as projected for the Project Area would generate the following motor vehicle traffic:

- 767 vehicles during the a.m. peak hour
- 985 vehicles during the p.m. peak hour

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[2] Including the Land Use and Transportation Element; the Open Space, Conservation and Recreation Element; and the Housing Element.

These traffic trips were then added to the existing traffic conditions within the Study Area through the use of the CMA traffic model to determine project-specific impacts.

This methodology does not identify the additional traffic trips that would be generated locally and stay local within specific traffic analysis zones (TAZs). These local, internal trips within a traffic zone were deemed to have no significant effect on the surrounding transportation system as measured in this analysis. However, because the TAZs within the Project Area are relatively small, the number of trips internal to any given TAZ would be similarly small and do not represent a substantial component of total trips. Therefore, the potential impact resulting from these trips is considered less than significant.

The number of trips generated by projected growth and development within the Project Area is lower than the traffic that would be anticipated from a comparable amount of growth and development in a non-urban infill area, such as in "greenfield" developments or in suburban locations. Traffic generated by non-urban infill or greenfield sites is typically determined based on application of Institute of Transportation Engineers (ITE) standard trip generation rates. If standard ITE trip rates were applied to the growth and development projected for the Project Area, the resulting trip generation would be about twice as high as identified above. However, this approach is not appropriate for determining traffic generated from within the Project Area for the following reasons:

- The growth and development projected to occur within the Project Area provides a balance of residential and commercial uses in an area where there is already dense development. This "smart growth" development pattern promotes opportunities for employment, shopping and other services in close proximity to housing, thereby reducing the number of vehicle trips and trip lengths.

- The projected growth in housing represents infill development opportunities and construction of new, more densely developed housing opportunities replacing existing blighted properties. The replacement of, and addition to the housing stock would occur in areas already served by transit and in close proximity to commercial services, thereby maximizing opportunities for walking, bicycle trips and transit.

- The net growth in employment opportunities represents infill commercial/industrial development, intensification of uses within existing commercial/industrial space, and construction of new employee-generating uses to replace existing blighted properties. These employment growth opportunities would not, in many cases, represent new uses so much as expansion of, or reuse of existing uses. Expansion or reuse of existing employment locations would not generate as much new traffic as development of new employment sites in locations where none exist today.

Trip Distribution

The Alameda Countywide Model determined the distribution of traffic generated by growth and development within the Project Area. Much of the trip distribution determined by the model recognizes the interrelationships between new housing opportunities in close proximity to new employment locations, and matches these trip generators (housing) with trip attractions

(employment). In other words, the traffic model assumes that many of the home-to-work, home-to-shopping, home-to-school and other types of trips generated from the Project Area would also be distributed to locations within the local Project Area.

Cumulative Impact Methodology

The same methods of analysis as described above were used for the analysis of transportation impacts associated with growth and development within the Project Area, in combination with other past projects, other current projects, and probable future projects.

Traffic forecasts were based on the 2001 version of the Alameda Countywide Model. The model provides forecasts of travel demand for the years 2005 and 2025 based on ABAG's *Projections 2000* socioeconomic forecasts. Two levels of analysis were performed for the analysis of cumulative traffic impacts using the Alameda Countywide Model. A Congestion Management Program (CMP) analysis was performed using the model with the ABAG land uses for 2005 and 2025. A summary of the CMP analysis is provided in Appendix D.

A more detailed analysis was conducted for the purposes of assessing cumulative environmental impacts to the transportation system and the extent to which growth and development within the Project Area would contribute to cumulative impacts. In the environmental analysis, a cumulative growth approach was developed for the City, using a forecast-based approach. This approach is based on regional forecasts of economic activity and demographic trends. The updated cumulative growth scenario for the City considered recent and anticipated future development projects in Oakland, as well as other changes in employment and population. Development projects and other changes in Oakland were identified based on input from City of Oakland and Port of Oakland staffs, and analysis of economic and real estate market data and trends. Future development projects were identified to include approved, proposed, and potential development projects that are expected by the year 2020, including all growth and development projected for the Project Area.

The 2020 employment and population data developed by the methods described above were compared against 2025 employment and population in the ABAG land use data set, and the former exceeded the latter within the City. The ABAG land use data for the City of Oakland were replaced in the ABAG 2025 land use data set and were used as the basis for the analysis of cumulative conditions for the year 2025.

The Alameda Countywide Model was used with the land use data developed for the City to determine the traffic volumes that would be present with redevelopment in combination with past projects, other current projects, and probable future projects. Because the land use intensity assumed for this environmental impact analysis was greater than the ABAG land use data used in the CMP analysis, the environmental impact analysis yielded more conservative results – an assessment of greater cumulative impacts – than the CMP analysis.

Significance Criteria

Redevelopment would have a significant effect on the environment if it would:

- Cause an increase in traffic which is substantial in relation to the existing or future baseline traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections), or change the condition of an existing street (i.e., street closures, changing direction of travel) in a manner that would substantially impact access or traffic load and capacity of the street system. Specifically, this potential impact is further defined as being significant if the Project would:

  – Cause the existing or future baseline level of service (LOS)[3] to degrade to worse than LOS D (i.e., E) at a signalized intersection which is located outside the Downtown[4] area;

  – Cause the existing or future baseline LOS to degrade to worse than LOS E (i.e., F) at a signalized intersection which is located within the Downtown area;

  – Cause the total intersection average vehicle delay to increase by four (4) or more seconds, or degrade to worse than LOS E (i.e., F) at a signalized intersection outside the Downtown area where the existing or future baseline level of service is LOS E;

  – Cause an increase in the average delay for any of the critical movements of six (6) seconds or more, or degrade to worse than LOS E (i.e., F) at a signalized intersection for all areas where the existing or future baseline level of service is LOS E;

  – At a signalized intersection for all areas where the existing or future baseline level of service is LOS F, cause:

    (a) the total intersection average vehicle delay to increase by two (2) or more seconds,

    (b) an increase in average delay for any of the critical movements of four (4) seconds or more, or

    (c) the volume-to-capacity ("V/C") ratio exceeds three (3) percent (but only if the delay values cannot be measured accurately);

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[3] LOS and delay are based on the "1997" *Highway Capacity Manual*, Transportation Research Board, National Research Council, 1998.

[4] Downtown is defined in the Land Use Transportation Element of the General Plan (page 67) as the area generally bounded by West Grand Avenue to the north, Lake Merritt and Channel Park to the east, the Oakland Estuary to the south and I-980/Brush Street to the west.

  - Add ten (10) or more vehicles and after project completion satisfy the Caltrans peak hour volume warrant at an unsignalized intersection for all areas;

  - Make a considerable contribution to cumulative impacts (a project's contribution to cumulative impacts is considered "considerable" when redevelopment contributes five (5) percent or more of the cumulative traffic increase as measured by the difference between existing and cumulative [with project] conditions).

- Cause a roadway segment on the Metropolitan Transportation System to operate at LOS F or increase the V/C ratio by more than three (3) percent for a roadway segment that would operate at LOS F without redevelopment[5];

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

- Substantially increase traffic hazards to motor vehicles, bicycles, or pedestrians due to a design feature (e.g., sharp curves or dangerous intersections) that does not comply with Caltrans design standards or incompatible uses (e.g., farm equipment);

- Result in less than two emergency access routes for streets exceeding 1,000 feet in length;

- Result in inadequate parking capacity – specifically, result in a parking demand (both project-generated and project-displaced) that would not be met by the project's proposed parking supply or by the existing parking supply within a reasonable walking distance of the project site. Project-displaced parking results from the project's removal of standard on-street parking and legally required off-street parking (non-public parking which is legally required);

- Fundamentally conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks);

- Generate added transit ridership that would:

  - Increase the average ridership on AC Transit lines by three (3) percent where the average load factor with the project in place would exceed 125 percent over a peak thirty minute period;

  - Increase the peak hour average ridership on BART by three (3) percent where the passenger volume would exceed the standing capacity of BART trains;

  - Increase the peak hour average ridership at a BART station by three (3) percent where average waiting time at fare gates would exceed one minute; or

[5] LOS and delay are based on the *Highway Capacity Manual*, Transportation Research Board, National Research Council, 1985, as required by the Alameda County CMA.

- Cause unreasonable delays to commercial vessels plying their trade.

Not all criteria listed above apply to the proposed Project. The Project would not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; it would not result in the creation of less than two emergency access routes for streets exceeding 1,000 feet in length; nor would it cause unreasonable delays to commercial vessels plying their trade.

5.4.1: Addition of Traffic to Regional Roadways

Redevelopment would add traffic to roadway segments on the Metropolitan Transportation System. However, the amount of traffic added would be small, and is considered to be *less than significant*.

The Project, in combination with past projects, other current projects, and probable future projects, would cause some roadway segments on the Metropolitan Transportation System (MTS) to operate at LOS F. This cumulative condition would increase the V/C ratio by more than three percent on segments that would operate at LOS F without cumulative development. Although this is considered to be a significant cumulative effect, the Project's contribution to this effect is *less than cumulatively considerable*.

Discussion

Project-Specific Effects on Freeway Segments

New growth and development within the Project Area would add traffic to roadway segments on the MTS. This traffic would not cause any freeway segments on the MTS to operate at LOS F, or increase the V/C ratio by more than three (3) percent for segments that would operate at LOS F without traffic generated from within the Project Area. Therefore, the impact of the Project on Study Area freeways is considered to be less than significant.

Cumulative Effects on Freeway Segments

New growth and development within the Project Area, in combination with past projects, other current projects, and probable future projects, would cause some roadway segments on the MTS to operate at LOS F, and would increase the V/C ratio by more than three percent on segments that would operate at LOS F without cumulative development. This would be a significant cumulative impact. A summary of freeway operations for cumulative conditions is provided in **Table 5-3**.

Table 5-3: Freeway Operations for Cumulative Conditions

Freeway Segment	Existing Conditions				Cumulative Conditions			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
I-80 at the Bay Bridge								
Eastbound	B	0.482	F	1.138	D	0.896	***F***	***1.345***
Westbound	F	1.098	D	0.895	***F***	***1.299***	***F***	***1.256***
I-80 East of I-80/I-580 Split								
Eastbound	C	0.720	F	1.008	E	0.933	***F***	***1.107***
Westbound	E	0.945	D	0.842	***F***	***1.078***	E	0.995
I-580 East of I-980/SH-24								
Eastbound	D	0.802	F	1.116	C	0.599	***F***	***1.300***
Westbound	E	0.981	D	0.877	***F***	***1.160***	D	0.806
I-580 West of I-980/SH-24								
Eastbound	D	0.847	F	1.178	C	0.743	F	1.064
Westbound	F	1.035	D	0.926	F	1.017	D	0.859
I-880 North of Union Street								
Northbound	D	0.806	C	0.661	D	0.821	D	0.777
Southbound	B	0.362	D	0.841	B	0.422	D	0.848
I-880 North of I-980								
Northbound	C	0.735	C	0.603	E	0.947	D	0.791
Southbound	A	0.330	C	0.768	B	0.486	D	0.859
I-880 - south of I-980								
Southeast	D	0.790	C	0.747	C	0.602	D	0.888
Northwest	C	0.730	D	0.809	E	0.949	D	0.795
I-980 North of 14th St.								
Eastbound	A	0.323	C	0.638	B	0.377	C	0.739
Westbound	C	0.627	A	0.334	C	0.727	B	0.387
SR 24 East of I-580								
Eastbound	B	0.391	F	1.020	C	0.560	***F***	***1.066***
Westbound	F	1.058	B	0.458	F	1.073	C	0.619

Source: Dowling Associates 2003
Significant cumulative impacts (i.e., the Project in combination with past projects, other current projects, and probable future projects) are shown in ***Bold Italics***.

Significant cumulative impacts would occur on the following freeway sections:

- I-80 at the Bay Bridge
- I-80 East of I-80/I-580 Split
- I-580 East of I-980/SH-24
- SR 24 East of I-580

New growth and development within the Project Area would add traffic to roadway segments on the MTS. Traffic from the Project Area alone would not cause any freeway segments on the MTS to operate at LOS F, or increase the V/C ratio by more than three (3) percent for segments that would operate at LOS F under the cumulative base case condition. The contribution of traffic from growth and development within the Project Area to the cumulative traffic levels on all freeway segments would *not be cumulatively considerable*, and the incremental effect of the Project on cumulative regional roadway congestion is considered *less than significant*.

5.4.2: Effects on Study Area Intersections

New growth and development within the Project Area would add traffic to Study Area intersections. However, the amount of traffic added would not result in a significant impact at any signalized intersections within the Study Area. This impact is considered to be *less than significant*.

Cumulative Impact 5.4.2: Traffic generated by new growth and development within the Project Area, in combination with traffic from past projects, other current projects, and probable future projects, would cause some signalized intersections to operate at unacceptable levels of service. Traffic generated from within the Project Area would contribute to certain intersections described below as having a significant cumulative impact, and the contribution of Project Area traffic would be considered a *cumulatively considerable contribution* to the cumulative effects at the intersection of San Pablo Avenue/40th Street in Emeryville.

Discussion

Project-Specific Effects on Local Roadways/Intersections

The impacts of projected growth and development within the Project Area, as may be facilitated or assisted by implementation of the Redevelopment Plan, on non-freeway roadways of the MTS were assessed by evaluating traffic operations at intersections where congestion is most likely to occur. The impact of Project Area traffic on Study Area intersections is summarized in **Table 5-4**.

Table 5-4: Intersections Operations, Existing plus Project

Intersection	Existing Conditions				Existing + Project			
	A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Hollis St / 40th St	C	29	C	30	C	29	C	31
San Pablo Av / 40th St	D	51	C	33	D	54	C	33
Hollis St / Mandela Extension (TWSC) [a]	A/B	2/13	A/C	5/18	A/B	2/13	A/C	5/19
San Pablo Av / Adeline	C	24	C	27	C	23	D	40
W. MacArthur Blvd / Market St	B	16	B	17	B	16	B	18
Market St / 36th St / I-580 Ramp	B	14	B	17	B	15	B	17
Market St / 35th St / I-580 Ramp	B	16	B	18	B	15	B	18
Market St / San Pablo Av	A	9	A	9	A	9	A	9
Hollis St / Peralta St	B	16	B	16	B	15	B	15
Mandela Pkwy / 32nd St (AWSC) [a]	A	7	A	7	A	8	A	8
Peralta St / 26th St (TWSC) [a]	A/B	1/11	A/B	2/15	A/B	2/13	A/C	3/17
Market St / 26th St	B	12	B	12	B	15	B	15
San Pablo Av / 27th St	B	16	B	15	B	14	B	18
27th / SR 24-580 Off Ramp	B	12	B	16	B	13	B	16
27th / SR 24-580 On Ramp	A	10	C	20	A	10	C	21
W Grand Av / Maritime St	C	34	C	30	C	34	C	30
W Grand Av / Frontage Rd	C	30	D	35	C	32	D	36
W Grand Av / Mandela Pkwy	A	10	B	11	B	10	B	11
W Grand Av / Adeline St	B	11	B	10	B	11	B	11
W Grand Av / Market St	A	10	B	11	A	10	B	11
W Grand Av / San Pablo Av	B	11	B	12	B	12	B	12
W. Grand Av / MLK Jr Way [b]	B	14	B	17	B	14	B	17
W. Grand Av / Northgate Av [b]	C	24	C	22	C	24	C	22
Brush St / 18th St [b]	B	12	B	18	B	12	B	18
Castro St / 18th St [b]	A	9	B	17	A	9	B	17
Brush St / 17th St [b]	A	10	B	14	B	10	B	15
Castro St / 17th St [b]	C	26	C	28	C	26	C	29
14th St / Mandela Pkwy	A	9	A	8	A	9	A	9
Adeline St / 14th St	B	15	B	16	B	15	B	16
Market St / 14th St	B	15	B	15	B	15	B	16
Brush St / 14th St [b]	B	15	B	15	B	16	B	15

Table 5-4: Intersections Operations, Existing plus Project

Intersection	Existing Conditions				Existing + Project			
	A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Castro St / 14th St [b]	A	10	B	11	B	10	B	12
Brush St / 12th St [b]	F	82	B	19	F	81	B	19
Castro St / 12th St [b]	B	12	B	15	B	12	B	15
Brush St / 11th St [b]	A	7	A	9	A	7	A	9
Castro St / 11th St [b]	B	18	C	24	B	18	C	24
7th St / I-880 SB Ramp	A	5	A	8	A	5	A	8
7th St / I-880 North Ramp	C	29	C	31	C	29	C	31
7th St / Peralta St	A	9	A	9	B	12	A	9
7th St / Mandela Pkwy	B	15	B	17	B	19	C	21
7th St / Union St	A	9	B	12	A	8	B	11
7th St / Adeline St	B	11	A	10	B	11	B	10
7th St / Market St	B	15	C	21	C	21	C	21
5th St / Union St / I-880 Ramps	C	32	C	27	C	32	C	27
5th St / Adeline St	C	30	C	29	C	31	C	29
I-880 Off Ramp / Market St	B	20	C	23	C	20	C	22
3rd St / Adeline St (AWSC) [a]	B	11	B	12	B	11	B	12
3rd St / Market St (TWSC) [a]	A/B	3/14	A/B	3/13	A/B	4/14	A/B	4/14

Source: Dowling Associates 2003

Notes: Significant impacts associated with growth and development within the Project Area are shown in ***Bold Italics.***
TWSC = Two-way stop control; AWSC = All-way stop control
For all intersections, the average LOS and average control delay in seconds are provided for all vehicles entering the intersection. For TWSC intersections, these values are followed by the LOS and delay in seconds for the movement with the highest control delay.
[a] Significant impacts at unsignalized intersections are based on signal warrants – not average control delay.
[b] Defined as a downtown intersection.

As shown in Table 5-4, no intersections are shown to exceed acceptable levels of service or exceed identified thresholds of significance under the Existing plus Project condition.

Cumulative Effects on Local Roadways/Intersections

The impacts of growth and development within the Project Area on non-freeway roadways, in combination with past projects, other current projects, and probable future projects, were assessed using the methods described above. The cumulative impacts on Study Area intersections are summarized in **Table 5-5**.

Table 5-5: Intersections Operations for Cumulative Conditions

Intersection	Cumulative Basecase - Without Project				Cumulative, with Project			
	A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Hollis St / 40th St	C	29	C	31	C	29	C	31
San Pablo Av / 40th St	F	107	D	52	***F***	***111***	***E***	***57***
Hollis St / Mandela Extension (TWSC) [a]	A/C	3/15	A/D	6/31	A/C	3/16	A/E	6/36
San Pablo Av / Adeline	C	31	D	30	C	31	D	55
W. MacArthur Blvd / Market St	B	16	B	19	B	17	C	20
Market St / 36th St / I-580 Ramp	B	15	B	17	B	15	B	17
Market St / 35th St / I-580 Ramp	B	16	B	18	B	16	B	18
Market St / San Pablo Av	A	8	A	9	A	8	A	9
Hollis St / Peralta St	B	15	B	17	B	14	B	17
Mandela Pkwy / 32nd St (AWSC) [a]	A/B	8/11	A/C	9/24	A/C	8/15	A/C	9/28
Peralta St / 26th St (TWSC) [a]	B	2	C	3	B	3	D	4
Market St / 26th St	B	14	B	15	B	16	B	16
San Pablo Av / 27th St	A	8	D	37	C	23	D	51
27th / SR 24-580 Off Ramp	B	14	B	16	B	15	B	17
27th / SR 24-580 On Ramp	B	11	C	23	B	12	C	27
W Grand Av / Maritime St	F	255	F	253	F	253	***F***	***260***
W Grand Av / Frontage Rd	F	87	F	160	***F***	***91***	***F***	***161***
W Grand Av / Mandela Pkwy	B	15	B	19	C	28	C	30
W Grand Av / Adeline St	B	15	B	16	B	16	B	17
W Grand Av / Market St	B	11	B	11	B	11	B	11
W Grand Av / San Pablo Av	B	13	B	13	B	13	B	14
W. Grand Av / MLK Jr Way [b]	B	15	B	17	B	15	B	17
W. Grand Av / Northgate Av [b]	C	25	C	25	C	25	C	26
Brush St / 18th St [b]	B	13	B	18	B	13	B	18
Castro St / 18th St [b]	B	15	B	19	B	15	B	19
Brush St / 17th St [b]	B	11	B	15	B	12	B	16
Castro St / 17th St [b]	C	26	C	31	C	26	C	32
14th St / Mandela Pkwy	A	9	A	8	A	9	A	9
Adeline St / 14th St	B	15	B	16	B	16	B	16
Market St / 14th St	B	15	B	15	B	15	B	15
Brush St / 14th St [b]	B	17	B	15	B	17	B	15
Castro St / 14th St [b]	B	11	B	12	B	11	B	12

Table 5-5: Intersections Operations for Cumulative Conditions

Intersection	Cumulative Basecase - Without Project				Cumulative, with Project			
	A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Brush St / 12th St [b]	F	137	C	22	F	136	C	22
Castro St / 12th St [b]	B	12	B	16	B	13	B	17
Brush St / 11th St [b]	A	8	A	9	A	8	A	10
Castro St / 11th St [b]	B	19	C	26	B	19	C	26
7th St / I-880 SB Ramp	A	4	B	11	A	4	B	11
7th St / I-880 North Ramp	F	83	D	40	F	83	D	41
7th St / Peralta St	A	9	A	8	B	12	A	8
7th St / Mandela Pkwy	B	14	B	15	B	18	C	21
7th St / Union St	A	8	B	12	A	8	B	12
7th St / Adeline St	B	12	B	10	B	12	B	11
7th St / Market St	C	23	C	22	C	32	C	23
5th St / Union St / I-880 Ramps	C	32	C	30	C	32	C	31
5th St / Adeline St	D	54	C	35	D	54	C	35
I-880 Off Ramp / Market St	C	22	C	20	C	22	C	20
3rd St / Adeline St (AWSC) [a]	E	42	C	22	E	42	C	22
3rd St / Market St (TWSC) [a]	B/E	13/46	F/F	56/207	B/F	14/51	***F/F***	***63/234***

Source: Dowling Associates 2003

Notes: Significant impacts associated with growth and development within the Project Area are shown in ***Bold Italics.***
TWSC = Two-way stop control; AWSC = All-way stop control
For all intersections, the average LOS and average control delay in seconds are provided for all vehicles entering the intersection. For TWSC intersections, these values are followed by the LOS and delay in seconds for the movement with the highest control delay.
[a] Significant impacts at unsignalized intersections are based on signal warrants – not average control delay.
[b] Defined as a downtown intersection.

As indicated in Table 5-5, the Project, in combination with past projects, other current projects, and probable future projects, would:

- cause the level of service to degrade to worse than LOS D at signalized intersections located outside the Downtown area,
- cause an increase in the average delay for a critical movement of six (6) seconds or more, at a signalized intersection where the existing or future baseline level of service is LOS E,
- cause total intersection average vehicle delay to increase by more than two seconds at a signalized intersection where the future baseline level of service would be LOS F, and

- cause an increase in average delay for a critical movement of four (4) seconds or more at a signalized intersection where the future baseline level of service would be LOS F.

One non-signalized intersection is shown to exceed identified thresholds of significance under the cumulative condition. Non-signalized intersections are more fully discussed below under Section 5.4.3.

The contribution of cumulative traffic to the intersections listed above in Table 5-5 would result in cumulatively significant impacts. The incremental effect associated with implementation of the Redevelopment Plan in assisting or facilitating growth and development within the Project Area would have a cumulatively considerable contribution to some of the cumulative impacts. The specific impact associated with growth and development within the Project Area at signalized intersections within the Study Area is at the following location:

- San Pablo Avenue & 40th Street, where the intersection would operate at LOS F under the cumulative basecase condition, and traffic generated from within the Project Area would increase the total intersection average delay by 4 seconds during the a.m. peak hour; and where traffic generated from within the Project Area would cause the level of service to degrade from LOS D to LOS E during the p.m. peak hour.

The Project, in combination with past projects, other current projects, and probable future projects, would result in cumulatively significant impacts at two other signalized intersections. However, the Project's contribution of traffic to these intersections is *less than cumulatively considerable*. The signalized intersections where cumulatively significant impacts would occur, but where the Project's contribution is less than cumulatively considerable, include:

- W. Grand Avenue & Maritime Street, where the intersection would operate at LOS F under the cumulative basecase condition, and traffic generated from within the Project Area would increase the total intersection average delay by 7 seconds during the p.m. peak hour. The Project would contribute less than two (2) percent of the cumulative traffic increase as measured by the difference between existing and cumulative (with project) conditions.

- W. Grand Avenue & Frontage Road along I-880, where the intersection would operate at LOS F under the cumulative basecase condition, and traffic generated from within the Project Area would cause an increase in average delay of four (4) seconds or more for critical movements at the intersection. The Project would contribute less than five (5) percent of the cumulative traffic increase as measured by the difference between existing and cumulative (with Project) conditions.

Mitigation Measures

No feasible mitigation measures are identified for the San Pablo Avenue & 40th Street intersection. Mitigation measures were investigated that could reduce cumulative impacts to a level that is less than significant. These measures include:

- Widening of 40th Street on the northerly side, re-designating the bike lane to a Class III facility and re-striping the eastbound lanes to provide a right turn lane onto southbound San Pablo Avenue, and

- modifying the traffic signal to provide split signal phasing for San Pablo Avenue traffic movements, and increasing the signal cycle length to 110 seconds.

These improvements would mitigate this cumulative impact. However, the widening of 40th Street would require the acquisition of substantial property along the street, potentially resulting in the need to acquire existing businesses. The secondary impacts of major street widening are considered to render that option infeasible. Additionally, because this intersection is located within the City of Emeryville, the City of Oakland does not have the authority to implement these mitigation measures.

Resulting Level of Significance

No feasible mitigation measures have been identified that would reduce cumulative impacts at the San Pablo Avenue and 40th Street intersection to a level that is less than significant. Therefore, residual cumulative impacts at that intersection would be significant and unavoidable, and the Project's contribution of traffic to this intersection would be *cumulative considerable and unavoidable*.

The *Oakland Army Base Area Redevelopment Plan Draft EIR* (City of Oakland 2002) identified applicable mitigation measures for the West Grand Avenue/Maritime Street and West Grand Avenue/Frontage Road intersection along I-880 intersections. The effects of these mitigation measures are shown in **Table 5-6**. Since the incremental effect associated with traffic generated by growth and development within the Project Area would have a less than cumulatively considerable contribution to these intersections, the mitigation improvements identified in this previous EIR would not be applicable to projects within the Redevelopment Plan.

Table 5-6: Intersections Operations for Cumulative and Mitigated Conditions

Intersection	Without Mitigation				With Mitigation			
	A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
San Pablo Av / 40th St	***F***	***111***	***E***	***57***	***F***	***111***	***E***	***57***
W Grand Av / Maritime St	F	253	***F***	***260***	D	42	***F***	***89***
W Grand Av / Frontage Rd	***F***	***91***	***F***	***161***	D	48	D	53
3rd St / Market St (AWSC mitigated)	B/F	14/51	***F/F***	***63/234***	B	9	C	18

Source: Dowling Associates 2003

Notes: Significant impacts associated with growth and development within the Project Area are shown in ***Bold Italics.***
TWSC = Two-way stop control; AWSC = All-way stop control
For all intersections, the average LOS and average control delay in seconds are provided for all vehicles entering the intersection. For TWSC intersections, these values are followed by the LOS and delay in seconds for the movement with the highest control delay.

5.4.3: Addition of Traffic to Unsignalized Intersections

New growth and development within the Project Area would add traffic to Study Area intersections. However, the amount of traffic added would be small, and would not result in a significant impact at any unsignalized intersections within the Study Area. This impact is considered to be *less than significant*.

Cumulative Impact 5.4.3: Traffic generated by new growth and development within the Project Area, in combination with traffic from past projects, other current projects, and probable future projects, would cause the intersection at 3rd and Market Streets to operate at unacceptable levels of service. At this intersection, Caltrans' peak hour volume traffic signal warrants would be satisfied. Growth and development within the Project Area, as may be assisted by implementation of the Redevelopment Plan, would add more than ten vehicles to this intersection. This contribution of traffic would be a *cumulatively considerable contribution* to this cumulatively significant traffic impact.

Discussion

Cumulative Effects

New growth and development within the Project Area would add more than ten vehicles to the 3rd Street & Market Street intersection where the Caltrans peak hour volume traffic signal warrants would be satisfied. The contribution of traffic from the Project Area to impacts at the 3rd Street & Market Street intersection would be cumulatively considerable and the incremental effect of the Project is considered significant.

Cumulative traffic conditions at the 3rd Street & Adeline Street intersection would satisfy the Caltrans peak hour volume traffic signal warrant; however, new growth and development within the Project Area would add fewer than ten vehicles to the intersection. The contribution of traffic from the Project Area to impacts at the 3rd Street & Adeline Street intersection would not be cumulatively considerable and the incremental effect of the Project is considered less than significant.

Mitigation Measures

The following mitigation measure is recommended to address the contribution of traffic resulting from implementation of the Redevelopment Plans' projects, programs and other activities toward cumulative traffic impacts:

- **Mitigation Measure 5.4.2: Convert the two-way-stop-control to all-way-stop-control at the 3rd Street & Market Street intersection.** Individual development projects pursuant to implementation of the Redevelopment Plan's programs or other activities within the Project Area shall fund a pro-rata fair share of the cost to convert the two-way-stop-control intersection to all-way-stop-control at the 3rd Street & Market Street intersection. Alternatively, at the Redevelopment Agency's sole discretion, redevelopment funds

could potentially be used to subsidize these fair-share funding contributions or to implement this improvement.

Resulting Level of Significance

Converting the two-way-stop-control to all-way-stop-control at the 3rd Street & Market Street intersection would mitigate the impact to a level of *less than significant*. The intersection would operate at LOS C or better during the a.m. and p.m. peak hours after converting the two-way-stop-control to all-way-stop-control.

An alternative improvement at this intersection would be the installation of a traffic signal, which would also fully mitigate cumulative traffic impacts at this intersection. However, according to the Caltrans Traffic Manual, a signal should not be installed if lesser measures will provide acceptable traffic operations.

Coordination of Improvements with the Oakland Army Base Area Redevelopment Project

The Oakland Army Base (OARB) Area Redevelopment Project, an area of approximately 1,800 acres in West Oakland, included a required mitigation for the 3rd Street / Market Street intersection. That improvement included installation of an all-way stop control and revising the westbound 3rd Street lanes to provide one combined through-left turn lane and one right-turn lane. This mitigation measure from the Oakland Army Base Redevelopment Project EIR is the same measure as recommended above. Prior to implementation of this mitigation measure, the City should coordinate mitigation responsibilities for this improvement among all contributing parties.

5.4.4 Increase in AC Transit Ridership

New growth and development within the Project Area would increase average ridership on AC Transit by approximately 0.5 percent, which is considered a *less than significant* increase.

Cumulative Impact 5.4.4: New growth and development within the Project Area, in combination with past projects, other current projects, and probable future projects, would be likely to increase average ridership on AC Transit by more than 3 percent. This is a significant cumulative effect. It is possible that the contribution of AC Transit riders from within the Project Area to cumulative ridership on AC Transit would be *cumulatively considerable.*

Discussion

Project Specific Impact

The impacts of the Project on the existing AC transit bus system were assessed based on the modal split assumptions derived from the Countywide Model, and the conservative assumption that all Project-related home-based work trips would occur during the peak two-hour period. In reality, home-based work trips are spread over three to four hours. Based on these conservative assumptions, the Project has the potential to generate between 389 to 415 new AC transit bus trips in 2005 and 2025 respectively, during the PM peak two-hour period. These trips are for

both inbound and outbound directions (See Appendix D, Table 4). These additional passengers represent and increase of 0.5 percent that is directly attributable to the Project. Based on recent survey conducted by AC Transit, one or two buses on some lines are approaching or currently exceed the maximum load factor of 1.25 (this mainly applies in downtown Oakland). However, most existing buses during the peak hour have sufficient capacity to accommodate this increase in bus trips. Therefore, the increase in average ridership on AC Transit lines attributed to new growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan, would be less than 3 percent. This impact on AC Transit operations is considered to be less than significant.

Cumulative Effects

New growth and development within the Project Area, in combination with past projects, other current projects, and probable future projects, would be likely to increase average ridership on AC Transit by more than 3 percent (see detailed analysis in Appendix D, Table 4). This would be a cumulatively significant impact. The precise location of new growth and development within the Project Area is not well defined. Growth and development within the Project Area may increase average ridership on AC Transit lines by three percent where the average load factor under cumulative conditions would exceed 125 percent over a peak thirty-minute period. Thus, it is possible that the contribution of AC Transit riders from within the Project Area would be cumulatively considerable.

Mitigation Measures

None required for project-specific effects. The following mitigation measure is intended to address the Project's contribution to cumulative impacts on the AC Transit system.

- **Mitigation Measure 5.4.4 Coordination with AC Transit.** The City of Oakland shall coordinate with AC Transit to ensure that the average load factor on any specific AC Transit line does not exceed 125 percent over a peak thirty-minute period. At the Redevelopment Agency's sole discretion, redevelopment financing capabilities could potentially be used to assist AC Transit in meeting this operational threshold.

Resulting Level of Significance

AC Transit is currently working on an impact study for bus routes within the Project Area, and will likely conduct environmental review for any proposed changes along these routes. Redevelopment Agency coordination with AC Transit pursuant to implementation of Mitigation Measure 5.4 above would offset the contribution of AC Transit riders due to implementation of the Redevelopment Plan to a level that is *less than cumulatively considerable*.

5.4.5 Increase in BART Ridership

The impact of the Project on BART operations is considered to be *less than significant*.

Cumulative Impact 5.4.5: New growth and development within the Project Area, in combination with other past projects, current projects and probable future projects, would likely result in cumulatively significant impacts on BART service at fare gates. The contribution of peak hour riders on BART trains due to new growth and development within the Project Area would *be cumulatively considerable*.

Discussion

Project-Specific Effects

Based on the modal split assumptions derived from the Countywide Model, new growth and development within the Project Area would increase peak-hour ridership on BART trains by approximately 280 riders at the West Oakland BART station and 65 riders at the MacArthur BART station. These increases in peak-hour ridership would be less than 3 percent of the total ridership on BART trains.

New growth and development within the Project Area would increase average daily ridership by approximately 9 percent at the West Oakland BART station, and approximately 1 percent at the MacArthur BART station. However, the average waiting time at fare gates at the West Oakland BART station is less than one minute, therefore the increase in ridership there, as well as at the MacArthur BART station, is a less than significant impact. The average ridership increases at other BART stations would be less than 3 percent.

All five BART lines serve the West Oakland Redevelopment Project Area station. Each line has an average of frequency of 15 minutes during the peak hour, except for the Pittsburg/Bay Point to Colma line, which has 7.5-minute headways. This represents a total of 96 trains at the West Oakland BART station within a two-hour period. Based on this model, estimates for new Project-related transit trips, assuming all Project-related transit trips occur during the peak-two hour period averages to approximately 7 passengers per train. Based on the total seating capacity of a BART train, this equates to an increase of approximately 1.0- percent of the total capacity. Based on this analysis, the increase in passengers due to the Project in both 2005 and 2025 would not cause significant impacts on BART parking, fare gates, platforms or trains, and can be accommodated with planned BART service.

Cumulative Effects

New growth and development within the Project Area, in combination with past projects, other current projects, and probable future projects, could increase the peak hour average ridership on BART trains. This cumulative increase in ridership is projected to be approximately 3 percent where the passenger volume would also exceed the standing capacity of BART trains (see detailed analysis in Appendix D, Table 5). This would be a significant cumulative effect. However, since the contribution of BART riders from within the Project Area would be less than 3 %, this would be a less than cumulatively considerable effect.

New growth and development within the Project Area, in combination with past projects, other current projects, and probable future projects, would increase the peak hour average ridership at the West Oakland station by more than 3 percent. Under these cumulative conditions the average waiting time at fare gates could exceed one minute. New growth and development within the Project Area could contribute a cumulatively considerable amount of new riders at these stations should these waiting times exceed one minute.

Mitigation Measures

None required for Project-specific effects. The following mitigation measure is recommended to address the Project's potential contribution to cumulative impacts at BART stations.

- **Mitigation Measure 5.4.5: Coordination with BART.** The City of Oakland shall coordinate with BART to ensure that adequate fare gate capacity is available at the West Oakland and MacArthur BART stations to accommodate anticipated increases in ridership associated with projected growth and development within the Project Area. To the extent that adequate capacity may be reliant on the addition of one or more new fare gates at the station, the Redevelopment Agency, at its sole discretion, may consider utilizing redevelopment financing capabilities to assist in the financing of such station improvements.

Resulting Level of Significance

Redevelopment Agency participation in the implementation of Mitigation Measure 5.4.5 above would offset the contribution of BART riders at BART stations due to implementation of the Redevelopment Plan to a level that is *less than cumulatively considerable*.

5.4.6 Traffic and Circulation Safety

New growth and development within the Project Area could result in traffic hazards to motor vehicles, bicycles, or pedestrians due to inadequate design features or incompatible uses. However, compliance with City standards should prevent the creation of hazards to motor vehicles, bicycles, or pedestrians due to inadequate design features or an incompatible use to levels of *less than significant*.

Discussion

Project-Specific Traffic Safety Issues

The Project Area will include a variety of uses and transportation modes ranging from bicyclists and pedestrians accessing area schools and other public spaces, commuter vehicles traveling to and from employment centers within the Project Area, and commercial vehicles (trucks). Occurrence of safety hazards related to design features or incompatible uses depends on site-specific design not currently defined. However, all new development projects pursuant to implementation of the Redevelopment Plan will be required to comply with City design standards. Compliance with City standards would prevent the creation of hazards to motor

vehicles, bicycles, or pedestrians due to inadequate design features or an incompatible use to a level of *less than significant*.

Existing Truck Traffic Safety Issues

Traffic in and near the Project Area consists of two primary components: passenger car traffic and heavy trucks primarily associated with Port of Oakland operations. Heavy trucks have a substantially greater proportional influence on traffic operations than passenger cars, and result in additional safety and land use compatibility issues.

The OARB EIR indicates that the Port of Oakland operations are projected to result in the generation of approximately 24,770 daily truck trips by year 2020. This projection is based on the Port of Oakland ability to reach the *Seaport Plan's* 2020 cargo throughput goals and by maximizing transport by train rather than by truck. These truck trips include current operations and approved operations associated with the Port of Oakland's Vision 2000 Program and the Oakland Army Base Area Redevelopment Project. Of this total, over half (or approximately 13,000) would be intermodal trips that would not leave the Port area. The remaining approximately 11,760 trips are considered over-the-road truck trips (City of Oakland 2002, Technical Appendix 4.3b). Based on the distribution of truck traffic derived from a Port of Oakland survey (Port of Oakland 1993), approximately 10% of these over-the-road trips (or 1,180 daily trucks) will use West Grand Avenue east of I-880; 3% (or approximately 350 daily trucks) will use 7th Street; and approximately 2% (or 230 daily trucks) will use MacArthur Boulevard, all within the West Oakland Project Area. (OARB EIR, City of Oakland 2002, Table 4.3-7). Port-related truck traffic generally peaks between 11:00 a.m. and 12:00 noon.[6]

To the extent that implementation of the West Oakland Redevelopment Plan assists in the development of new land uses along these truck traffic routes, such new development could contribute to the exacerbation of existing traffic safety and land use compatibility issues.

Existing Trucking Prohibitions

The City of Oakland has designated certain streets within the Project Area as truck routes and container routes. Fully loaded containers on specialized chassis, with axle weights higher than typically allowed on other public streets, are allowed to operate with special permits along container routes. The City of Oakland has also developed a plan for truck prohibitions in West Oakland, as shown on **Figure 5-3**. Under a 1993 Memorandum of Understanding between the City of Oakland and the Port of Oakland, the City is responsible for enforcement of traffic laws in the vicinity of the Port, including truck route compliance and parking restrictions. The Port funds two police officer positions to enforce these laws in the West Oakland neighborhoods.

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[6] Vehicle classification counts were conducted at three locations within the OARB in 2000 to determine the relative number of passenger cars and trucks in the Port area. These counts were conducted at Maritime Street south of West Grand Avenue, 7th Street west of I-880; and Middle Harbor Road south of 3rd Street. These locations show traffic conditions, respectively, at the northern, central, and southern areas of the Port. The numbers of trucks shown in the OARB EIR at these locations (Figure 4.3.4) is substantially higher than the truck volumes indicated by the distribution numbers. This is because the majority of counted trucks exit off of local streets and onto the freeway system at the nearest freeway on-ramp.

Figure 5-3

Benefits of Redevelopment

The OARB EIR includes the following mitigation measure intended to reduce the effects of transport trucks on local streets:

> *Mitigation Measure 4.3-7: The City and the Port shall continue to work together and shall create a truck management plan designed to reduce the effects of transport trucks on local streets. The City and Port shall fund on a fair share basis implementation of this plan. Elements that may be included in this plan include:*
>
> - *Further analysis of truck traffic in West Oakland;*
> - *Traffic calming strategies on streets not designated as truck routes to discourage truck through travel;*
> - *Truck driver education programs;*
> - *Expanded signage, including truck prohibitions on streets not designated as truck routes;*
> - *Traffic signal timing improvements;*
> - *Exploring the feasibility of truck access to Frontage Road;*
> - *Roadway and terminal gate design elements to prevent truck queues from impeding the flow of traffic on public streets; and*
> - *Continued Port finding of two police officers to enforce prohibitions on local streets.* (OARB EIR, City of Oakland, page 4.3-42).

California Redevelopment Law enables redevelopment agencies to allocate funds toward public infrastructure improvements that can encourage further investments in neighborhoods and which make them more desirable places to live. Such infrastructure improvements may include transportation and circulation system improvements intended to enhance public safety, such as those identified in the previously identified mitigation measure. At the Redevelopment Agency's discretion, redevelopment funds could be allocated toward implementation of these circulation safety improvements.

5.4.7 Potential Parking Shortages

New growth and development within the Project Area pursuant to implementation of the Redevelopment Plan could result in an inadequate parking supply within the Project Area. Compliance with City parking code requirements would prevent the creation of new parking shortages, so this impact is considered *less than significant*.

Cumulative Impact 5.4.7: Truck Parking. Redevelopment, in combination with past, other current, and probable future projects (including the Port of Oakland's Vision 2000 Program and the Oakland Army Base Area Redevelopment Project) could result in a cumulatively inadequate supply of parking for trucks serving the Port of Oakland.

Discussion

Project Impacts Related to Parking

Parking demand related to development within the Project Area that may be assisted by, or facilitated by implementation of the Redevelopment Plan would depend on site-specific design issues not currently defined. However, the Redevelopment Plan is to be consistent with the City General Plan and the General Plan's implementing ordinances. Therefore, new development that may occur in furtherance of the Redevelopment Plan will be required to comply with City Code requirements, including parking requirements as found in the City's parking ordinance. Compliance with these ordinance requirements would ensure that this impact would be less than significant.

Existing West Oakland BART Station Parking

The West Oakland BART station currently provides 419 vehicle parking spaces in the surface parking lot. Generally, all available BART parking spaces are filled by approximately 6:00 a.m. Caltrans operates a park-and-ride lot on 7th Street between Union, Chestnut and 8th Streets. This lot is usually fully occupied during the week. Additionally, private off-street parking lots operated in the vicinity are similarly fully utilized during the weekdays (City of Oakland, 1998). Because the existing demand for parking at the West Oakland BART station exceeds the available supply, parking problems are encountered in the vicinity. In order to discourage non-residential long-term on-street parking, the City has implemented a Residential Permit parking Program that limits on-street parking to 2 to 4 hours for vehicles without a permit. This program was implemented between Mandela Parkway and Peralta Street primarily to discourage overflow parking from the West Oakland BART station.

Potential Benefits of Redevelopment

The Redevelopment Plan is intended as an implementation tool of the City of Oakland General Plan, including the LUTE. The LUTE includes identification of target areas and strategies that are intended to "offer business support and public improvements toward establishment of a Transit Village near the BART station". According to the *West Oakland Transit Village Action Report*, preliminary ideas for this Transit Village related to physical parking improvements include:

- Construction of a 4 to 5 level public parking structure that could accommodate up to 1,400 to 1,600 parking spaces,
- Development of mixed used housing/retail/office projects that also include public parking as part of the mix,
- Development of satellite parking facilities with shuttle service to the BART station,
- And metered on street parking along 7th Street.

California Redevelopment Law enables redevelopment agencies to allocate funds toward public infrastructure improvements, including the provision of additional parking opportunities. Redevelopment funds could be allocated toward implementation of these identified parking improvements.

Cumulative Truck Parking Shortages

In an effort to address land use compatibility issues in West Oakland, the City approved a Truck Regulation Ordinance in 2000.[7] This ordinance establishes special regulations applying to truck-related activities in West Oakland, and requires a conditional use permit for the expansion of any truck or truck-related use, including truck parking. The limits on the expansion of truck and truck-related activity refer to both building/facility expansion, and expansion of truck activity from an existing facility (i.e. as increases in the number of truck trips without expansion of the building facilities). The Redevelopment Plan is intended to assist in implementation of the General Plan and its supporting ordinances, including these truck regulations. It is likely that implementation of this ordinance, as may be assisted by the Redevelopment Plan's projects, programs or other activities, will limit the expansion of industrial uses with truck-related activity in West Oakland in the future. This is regarded as a beneficial land use effect of the Project (see discussion in Chapter 4: Land Use).

However, limitations on the expansion of truck-related activity (including truck-parking supply) will contribute to a cumulative deficit in truck parking and support services projected to be necessary to serve the demand for such uses as generated by the Port of Oakland. This issue has been studied extensively by the Port of Oakland and the City of Oakland, and many of the conclusions from these studies are included in the *Oakland Army Base Area Redevelopment Project EIR* (City of Oakland 2002). The conclusions from this EIR, which is hereby incorporated by reference, are summarized below.

The Port of Oakland commissioned a study (Tioga Group 2001) to explore ways to accommodate truck services that must be located near the Port, while assuring that the adjacent communities are relieved of unnecessary truck traffic. The study used forecasts of cargo segment growth, typical facility designs, industry standards, and working assumptions to estimate the usable acres required for efficient, single-purpose, core service facilities. This study concluded that a total of approximately 178 acres of core Port-related services will be necessary

[7] Title 17.102.380 et.seq. of the Oakland Zoning Code

by year 2020, including approximately 46 acres of truck parking/services, approximately 47 acres of working reefer depots, and 85 acres of heavy cargo facilities (Tioga Group 2001).

According to the *Oakland Army Base Area Reuse Plan* (City of Oakland 2002), a total of 105 acres within that Redevelopment Project are to be dedicated to "ancillary maritime uses". The term "ancillary maritime use" includes those types of truck-dependent uses that are necessary to support maritime Port operations, such as truck parking area. The 105 acres of ancillary maritime support use within the Oakland Army Base (OARB) Redevelopment Project Area, in combination with other efforts by the Port to provide satellite trucking facilities at strategic locations, could accommodate much but not all demand for such uses under efficient operating conditions. Additional interim space within the Port of Oakland's overall area will likely be available during terminal development at the Port. However, starting in about year 2010, there will be a shortfall or "gap" in available land supply for these uses. Not all Port-related ancillary maritime support services can be accommodated within the Port's maritime area and/or the Oakland Army Base Redevelopment Project Area, and some of these necessary uses will have to be located at suitable sites elsewhere (OARB EIR, City of Oakland 2002). The City and the Port of Oakland, the Bay Conservation and Development Commission (BCDC) and trucking industry representatives have agreed to continue to work with the trucking industry and the West Oakland community to resolve this issue (OARB EIR, City of Oakland 2002, page 5-15). Appropriate solutions are needed to find the amount of land in locations near but outside the Port that are able to serve trucking needs while minimizing the impact of Port-related trucking on the West Oakland community. Toward this end, the OARB EIR included the following mitigation measure.

> *Mitigation 5.3-7: The City and Port shall cooperatively develop a program that combines multiple strategic objectives and implementation tools designed to reduce cumulative truck parking and other ancillary maritime support impacts. This program should consider strategies that may include, but should not be limited to the following:*
>
> *a) Pursue truck traffic mitigation steps, information strategies, and rail intermodal strategies.*
>
> *b) Identify potential land swaps and utilize additional small parcels of land in the vicinity of the Port, especially for truck parking and support services.*
>
> *c) Prioritize the use of harbor-area land for core services, maximizing the efficient use of harbor-area land and facilities, and reduce the impacts in adjacent neighborhoods.*
>
> *d) Promote intensive land use (doing more with less) and extended terminal gate hours.*
>
> *e) Actively encourage relocation of selected services to other Oakland, East Bay, or northern California (Hinterland Loop) locations.*
>
> *f) Develop multi-user facilities in Oakland or in corridor locations (e.g., Richmond and San Leandro) for both core and non-core services.*

The OARB EIR found that implementation of this mitigation measure would take many years, and the success of the program cannot be ascertained. Therefore, this cumulative impact was identified as significant and unavoidable (OARB EIR, City of Oakland 2002, page 5-17). To the extent that the West Oakland Redevelopment Plan assists in implementation of limits on the

operation and/or expansion of truck and truck-related activity within the Project Area, such restrictions will further reduce the supply of land available for such uses, and contribute to this cumulative effect.

Any mitigation measures that might be recommended for the Project Area that would result in expansion of trucking operations and truck-related activities would be in conflict with the land use compatibility strategies embodied in General Plan policy and supporting land use ordinances. These policies and ordinances include limitations on such uses that serve to improve land use compatibility impacts within the Project Area, particularly where such uses are adjacent to or intermixed within residential neighborhoods. Therefore, no additional mitigation measures are recommended, and this impact of a shortfall in truck parking and truck-related land use remains *cumulatively significant and unavoidable.*

6

Air Quality

6.1 Introduction

This chapter of the EIR describes existing air quality conditions within the West Oakland Redevelopment Project Area and regional vicinity. It also identifies potential impacts associated with projected growth and development within the Project Area as may be facilitated by implementation of the Redevelopment Plan on existing air quality and recommends, where necessary and feasible, mitigation measures to reduce and or avoid potentially significant air quality impacts. Air quality issues discussed in this section of the EIR include:

- Consistency of the Project with the Clean Air Plan,
- Emission of regional air pollutants,
- Emission of local air pollutants, and
- Construction-related air quality impacts.

Significance thresholds for impacts on air quality would generally be reached if future growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan were to be inconsistent with the Clean Air Plan, or if air pollutants would be emitted above levels established by the Bay Area Air Quality Management District (BAAQMD).

6.2 Environmental Setting

6.2.1 Meteorology

Oakland is located in northern Alameda County, which lies within the San Francisco Bay Area Air Basin. Temperatures in Oakland average 58^0F annually, ranging on the average from the mid-40s on winter mornings to the mid-70s on summer afternoons. Daily and seasonal fluctuations in temperature are relatively minor because of the moderating effects of the nearby ocean. In contrast to the steady temperature regime, rainfall is highly variable and confined almost exclusively to the "rainy" period from early November to mid-April. Oakland averages 18 inches of precipitation annually, but because much of the area's rainfall is derived from the

fringes of mid-latitude storms, a shift in the annual storm track of a few hundred miles can mean the difference between a very wet year and near-drought conditions (BAAQMD, 1996; CARB, 1984).

In the Oakland area, the flow of marine air traveling through the Golden Gate, across San Francisco and through the San Bruno Gap is the dominant weather factor. Winds in the Oakland area are typically out of the west, west-northwest, and northwest (about 50% of the time). All other wind directions occur no more than seven percent of the time, individually, and calm conditions occur during eight percent of annual observations. Annual average wind speeds are approximately nine miles per hour (BAAQMD, 1996; CARB, 1984).

Air pollution potential in northern Alameda County is lowest close to the Bay, where the Project Area is located, due largely to two factors: good ventilation from winds that are frequently brisk, and a relatively low flux of pollutants from upwind areas. The occurrence of light winds in the early morning and late evening occasionally causes elevated levels of pollutants (BAAQMD, 1996).

6.2.2 Emissions and Ambient Air Quality

The BAAQMD estimates emissions of five criteria air pollutants: reactive organic gases (ROG, also known as ozone, O_3), carbon monoxide (CO), particulate matter (PM_{10}), nitrogen oxides (NO_x), and sulfur dioxide (SO_2) from seven use categories: residential, commercial, industrial, infrastructure, construction, transportation, and agricultural sources. Annual average emissions are compiled for each county in the Bay Area Air Basin. $PM_{2.5}$ is not included in this inventory because the federal $PM_{2.5}$ standard was only recently upheld, and Bay Area-wide $PM_{2.5}$ emissions and monitoring data are not yet available. Inventory information presented in **Table 6-1** indicates that within the region, the BAAQMD expects total annual tons of CO, ROG, and NO_x to decrease over time, and total annual tons of SO_2 and PM_{10} to increase. As presented in Table 6-1, the District expects the percentage of Alameda County's contribution to basin-wide emissions would remain approximately the same per pollutant, except the County's relative contribution to CO is expected to decrease slightly (BAAQMD, 1996).

Table 6-1: Bay Area Emission Inventory Summary and Projections, [a] 1995 To 2010

	1995		2000		2010	
Pollutant	**Bay Area (tons/day)**	**Alameda County's Share[b]**	**Bay Area (tons/day)**	**Alameda County's Share[b]**	**Bay Area (tons/day)**	**Alameda County's Share[b]**
CO	2,425	22%	1,963	21%	1,600	21%
ROG/Ozone	535	22%	464	22%	406	22%
NO_x[c]	454	20%	441	19%	449	20%
SO_2	102	12%	107	11%	115	12%
PM_{10}[d]	462	19%	501	19%	582	19%

Notes:
[a] Data are estimates for 1995 and were taken from BAAQMD (1996) CEQA Guidelines.
[b] Percent of Bay Area emissions attributable to Alameda County sources.
[c] Average summer day emissions.
[d] Average winter day emissions.
SOURCE: BAAQMD (1999)

The BAAQMD operates a regional monitoring network which measures the ambient concentrations of six criteria air pollutants: ROG (O_3), CO, particulate matter (PM_{10} and $PM_{2.5}$), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). Existing and probable future levels of air quality in Oakland can be generally inferred from ambient air quality measurements conducted by the BAAQMD at its monitoring stations in downtown Oakland and San Leandro. **Table 6-2** is a six-year summary of monitoring data (1996-2001) from the BAAQMD's Alice Street station in Oakland and County Hospital in San Leandro. Data from the San Leandro station are included because the Alice Street monitoring station does not monitor PM_{10} concentrations. Final data for 2002 are not yet available. Table 6-2 compares measured pollutant concentrations with state ambient air quality standards, which are more stringent than the corresponding federal standards.

Table 6-2: Oakland Ambient Air Quality Monitoring Summary, 1996 – 2001

Monitoring Station & Pollutant	Standard[a]	Number of Days Standards were Exceeded and Maximum Concentrations Measured					
		1996	1997	1998	1999	2000	2001
Downtown Oakland Data:							
Ozone (ROG)							
1-Hour	>0.09 ppm	0	0	0	0	0	0
Max. 1-Hour Conc. (ppm)[b]		0.09	0.08	0.06	0.08	0.07	0.07
Carbon Monoxide							
1-Hour	>20. ppm	0	0	0	0	0	0
8-Hour	>9. ppm	0	0	0	0	0	0
Max. 1-Hour Conc. (ppm)		7	8	6	6	5	5
Max. 8-Hour Conc. (ppm)		3.9	3.6	4.6	5.2	3.4	4.0
San Leandro Data:							
Suspended Particulates (PM10)							
Max. 24-hr. Conc. ($\mu g/m^3$)[b]	>50 $\mu g/m^3$	**59**	**65**	32	_ _d	_ _d	_ _d
Exceedances/Samples[c]		1/61	1/61	0/30	_ _d	_ _d	_ _d
Annual Geometric Mean ($\mu g/m^3$)	30 $\mu g/m^3$	19.1	15.9	_ _d	_ _d	_ _d	_ _d

Notes: BAAQMD Monitoring Stations, Alice Street, in Oakland and County Hospital in San Leandro.
Bold values are in excess of applicable standard. "NA" indicates that data is not available.

a State standard, not to be exceeded.

b conc. = concentration; ppm = parts per million; □g/m^3 = micrograms per cubic meter

c Indicates the number of exceedances and the number of samples taken in a given year.

d Monitoring discontinued in mid-1998 at San Leandro; Annual Geometric mean cannot be determined for 1998.

SOURCE: California Air Resources Board, 1996-2001, Internet Air Quality Data Summaries.

Recognizing that children can sometimes be more at risk than adults from the harmful effects of air pollution, changes in state law established specific requirements to examine the impacts of air pollution on children's health. Senate Bill 25 requires the California Air Resources Board (CARB) to expand its existing monitoring program in six communities around the state and to conduct special monitoring. Fruitvale was chosen as one of the six sites for the Children's Environmental Health Protection Program because it is impacted by several categories of pollutant emissions and because of the large school-age population in the area. In November 2001, monitoring began at Lockwood Elementary School, which is located southeast of the Project Area at 6701 International Boulevard. In the initial phase of the study, monitoring is expected to continue until November 2002. This site is collecting information on approximately 70 air pollutants. Analysis of this data is not yet available and is not expected to be available during the timeframe for this EIR.

Ozone (O_3)

O_3 is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG), and nitrogen oxides (NO_x). The main sources of NO_x and ROG, often referred to as ozone precursors, are combustion processes (including motor vehicle engines) and the evaporation of solvents, paints and fuels. Automobiles are the single largest source of ozone precursors in the Bay Area. O_3 is a regional air pollutant because its precursors are transported and diffused by wind concurrently with O_3 production by the photochemical reaction process. O_3 causes eye irritation, airway constriction, shortness of breath, and can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema (BAAQMD, 1999). **Table 6-2** shows that exceedance of the state standard of 0.09 parts per million (ppm) and the less stringent federal standard of 0.12 ppm for one hour has not been exceeded during the last six years, according to published data.

Carbon Monoxide (CO)

CO is an odorless, colorless gas usually formed as the result of incomplete combustion of fuels. The single largest source of CO is the motor vehicle, and highest during low travel speeds, stop-and-go driving, cold starts, and hard acceleration. Exposure to high concentrations of CO reduces the oxygen-carrying capacity of the blood and can cause dizziness and fatigue, impair central nervous system function, and induce angina in persons with serious heart disease (BAAQMD, 1999). Table 6-2 also shows that no exceedances of state CO standards were recorded between 1996 and 2001. Measurements of carbon monoxide (CO) show low baseline levels, with the hourly maximum averaging less than 40% of the allowable state standard. Similarly, maximum eight-hour CO levels average less than 60% of the allowable eight-hour standard.

Particulate Matter (PM_{10} and $PM_{2.5}$)

Particulate matter is a class of air pollutants that consists of solid and liquid airborne particles in an extremely small size range. Particulate matter is measured in two size ranges: PM_{10} for particles less than 10 microns in diameter and $PM_{2.5}$, for even smaller particles which are less than 2.5 microns in diameter. Motor vehicles generate about half of Bay Area particulates, through tailpipe emissions as well as brake pad and tire wear. Wood burning in fireplaces and stoves, industrial facilities, and ground-disturbing activities such as construction are other sources of fine particulates. Fine particulates are small enough to be inhaled into the deepest parts of the human lung can cause adverse health effects. Among the criteria pollutants that the BAAQMD regulates, particulates appear to represent the most serious overall health hazard. Studies have shown that elevated particulate levels contribute to the death of approximately 200 to 500 people per year in the Bay area. High levels of particulates have also been known to exacerbate chronic respiratory ailments, such as bronchitis and asthma, and have been associated with increased emergency room visits and hospital admissions (BAAQMD, 1996).

Table 6-2 also shows that exceedances of the state PM_{10} standard occur relatively infrequently in San Leandro. State PM_{10} standards were exceeded on two measurements out of 152 measurement days during 1996 to 1998 (PM_{10} is not monitored everyday). The BAAQMD discontinued monitoring PM_{10} concentrations in San Leandro in mid-1998. Federal PM_{10}

standards were not exceeded at the San Leandro monitoring station. PM_{10} concentrations in Oakland would be expected to be similar to those measured in San Leandro.

In 1997, the U. S. Environmental Protection Agency adopted a new standard for $PM_{2.5}$, which represents the fine fraction of particulate matter; this standard was subject to legal challenge but was upheld by the U.S. Supreme Court in February 2001. California has proposed a state standard for $PM_{2.5}$ that is more stringent than the new federal standard. The new state standard is an annual average standard of 12 $\mu g/m^3$, not to be exceeded. This standard will go into effect in 2003, after having gone through California's review process for new regulations. The BAAQMD began monitoring $PM_{2.5}$ concentrations in 1999 in Fremont, Livermore, Concord, San Francisco, Redwood City, San Jose, Vallejo and Santa Rosa, with no stations in Oakland or San Leandro. $PM_{2.5}$ data are not yet available, although results of PM_{10} monitoring in San Leandro, as shown in Table 6-2, indicate that there were no exceedances of the federal $PM_{2.5}$ standard between 1996 and 1998 since the PM_{10} standard (which includes $PM_{2.5}$) was not exceeded.

To increase knowledge of particulate exposure at and near the Port of Oakland, the Port of Oakland initiated a monitoring program in April 1997 to measure PM_{10} and $PM_{2.5}$ at two locations. One monitoring station is located on Port property near the intersection of 7th Street and Middle Harbor Road. The second monitoring station is located near the intersection of Filbert and 24th streets in a residential area of West Oakland. The monitoring program is being coordinated with the BAAQMD.

While the sampling program is ongoing, data have been reported for the years 1997 through August 2001 and are summarized in **Table 6-3**. During this sampling period, the highest annual average PM_{10} concentration in the project area was 30.7 $\mu g/m^3$, slightly above the annual average state standard of 30 $\mu g/m^3$ that was in effect until early 2003. The state's new annual average PM_{10} standard of 20 $\mu g/m^3$ was exceeded every year since 1997 at both stations. The peak 24-hour concentration was 83 $\mu g/m^3$, above the 24-hour state standard of 50 $\mu g/m^3$. The maximum 24-hour $PM_{2.5}$ concentration was 59 $\mu g/m^3$, below the 24-hour federal standard of 65 $\mu g/m^3$. The maximum annual average $PM_{2.5}$ concentration was 12.6 $\mu g/m^3$; the federal annual average $PM_{2.5}$ standard of 15 $\mu g/m^3$ was not exceeded. The state annual average $PM_{2.5}$ standard of 12 $\mu g/m^3$ would have been slightly exceeded in 1999 at the 7th/Middle Harbor site if the State annual average $PM_{2.5}$ standard had been in effect in prior years.

Monitoring data listed for these two stations in Table 6-3 also indicates that 24-hour and annual average concentrations are similar to each other, suggesting that regional sources and meteorology largely influence ambient concentrations. If ambient concentrations were heavily influenced by Port activities, the monitoring station at the Port (7th Street/Middle Harbor Road) would indicate much higher values than the monitoring station located 1.5 miles to the east in West Oakland (Filbert/24th Street). A recent study regarding PM_{10} in the region and Oakland states that the ten-year trend in PM_{10} concentrations is definitely downward, but discontinuous on a year-to-year basis due to the effects of weather during any given year. This study corroborated the results of the Port's West Oakland particulate air monitoring study and also found that local PM_{10} concentrations are consistent with overall regional concentrations, and therefore, are influenced by regional rather than local factors (OARB, 2002).

Table 6-3: $PM_{2.5}$ and PM_{10} Concentrations, [a] 1997 to 2001

Monitoring Site and Pollutant	Federal Standard	State Standard	Maximum and Annual Average Concentrations and Number of Days Standards were Exceeded				
			1997[b]	1998	1999	2000	2001[c]
Port of Oakland Site (7TH/Middle Harbor Road)							
PM2.5							
24-Hour Maximum Conc. (µg/m³)[d]	65	--	53	58	53	32	44.6
Annual Average Conc. (µg/m³)	15	--	10.5	10.6	12.6	11.0	11.6
Days Above Fed./State Standard			0/--	0/--	0/--	0/--	0/--
PM10							
24-Hour Maximum Conc. (µg/m³) [d]	150	50	83	76	72	60	68.1
Annual Average Conc. (µg/m³)	50	30	25.2	25.7	34.5	30.6	33.4
Days Above Fed./State Standard			0/2	0/6	0/14	0/2	0/7
West Oakland Site (Filbert/24th Street)							
PM2.5							
24-Hour Maximum Conc. (µg/m³) [d]	65	--	51	59	49	35	44.6
Annual Average Conc. (µg/m³)	15	--	9.5	9.9	11.7	11.2	10.6
Days Above Fed./State Standard			0/--	0/--	0/--	0/--	0/--
PM10							
24-Hour Maximum Conc. (µg/m³) [d]	150	50	77	65	81	59	83
Annual Average Conc. (µg/m³)	50	30	23.4	22.1	25.4	25.0	26.8
Days Above Fed./State Standard			0/1	0/1	0/4	0/2	0/3

NOTES:
[a] All concentrations in µg/m³ (micrograms per cubic meter).
[b] April 1997 – December 1997.
[c] January 2001 – August 2001.
[d] Highest 24-hour concentration in a 12-month period.

-- = Not applicable (no standard).

SOURCE: Orion Environmental Associates (2003); OARB EIR (2002)

Nitrogen Dioxide (NO_2)

NO_2 is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO_2. The major health effect from exposure to high levels of NO_2 is the risk of acute and chronic respiratory disease. NO_2 is often observed during the same conditions that produce high levels of O_3. NO_2 is a precursor to O_3. The NO_2 standard is being met in the Bay Area, and the latest pollutant trends information suggests that this standard will not be exceeded in the foreseeable future (BAAQMD, 1996).

Sulfur Dioxide (SO_2)

SO_2 is a colorless acid gas with a strong odor. The main source of SO2 is the combustion of fuels containing sulfur, such as fuel oil, coal and diesel. California has very low levels of SO_2 because most large combustion sources burn natural gas, which contains only trace quantities of sulfur. California regulations also limit the sulfur content of gasoline and diesel fuel. The major health effect from exposure to SO_2 can irritate lung tissue and increase the risk of acute and chronic respiratory disease. The SO_2 standard is being met in the Bay Area, and the latest pollutant trends information suggests that this standard will not be exceeded in the foreseeable future (BAAQMD, 1996).

Toxic Air Contaminants

Toxic air contaminants (TACs) are air pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations. Potential human health effects of TACs include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs with varying degrees of toxicity. Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

TACs do not have ambient air quality standards, but are regulated by the BAAQMD using a risk-based approach. This approach uses a health risk assessment to determine what sources and pollutants to control as well as the degree of control. A health risk assessment is an analysis where human health exposure to toxic substances is estimated, and considered together with information regarding the toxic potency of the substances, to provide quantitative estimates of health risks.

In addition to criteria pollutants, both the BAAQMD and the California Air Resources Board (CARB) operate TAC monitoring networks in the San Francisco Bay Area. These stations measure 10 to 15 TACs, depending on the specific station. The TACs selected for monitoring are those that have traditionally been found in the highest concentrations in ambient air, and therefore tend to produce the most significant risk. The BAAQMD operates an ambient TAC monitoring station at Davie Stadium at 198 Oak Road in Oakland, which is about 2.5 miles to the east of the Project Area. The estimated average lifetime cancer risk resulting from exposure to TAC concentrations monitored at the Oakland station was approximately 160 in one million in 1999, and 150 in one million in year 2000. This risk level is comparable to the Bay Area average for estimated average lifetime cancer risk, which was 186 in one million in year 1999, and 167 in one million in year 2000 for all Bay Area TAC monitoring stations (BAAQMD, 2000 and 2001). These levels can be compared to the much higher background cancer incidence rate in the United States from all causes, which is about 1 in 4, or 250,000 in one million (OARB, 2002).[1]

[1]It is generally believed that a large portion of the total background cancer risk in the United States comes from smoking and other personal habits, genetic susceptibilities, diet, natural radiation including radon, and other lifestyle factors.

Established under the Emergency Planning and Community Right-to-Know Act of 1986 and expanded by the Pollution Prevention Act of 1990, the U.S. Environmental Protection Agency maintains a Toxic Release Inventory (TRI) Program for toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities (http://www.epa.gov/tri/). The TRI Chemical Report identifies six reported chemical releases in 2000 totaling 24,697 pounds for all industries in West Oakland: nitrate compounds (10 pounds or 0.04% of total), nitric acid (10 pounds or 0.04%), zinc compounds (10 pounds or 0.04%), chlorine (250 pounds or 1.0%), ammonia (1,217 pounds or 4.9%), and acetaldehyde (23,200 pounds or 94% of total; USEPA, 2002). The TRI Industry Report for 2000 indicates that 24,427 pounds (99% of total) are released by food industries, while 270 pounds (1%) are from fabricated metal industries. Of these six chemicals, acetaldehyde is identified as a known or suspected carcinogen, while the remaining are identified as non-carcinogenic compounds (but could have short-term (acute) health risks). The Pacific Institute (2002) identifies Red Star Yeast and Precision Cast Products, Inc. as the primary contributors of TACs emitted in West Oakland in 1997. Red Star Yeast was the major contributor of carcinogenic air emissions in West Oakland, mainly from its emissions of acetaldehyde and it is discussed below. However, LeSaffre, the owner of the Red Star Yeast plant, has permanently ceased production at the facility as of April 15th, 2003. Precision Cast ceased operating its West Oakland plant in May 2001. The building has been sold and will no longer be operated as an industrial facility (Port of Oakland, 2002).

Acetaldehyde

Acetaldehyde is a colorless liquid with a pungent, fruity odor. When ingested or inhaled, acetaldehyde can irritate eyes, nose, and throat, cause conjunctivitis, coughing, central nervous system depression, eye and skin burns, dermatitis, and delayed pulmonary edema (NSC, 2002). Tests involving acute exposure of rats, rabbits, and hamsters have demonstrated acetaldehyde to have low acute toxicity from inhalation and moderate acute toxicity from oral or dermal exposure. According to the EPA (2002), human data regarding the carcinogenic effects of acetaldehyde are inadequate. Only one epidemiology study is available that has several limitations including short duration, small number of subjects, and concurrent exposure to other chemicals and cigarettes. However, the EPA has classified acetaldehyde as a probable human carcinogen.

In West Oakland, Red Star Yeast & Products, operated by LeSaffre, was the primary source of acetaldehyde, which is a byproduct of yeast production. According to the BAAQMD, LeSaffre reported emitting 32,000 pounds of acetaldehyde in 2000.

LeSaffre's plant operated under a permit issued by the BAAQMD, and was in the process of renewing that permit early in the year of 2003 (BAAQMD, 2003). Yeast plants are subject to BAAQMD regulation under what is known as "Regulation 8, Rule 2 - Miscellaneous Operations". However, when the Red Star Yeast & Products' permit was issued in 1997, the BAAQMD determined that Red Star Yeast was exempt from the requirements of those regulations. In early 2003 the BAAQMD revised that decision, and anticipated that the exemption would have been removed when the permit was renewed. Additionally, the BAAQMD is considering adoption of proposed regulation changes to replace Regulation 8-2. These new regulations, known as proposed Regulation 8-53 are more stringent than the requirements under Regulation 8-2. These new regulations, if adopted, were anticipated to have

been applied to Red Star's permit renewal, and would have greatly reduce the emissions from that facility (BAAQMD, 2003). Additionally, the Red Star Yeast facility was under considerable and mounting public pressure to close down. Public protests and opposition was led principally by the Coalition for West Oakland Revitalization (CWOR), the Chester Street Block Club and other community groups, together with research efforts conducted by the Pacific Institute. This public opposition, combined with anticipated regulatory changes, eventually led to LeSaffre's decision to close down this facility in April of 2003 (S.F. Chronicle, 2003).

Particulate Matter

In 1998, the CARB formally identified particulate matter emitted by diesel-fueled engines as a TAC. Diesel engines emit TACs in both gaseous and particulate forms. The particles emitted by diesel engines are coated with chemicals, many of which have been identified by the EPA as hazardous air pollutants (HAPs) and by the CARB as TACs. The vast majority of diesel exhaust particles are very small (94% of their combined mass consists of particles less than 2.5 microns in diameter), both the particles and their coating of TACs can be inhaled into the deepest part of the lungs. While the gaseous portion of diesel exhaust also contains TACs, the CARB's action was specific to diesel particulate emissions, which, according to supporting CARB studies, represent 50 to 90% of the mutagenicity of diesel exhaust (OARB, 2002).

The CARB action was taken at the end of a lengthy process that considered dozens of health studies, extensive analysis of health effects and exposure data, and public input collected over the last nine years. CARB's Scientific Advisory Committee has recommended a unit risk factor of 300 in a million/1 $\mu g/m^3$ of lifetime exposure for diesel particulate. The CARB action will lead to additional control of diesel engine emissions in coming years by CARB. The EPA has also begun an evaluation of both the cancer and non-cancer health effects of diesel exhaust (OARB, 2002).

The 1998 ruling prompted the CARB to begin searching for means to reduce diesel PM emissions. In September 2000, the CARB approved the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (Diesel Risk Reduction Plan). The Diesel Risk Reduction Plan outlines a comprehensive and ambitious program that includes the development of numerous new control measures over the next several years aimed at substantially reducing emissions from new and existing on-road vehicles (e.g., heavy duty trucks and buses), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps), and stationary engines (e.g., stand-by power generators) (OARB, 2002).

There is also growing evidence that exposure to emissions from diesel-fired engines (about 95% of which come from mobile sources) may result in cancer risks that exceed those attributed to the measured TACs. In 1998, the State of California identified diesel particulate matter (PM) as a TAC and issued a health risk assessment that included estimates of cancer potency of diesel PM. Because diesel PM cannot be monitored directly in the ambient air, cancer risk is estimated using indirect methods based on measurement of surrogate compounds. The BAAQMD has estimated the average cancer risk associated with diesel particulate exposure in the Bay Area, based on CARB estimates of population-weighted average ambient diesel PM concentrations for the Bay Area in the year 2000, to be about 450 in one million (OARB, 2002).

Odors

BAAQMD Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. The limitations of this regulation limit the "discharge of any odorous substance which causes the ambient air at or beyond the property line…to be odorous and to remain odorous after dilution with four parts of odor-free air." The BAAQMD must receive odor complaints from ten or more complainants within a 90-day period in order for the limitations of this regulation to go into effect. If this criterion has been met, an odor violation can be issued by the BAAQMD if a test panel of people can detect an odor in samples collected periodically from the plant.

In West Oakland, Red Star Yeast & Products was a source of odor emissions in its vicinity. Given LeSaffre Yeast Corporations' recent decision to shutdown this facility, there will no longer be an odor problem from this facility. The BAAQMD is also currently considering adoption of proposed new regulations that, if adopted, would have greatly reduced the impact of odors on the community, making odors from the facility's stacks undetectable except under extremely unusual conditions (BAAQMD, 2003).

The East Bay Municipal Utility District (EBMUD) Main Wastewater Treatment Plant (WWTP) is located west of the Plan Area, within a triangular area formed by Grand Avenue and the I-80, I-580, and I-880 freeways. There are no odor complaints on file with the BAAQMD for this facility over the past three years (BAAQMD, 2002).

6.2.3 Sensitive Receptors

Land uses such as schools, children's day care centers, hospitals, and convalescent homes are considered to be more sensitive than the general public to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational uses are also considered sensitive, due to the greater exposure to ambient air quality conditions and because the presence of pollution detracts from the recreational experience. There are residential uses, schools, and day care centers located within the Project Area.

While the presence of sensitive receptors is always a concern, all members of the population can be adversely affected by criteria pollutants, toxic air contaminants, odor, and dust. Therefore, any consideration of potential air quality impacts should include all members of the population.

Public Health Concerns

As described above, increased cancer risk is associated with long-term exposure to certain criteria pollutants and toxic air contaminants, while short-term exposure can cause or aggravate chronic respiratory disease such as asthma, bronchitis, and emphysema.

Asthma is a serious and growing health problem both in the United States and worldwide. The Pacific Institute (2002) reports that in 1998, West Oakland children were seven times more likely

to be hospitalized for asthma than the average child in the state of California. This conclusion is based on age-adjusted hospitalization rates and actual hospitalization rates for Oakland zip codes. but may not necessarily reflect the relative rate of asthma occurrence in the area compared to elsewhere. Rather than examining only asthma-related hospitalization rates, a more comprehensive study was completed by the University of California at Los Angeles (UCLA) Center for Health Policy Research. This study, known as the 2001 California Health Interview Survey (CHIS) is the largest health survey ever conducted in any state and one of the largest in the nation, covering a broad range of public health concerns, including health status and conditions, health-related behaviors, health insurance coverage, and access to health care services. This survey reported the number of people, by County, that experience asthma symptoms at least once a year (called "lifetime asthma prevalence"). The CHIS found that California's lifetime asthma prevalence, at 11.9% of the population, is higher than the national lifetime asthma prevalence of 10.1%.[2]

When asthma symptom prevalence in 2001 is sorted by County, the CHIS found that those who live in rural areas have more frequent asthma symptoms. Asthma symptom prevalence by county ranged from 5.7% to 14.1% for all ages. The highest rates occurred in Fresno and Solano counties with rates of 13.4% and 14.1%, respectively, for all ages and 16% for children (ages 0-17). Alameda County had an asthma symptom prevalence rate for children of 9.9%, and 10.1% for all ages. These rates exceed the statewide average of 9.6% for children and 8.8% for all ages, but are similar to the rates for Contra Costa County and some other Bay Area counties. **Table 6-4** lists asthma symptom prevalence in Bay Area counties from the CHIS study. These data as well as other data in this study indicate that asthma is mainly a regional problem, not only a local problem, as evidenced by the similar rates for both East Bay counties, Alameda and Contra Costa County. However, these regional statistics may mask the fact that asthma rates are higher among African-American children than among the rest of the population. There may thus be asthma "hot spots" in West Oakland that are not well characterized by countywide averages.

2 "Lifetime Asthma Prevalence" are those that have been diagnosed with asthma at some point in their lives, while "Asthma Symptom Prevalence" are those that experience asthma symptoms at least once per year.

Table 6-4: Asthma Symptom Prevalence In Bay Area Counties In 2001

Bay Area Counties	% of Children (Ages 0-17)	% of Adults (Ages 18+)	%, All Ages
Santa Clara	9.3	8.0	8.3
Alameda	9.9	10.2	10.1
Contra Costa	9.1	10.4	10.0
San Francisco	10.5	8.3	8.6
San Mateo	9.0	6.1	6.7
Sonoma	11.6	8.7	9.4
Solano	15.9	13.3	14.1
Marin	14.2	8.1	9.4
Napa	8.9	11.9	11.1

SOURCE: UCLA Center for Health Policy Research (2001)

Asthma is a chronic illness, but can be controlled with effective treatment and management. People with asthma have more frequent symptoms if they are exposed to environmental "triggers" such as certain air pollutants, outdoor allergens, tobacco smoke, cockroaches, dust mites, furry pets, mold, and viral respiratory infections. The CHIS also determined that frequent asthma symptoms can be a sign of inadequate medical control and persistent exposure to environmental triggers as well as greater severity of the disease. People with asthma will also have more symptoms if they do not take appropriate or adequate medication. Approximately 14.9% of adults and 18.2% of children in California who experience daily and weekly symptoms are not currently taking any medications to control their asthma.

6.3 Regulatory and Policy Setting

6.3.1 Ambient Air Quality Standards

The federal Clean Air Act Amendments of 1970 established national ambient air quality standards, and individual states retained the option to adopt more stringent standards and to include other pollution sources. California had already established its own air quality standards when federal standards were established, and because of the unique meteorological problems in the state, there is considerable diversity between state and national ambient air quality standards (SAAQS and NAAQS, respectively) currently in effect in California, as shown in **Table 6-5**. California ambient standards tend to be at least as protective as national ambient standards and are often more stringent.

Table 6-5: State and Federal Ambient Air Quality Standards and Attainment Status

Pollutant	Averaging Time	(State) SAAQS[a] Standard	(State) SAAQS[a] Attainment Status	(Federal) NAAQS[b] Standard	(Federal) NAAQS[b] Attainment Status
Ozone	1-hour	0.09 ppm	N	0.12 ppm	N
	8-hour	NA	NA	0.08 ppm	U
Carbon Monoxide	1 hour	20 ppm	A	35 ppm	A
	8 hour	9.0 ppm	A	9 ppm	A
Nitrogen Dioxide	1 hour	0.25 ppm	A	NA	NA
	Annual	NA	NA	0.053 ppm	A
Sulfur Dioxide	1 hour	0.25 ppm	A	NA	NA
	24 hour	0.04 ppm	A	0.14 ppm	A
	Annual	NA	NA	0.03 ppm	A
Particulate Matter (PM_{10})	24 hour	50 $\mu g/m^3$	N	150 $\mu g/m^3$	U
	Annual[c]	20 $\mu g/m^3$	N	50 $\mu g/m^3$	A
Fine Particulate Matter ($PM_{2.5}$)	24 hour	NA	NA	65 $\mu g/m^3$	U
	Annual	12 $\mu g/m^3$ [d]	NA	15 $\mu g/m^3$	U
Sulfates	24 hour	25 $\mu g/m^3$	A	NA	NA
Lead	30 day	1.5 $\mu g/m^3$	A	NA	NA
	Cal. Quarter	NA	NA	1.5 $\mu g/m^3$	A
Hydrogen Sulfide	1 hour	0.03 ppm	U	NA	NA
Visibility Reducing Particles	8 hour	see note e	U	NA	NA

Notes: A = Attainment; N = Non-Attainment; U = Unclassified; NA = Not Applicable; ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter.

a SAAQS = State Ambient Air Quality Standards (California). SAAQS for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, particulate matter, and visibility reducing particles are values that are not to be exceeded. All other state standards shown are values not to be equaled or exceeded.

b NAAQS = National Ambient Air Quality Standards. NAAQS, other than ozone and particulates, and those based on annual averages or annual arithmetic means, are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentration is 0.08 ppm or less. The 24-hour PM10 standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than the standard. The 24-hour PM2.5 standard is attained when the 3-year average of 98th percentiles is less than the standard.

c State Standard = Annual Geometric Mean; National Standard = Annual Arithmetic Mean.

d State PM2.5 standard is a new standard that will go into effect in 2003.

e Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70%. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

SOURCE: Bay Area Air Quality Management District Internet web site. Standards and attainment status as of January 2002. http://www.baaqmd.gov/planning/resmod/baas.htm

The ambient air quality standards are intended to protect the public health and welfare, and they specify the concentration of pollutants (with an adequate margin of safety) to which the public may be exposed without adverse health effects. They are designed to protect those segments of

the public most susceptible to respiratory distress, known as sensitive receptors, including asthmatics, the very young, the elderly, people weak from other illness or disease, or persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollution levels somewhat above the ambient air quality standards before adverse health effects are observed.

6.3.2 Federal Programs and Standards

The 1977 Clean Air Act (last amended in 1990, 42 United States Code [USC] 7401 *et seq.*) required that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of pollutants can be controlled in order to achieve all standards within the deadlines specified in the Clean Air Act. For the Bay Area Air Basin, the Association of Bay Area Governments (ABAG), the Metropolitan Transportation Commission (MTC), and the BAAQMD jointly prepared a *Bay Area Air Quality Plan* in 1982, which predicted attainment of all federal clean air standards within the basin by 1987. This forecast was somewhat optimistic in that attainment of federal clean air standards did not occur throughout the entire air basin until 1991. The plan, which is referred to as the State Implementation Plan (SIP), must contain control strategies that demonstrate attainment with national ambient air quality standards by deadlines established in the federal CAA.

The Bay Area Air Basin attainment status with respect to federal standards is summarized in Table 6-5. In general, the Bay Area experiences low concentrations of most pollutants when compared to federal standards, except for O_3 and particulate matter, for which standards are exceeded periodically. In 1995, after several years of minimal violations of the federal one-hour ozone standard, the U.S. Environmental Protection Agency (EPA) revised the designation of the Bay Area Air Basin from "non-attainment" to "attainment" for this standard. However, with less favorable meteorology in subsequent years, violations of the one-hour ozone standard were again observed in the basin. Effective August 1998, the EPA downgraded the Bay Area's classification for this standard from a "maintenance" area to an "unclassified non-attainment" area. In 1998, after many years without violations of any carbon monoxide (CO) standards, the attainment status for CO was upgraded to "attainment."

In response to the EPA's redesignation of the basin for the one-hour federal ozone standard, the BAAQMD, ABAG, and MTC were required to develop an ozone attainment plan to meet this standard. The *1999 Ozone Attainment Plan* was prepared and adopted by these agencies in June 1999. However, in March 2001, the EPA proposed and took final action to approve portions of the 1999 OAP and disapprove other portions, while also making the finding that the Bay Area had not attained the national 1-hour ozone standard. As a result, a revised OAP was prepared and adopted in October 2001. The 2001 Plan amends and supplements the 1999 Plan, and provides for attainment by 2006.

The 2001 Plan includes control strategies for stationary and mobile sources. Mobile source strategies encourage the retirement of older, more polluting technologies and the introduction of new, less polluting technology; these technological improvements in automobile engines and fuels, which are required by the CARB, have contributed and will continue to contribute the bulk of the quantifiable emission reductions from mobile sources. While CARB-required on-road

mobile source emission controls are estimated to decrease VOC and NO_x daily emissions by about 69.6 tons and 81.1 tons, respectively, between 2000 and 2006, the effectiveness of transportation control measures (TCMs) is measured in tenths or hundredths of a ton per day. In the 2001 Plan, TCMs are targeted to reduce VOC and NO_x emissions by 0.5 tons and 0.7 tons, respectively. TCMs include provision of programs and funding to help cities and non-profit agencies link transportation projects with community plans as well as provide for low emission buses and pedestrian/bicycle facilities. Most notably, the 2001 Plan indicates that the need to encourage compact, infill and transit-oriented development, which places housing, jobs, shops and services closer together and nearer to public transportation. Only then will walking, bicycling and transit become more attractive options for many daily trips, thereby reducing air pollutant emissions.

6.3.3 State Programs and Standards

California Clean Air Act

In 1988, California passed the California Clean Air Act (CCAA, California Health and Safety Code § 39600 *et seq.*) which, like its federal counterpart, called for designations of areas as attainment or non-attainment, based on state Ambient Air Quality Standards rather than federal or national standards. The Bay Area Air Basin attainment status with respect to state standards is summarized in Table 6-5. In general, this table indicates the Bay Area experiences low concentrations of most pollutants when compared to state standards, except for O_3 and particulate matter, for which standards are exceeded periodically.

State Ambient Air Quality Standards

The California Air Resources Board (CARB or ARB) is the state agency responsible for regulating air quality. ARB responsibilities include establishing State Ambient Air Quality Standards, emissions standards and regulations for mobile emissions sources (e.g., autos, trucks, etc.), and overseeing the efforts of county-wide and multi-county air pollution control districts, which have primary responsibility over stationary sources. The emission standards most relevant to proposed redevelopment are those related to automobiles, light- and medium-duty trucks, and California heavy-duty truck engines. The CARB also regulates vehicle fuels, with the intent to reduce emissions, and has set emission reduction performance requirements for gasoline (California reformulated gasoline), and limited the sulfur and aromatic content of diesel fuel to make it burn cleaner. The CARB also sets the standards used to pass or fail vehicles in smog check and heavy-duty truck inspection programs.

Bay Area Air Quality Management District

The Bay Area Air Quality Management District (BAAQMD) is the regional agency responsible for air quality regulation within the San Francisco Bay Area Air Basin. The BAAQMD regulates air quality through its planning and review activities. The BAAQMD has permit authority over most types of stationary emission sources and can require stationary sources to obtain permits, and can impose emission limits, set fuel or material specifications, or establish operational limits to reduce air emissions. The BAAQMD regulates new or expanding stationary sources of toxic air contaminants.

Clean Air Plan

For state air quality planning purposes, the Bay Area is classified by the CCAA as a *serious* non-attainment area for ozone. The *serious* classification triggers various plan submittal requirements and transportation performance standards. One such requirement is that the Bay Area update the Clean Air Plan (CAP) every three years to reflect progress in meeting the air quality standards and to incorporate new information regarding the feasibility of control measures and new emission inventory data. The Bay Area's record of progress in implementing previous measures must also be reviewed. The most recent draft revision to the CAP was completed in 2000. The *2000 CAP* applies control measures to stationary sources, mobile sources, and transportation control measures (TCMs). Although the *2000 CAP* is an ozone plan, it includes PM_{10} attainment planning as an informational item. The *2000 CAP* includes 19 TCMs, which were also included in the *1997 CAP*, and many of which were partially implemented during 1998 to 2000. The *2000 CAP* continues to implement and expand key mobile source programs included in the *1997 CAP*.

6.4 Impacts and Mitigation Measures

Significance Criteria

The Project would have a significant impact on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan. This criteria is further defined as:
    - Resulting in a fundamental conflict with the local general plan, when the general plan is consistent with the regional air quality plan. When the general plan fundamentally conflicts with the regional air quality plan, then if the contribution of the proposed project is cumulatively considerable when analyzed, the impacts to air quality should be considered significant.
    - Fundamentally conflict with the *Bay Area 2000 Clean Air Plan* (CAP), because population growth for the jurisdiction exceeds values in the CAP, based on population projections in ABAG's *Projections 2000*.
    - Fundamentally conflict with the CAP because the rate of increase in vehicle miles traveled (VMT) in the jurisdiction is greater than the rate of increase in population.
    - Fundamentally conflict with the CAP because the project does not demonstrate reasonable efforts to implement transportation control measures (TCMs) in the CAP.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Expose sensitive receptors to substantial pollutant concentrations;
- Contribute to CO concentrations exceeding the state ambient air quality standards of 9 ppm averaged over 8 hours and 20 ppm for 1 hour;

- Result in total emissions of ROG, NO_x, or PM_{10} of 15 tons per year or greater, or 80 pounds (36 kilograms) per day or greater (there is currently no quantitative significance threshold for $PM_{2.5}$);
- Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Result in a substantial increase in diesel emissions;
- Create objectionable odors affecting a substantial number of people;
- Result in potential to expose persons to substantial levels of toxic air contaminants (TACs), such that the probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 10 in one million; or
- Result in ground-level concentrations of non-carcinogenic toxic air contaminants such that the Hazard Index would be greater than 1 for the MEI.

6.4.1 Consistency with the *Clean Air Plan*

The projected population growth within the Project Area is consistent with the population projections contained in the City General Plan for the City overall, and may be facilitated by implementation of the Redevelopment Plan. This population growth and its associated increase in vehicle miles traveled (VMT) would be consistent with the *Clean Air Plan* (CAP) for the City overall and would *not result in a significant environmental effect.*

Discussion

According to the BAAQMD CEQA Guidelines (1999) the following criteria, as applied to the Project Area, can be satisfied such that the Redevelopment Plan can be determined to be consistent with the Clean Air Plan (CAP):

- Population growth in Oakland will not exceed the values included in the current CAP. Citywide population is estimated in ABAG's *Projections 2000* to increase approximately 11% for the period between years 2000 and 2020, which averages approximately 0.5% per year. Under the City General Plan, population growth for the City overall is estimated to average approximately 0.4% per year or 9% between 2000 and 2020. Since the *2000 CAP* is based on ABAG's *Projections 2000* population projections, population growth in the City overall would be less, and therefore consistent with, the *2000 CAP*.
- Within the Project Area the population is projected to increase by an average of approximately 1% per year between 2000 and 2020, with a total population increase over the 20-year period of approximately 21%. This growth in population may be facilitated by implementation of the Redevelopment Plan's projects, programs and other activities. This rate of growth would be more than the citywide population growth rate for the same period.

However, the higher population increase within the Project Area would be offset by lower growth rates in other areas of Oakland, such as the Central City East Redevelopment Area, where the population is estimated to increase by 0.2% per year or 4% over the same 20-year period. Although the growth rate would be higher in West Oakland than in other areas of the city, population growth within the Project Area would be consistent with the *2000 CAP*. Growth in West Oakland is part of the total citywide 20-year growth rate of 9% to 11%, which are both consistent with the *2000 CAP* and ABAG's population projections.

- The rate of increase in VMT (vehicles miles traveled) for Oakland is equal to or lower than the rate of increase in population. The increase in VMT attributable to growth and development within the Project Area is estimated to be 0.3% per year between 2000 and 2020. Since this increase in VMT is lower than the projected population growth rate for the Project Area and City overall (all between 0.4% and 1%), the Redevelopment Plan would be consistent with regional air quality planning. It would support planned attainment of air quality standards by allowing for population growth at a rate consistent with the CAP, but without a proportionate increase in vehicle use (as represented in vehicles miles traveled).

City General Plan Policies

Existing policies contained in the Open Space, Conservation, and Recreation (OSCAR) Element as well as the Land Use and Transportation Element (LUTE) would also help reduce potential regional and local air quality emissions by encouraging use of transit, alternative transportation modes, and sustainable development patterns. Future Redevelopment Plan implementation projects, programs and other activities will be required to be consistent with these General Plan policies, including the following:

Policy CO-12.1: *Promote land use patterns and densities which help improve regional air quality conditions by: a) minimizing dependence on single passenger autos; (b) promoting projects which minimize quick auto starts and stops, such as mixed use developments; (c) separating land uses which are sensitive to pollution from the sources of air pollution; and (d) supporting telecommuting, flexible work hours, and behavioral changes which reduce the percentage of people in Oakland who must drive to work on a daily basis.*

Policy CO-12.2: Maintain a coordinated bus, rail, and ferry transit system which provides efficient service to major destinations and promotes alternatives to the single passenger auto.

Policy CO-12.3: Expand existing transportation systems management and transportation demand management strategies which reduce congestion, vehicle idling, and travel in single-passenger autos.

Policy CO-12.4: Require that development projects be designed in a manner which reduces potential adverse air quality impacts. This may include: (a) the use of vegetation and landscaping to absorb carbon monoxide and to buffer sensitive receptors; (b) the use of low-polluting energy sources and energy conservation measures; and (c) designs which encourage transit use and facilitate bicycle pedestrian travel.

Policy CO-12.6: Require construction, demolition and grading practices which minimize dust emissions.

Policy CO-12.7: Coordinate local air quality planning efforts with other agencies, including adjoining cities and counties, and the public agencies responsible for monitoring and improving air quality. Cooperate with regional agencies such as the Bay Area Air Quality Management District (BAAQMD), the Metropolitan Transportation Commission (MTC), the Association of Bay Area Governments (ABAG), and the Alameda County Congestion Management Agency in developing and implementing regional air quality strategies. Continue to work with BAAQMD and the California Air Resources Board in enforcing the provisions of the State and Federal Clean Air Acts, including the monitoring of air pollutants on a regular and on-going basis.

Land Use and Transportation Element

Objective T2: Provide mixed use, transit-oriented development that encourages public transit use and increases pedestrian and bicycle trips at major transportation nodes.

Policy T2.2 Encouraging Transit-Oriented Development: Transit-oriented development should be encouraged at existing and proposed transit nodes, defined by the convergence of two or more modes of public transit such as BART, bus, shuttle service, light rail or electric trolley, ferry, and inter-city or commuter rail.

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

Policy T2.3 Promoting Neighborhood Services: Promote neighborhood-serving commercial development within one-quarter to one-half mile of established transit routes and nodes.

Policy T2.5 Linking Transportation and Activities: Link transportation facilities and infrastructure improvements to recreational uses, job centers, commercial nodes, and social services (i.e., hospitals, parks, or community centers).

Policy T3.2 Promoting Strategies to Address Congestion: The City should promote and participate in both local and regional strategies to manage traffic supply and demand where unacceptable levels of service exist or are forecast to exist.

Policy T3.6 Encouraging Transit: The City should encourage and promote use of public transit in Oakland by expediting the movement of and access to transit vehicles on designated "transit streets" as shown on the Transportation Plan.

Policy T3.7 Resolving Transportation Conflicts: The City, in constructing and maintaining its transportation infrastructure, should resolve any conflicts between public transit and single occupant vehicles in favor of the transportation mode that has the potential to provide the greatest mobility and access for people, rather than vehicles, giving due consideration to the environmental, public safety, economic development, health, and social equity impacts.

Policy T4.1 Incorporating Design Features for Alternative Travel: The City will require new development, rebuilding, or retrofit to incorporate design features in their projects that encourage use of alternative modes of transportation such as transit, bicycling, and walking.

Policy T4.2 *Creating Transportation Incentives: Through cooperation with other agencies, work to create incentives to encourage travelers to use alternative transportation options.*

Policy T4.3 *Reducing Transit Waiting Times: The City should encourage transit operators to reduce waiting times for users by coordinating schedules and maintaining intervals of fifteen (15) minutes or less between buses during peak daytime periods.*

Policy T4.4 *Developing Light Rail or Electric Trolley: The City supports the development of light rail or trolley bus along Regional Transit streets in high travel demand corridors.*

Policy T4.5 *Preparing a Bicycle and Pedestrian Master Plan: The City should prepare, adopt, and implement a Bicycle and Pedestrian Master Plan as a part of the Transportation Element of this General Plan.*

Policy T4.6 *Making Transportation Accessible for Everyone: Alternative modes of transportation should be accessible for all of Oakland's population. Including the elderly, disable, and disadvantaged.*

Policy T6.1 *Posting Maximum Speeds: Collector streets shall be posted at the lowest possible speed (usually a maximum speed of 25 miles per hour), except where a lower speed is dictated by safety and allowable by law.*

Policy T6.2 *Improving Streetscapes: The City should make major efforts to improve the visual quality of streetscapes. Design of the streetscape, particularly in neighborhoods and commercial centers, should be pedestrian-oriented and include lighting, directional sign, trees, benches, and other support facilities.*

Policy D3.1 *Promoting Pedestrians: Pedestrian-friendly commercial areas should be promoted.*

Policy D3.2 *Incorporating Parking Facilities: New parking facilities for cars and bicycles should be incorporated into the design of any project in a manner that encourages and promotes safe pedestrian activity.*

Policy N1.2 *Placing Public Transit Stops: The majority of commercial development should be accessible by public transit. Public transit stops should be placed at strategic locations in Neighborhood Activity Centers and Transit-oriented Districts to promote browsing and shopping by transit users.*

6.4.2 Consistency with *Clean Air Plan's* Transportation Control Measures (TCMs)

The objectives and policies of the Land Use and Transportation Element (LUTE) were determined to be consistent with the objectives and Transportation Control Measures (TCMs) as outlined in the CAP.[3] Because the Redevelopment Plan would be consistent with the LUTE, and the LUTE is consistent with the CAP, the Redevelopment Plan would be consistent with the CAP and this would *not be an environmental impact* of the Project.

Discussion

The Redevelopment Plan would be consistent with pertinent TCMs outlined in the *2000 CAP*. The Redevelopment Plan could facilitate development of the planned West Oakland Transit Village. This transit village would encourage new growth in proximity to the West Oakland BART station, which is consistent with TCMs 13 and 15 of the *2000 CAP*. These TCMs encourage incentives to increase transit use and programs to reduce the number and length of single-occupant automobile trips. The Redevelopment Plan encourages higher density development and mixed use development in the vicinity of the West Oakland BART station, which helps promote the use of public transit. The proximity of residential and commercial uses also helps to reduce shopping-related auto trips. In general, high-density development tends to encourage the use of public transit while increasing the proximity of housing to jobs and other destinations can encourage other modes of transportation such as bicycling and walking.

As noted in the *Oakland General Plan Land Use and Transportation Element Draft EIR,* the "Transit First" resolution (passed by the City Council on October 29,1996) is reflected in the adopted policies of that General Plan Element. The Land Use and Transportation Element is consistent with the *Clean Air Plan* objectives and TCMs.

In addition, the Bicycle Master Plan (City of Oakland, July 20, 1999), which is a part of the LUTE, encourages bicycle commuting to help reduce traffic congestion and air pollution. A key objective of the Bicycle Master Plan is to increase the bicycle commute mode share to four-percent (6,406 daily bicycle commuters based on 1990 employment levels) by 2010. These bicyclists will save an estimated 2.6 million vehicle trips and 9 million vehicle miles per year. According to the Master Plan, the estimated air quality benefit of these future bicycle commuters is a daily reduction of about 425 tons of particulate matter (PM_{10}), 1,225 tons of NO_x, and 1,783 tons of ROG.

Since the policies of the LUTE, including the Bicycle Master Plan, would be implemented pursuant to any implementation projects, programs and other activities of the Redevelopment Plan, the proposed redevelopment Plan would be consistent with *Clean Air Plan's* TCMs.

[3] This determination is discussed in detail on pages III.E-17 through III.E-20 in the *Oakland General Plan Land Use and Transportation Element Draft EIR* (Environmental Science Associates, 1997).

6.4.3 Effect of Project Emissions on Regional Air Quality

Traffic increases associated with growth and development within the Project Area, as may be facilitated through implementation of the Redevelopment Plan, would not significantly degrade regional air quality. Project-related emissions increases would not exceed BAAQMD project-specific significance thresholds for reactive organic gases (ROG), NOx, and PM_{10}, and therefore, would not significantly contribute to recent exceedances of applicable state PM_{10} standards in the region. This would be a *less than significant impact* of the Project.

Discussion

Traffic increases associated with projected growth and development within the Project Area would not significantly degrade regional air quality. As indicated under Section 6.4.1, the VMT growth rate associated with the Project would be 0.3% per year between 2000 and 2020. This increase in VMT is estimated to result in a total daily increase of approximately 75,000 vehicle miles. The daily incremental increase in mobile source emissions associated with this increase in vehicle miles traveled is presented in **Table 6-6**. As shown in Table 6-6, emissions increases attributable to growth and development within the Project Area would not exceed BAAQMD project-specific significance thresholds for reactive organic gases (ROG) and NOx. The BAAQMD threshold for PM_{10} would be approached but not exceeded.

Table 6-6: Estimated Daily Regional Emissions, 2005 and 2020

	Projected Emissions (Pounds per Day)				
	ROG	**NO_X**	**CO**	**SO_X**	**PM-10**
2005	168.8	122.9	1498.0	1.0	79.8
2020	79.9	65.7	747.1	0.6	79.7
BAAQMD Threshold	80	80	-	-	80

SOURCE: Orion Environmental Associates (2003)

This table also compares daily emissions associated with projected growth and development within the Project Area by year 2020, and compares them to emissions levels that would result if this growth and development were to occur by the year 2005. This scenario is presented for comparison purposes only since Project buildout would not occur by year 2005. Although population projections for the proposed Plan estimate that full buildout would not be achieved until 2025, the year 2020 analysis presents more of a conservative, worst-case analysis under CEQA. This comparison demonstrates that under current emission rates, the project's regional emissions would be significant. However, projected emissions would decrease to below the 80-pounds per day threshold by 2020 due to improvements in the overall automobile fleet, attrition of older, high polluting vehicles, and improved fuel mixtures (as a result of on-going state and federal emissions standards and programs for on-road motor vehicles). Since full buildout is not likely to be achieved until 2025, it is more likely that the 80-pounds per day threshold would not be exceeded and would have a *less than significant* impact on regional air quality.

It should also be noted that emissions increases from projected growth and development within the Project Area might be less than would result if this growth occurred in outlying areas of the air basin (where trip lengths would be longer). Future growth as may be facilitated by implementation of the Redevelopment Plan would be infill development anticipated to provide new housing near transit corridors, new jobs near existing housing, and new housing near existing jobs (i.e., "smart growth"). It is also anticipated that as traffic congestion problems worsen in the region and travel times get longer, people will need to shorten their commute distance in order to maintain the same travel time as they have today. These factors, in addition to some increase in transit use, would tend to reduce trip lengths in the future.

6.4.4 Effect of Project Emissions on Local Air Quality

Traffic generated by projected growth and development within the Project Area would not significantly increase CO emissions along roadways and at intersections within the Project Area or its vicinity. This would be a *less than significant effect* of the Project.

Discussion

A micro-scale CO impact analysis was conducted at 11 study intersections distributed throughout the Project Area and its vicinity. These are 11 of the 48 intersections analyzed for traffic impacts in Chapter 5:Traffic and Circulation. Service level operations (used as an indicator of travel speed) were calculated as part of the transportation analysis. The 11 selected intersections were those where service levels changed by one service level as a result of Plan-related traffic increases or those that operated at LOS D, E, or F under existing or future conditions. A Caltrans screening approach, which is based on the CALINE4 model, was used to estimate CO concentrations along these roadway links (Caltrans, 1988). Carbon monoxide concentrations were calculated at a distance of 25 feet from the edge of each roadway to determine potential impacts based on worst-case conditions (peak hour traffic and theoretical minimum atmospheric mixing).

Table 6-7 compares the one-hour and eight-hour CO exposures for existing (2003) and future (2025) conditions without and with the growth and development projected for the Project Area. Significance of localized CO emissions from mobile sources are determined by modeling the ambient CO concentration under existing and future conditions, and comparing the resulting one-hour and eight-hour concentrations, both without and with the proposed Project, to the respective state and federal CO standards. A detailed impact analysis using the BAAQMD screening model indicates that the state and federal one-hour ambient standards for CO would not be violated at study intersections during worst-case atmospheric conditions (wintertime conditions when CO concentrations are typically greatest). Modeling results indicate that CO concentrations will decrease in the future due to attrition of older, high polluting vehicles, improvements in the overall automobile fleet, and improved fuel mixtures (as a result of on-going state and federal emissions standards and programs for on-road motor vehicles).

Table 6-7: Estimated Worst-Case Existing and Future CO Concentrations at Selected Intersections

Intersection	Averaging Period	Existing	Existing + Plan	Future Baseline (2025)	Future + Plan
(1) San Pablo Ave./40th St.	1 Hour	6.4	6.5	5.2	5.2
	8 Hour	5.1	5.1	3.9	3.9
(2) San Pablo Ave./Adeline St.	1 Hour	6.5	6.6	5.2	5.3
	8 Hour	5.1	5.2	3.9	4.0
(3) Market St./W. MacArthur Blvd.	1 Hour	5.8	5.9	4.9	4.9
	8 Hour	4.7	4.8	3.7	3.7
(4) Peralta St./26th St.	1 Hour	5.1	5.1	4.3	4.4
	8 Hour	4.3	4.3	3.4	3.4
(5) San Pablo Ave./27th St.	1 Hour	6.0	6.1	4.9	5.0
	8 Hour	4.8	4.9	3.7	3.8
(6) Maritime St./W. Grand Ave.	1 Hour	5.8	5.8	5.3	5.3
	8 Hour	4.7	4.7	4.0	4.0
(7) I-880 Frontage Rd./W. Grand Ave.	1 Hour	6.1	6.2	5.3	5.4
	8 Hour	4.9	5.0	4.0	4.0
(8) Mandela Pkwy./W. Grande Ave.	1 Hour	5.7	5.8	5.0	5.0
	8 Hour	4.7	4.7	3.8	3.8
(9) Adeline St./14th St.	1 Hour	5.4	5.5	4.7	4.8
	8 Hour	4.5	4.5	3.6	3.7
(10) Mandela Pkwy./7th St.	1 Hour	5.4	5.6	4.5	4.6
	8 Hour	4.5	4.6	3.5	3.6
(11) Market St./3rd St.	1 Hour	5.0	5.0	4.4	4.4
	8 Hour	4.2	4.2	3.4	3.4
Background Levels (included in above numbers	1 Hour	4.6	4.6	4.0	4.0
	8 Hour	3.6	3.6	3.2	3.2
State CO Standard	1 Hour	20 ppm	20 ppm	20 ppm	20 ppm
	8 Hour	9.0 ppm	9.0 ppm	9.0 ppm	9.0 ppm
Federal CO Standard	1 Hour	35 ppm	35 ppm	35 ppm	35 ppm
	8 Hour	9 ppm	9 ppm	9 ppm	9 ppm

NOTE: The "Existing" and "Future" scenarios are based on existing (2003) and future (2025) traffic volumes presented in the Traffic section of this report.

SOURCE: Orion Environmental Associates (2003)

6.4.5 Emissions Generated by Construction Activities

Potential Impact 6.4.5: Construction Emissions. Construction associated with the Redevelopment Plan's implementation projects, programs and other activities within the Project Area would generate dust (including the respirable fraction known as PM_{10}) and combustion emissions. These emissions would be a *potentially significant effect* of the Project.

Discussion

Dust Emissions

Potential dust emissions that may be associated with future implementation of the redevelopment Plan's projects, programs and other activities within the Project Area would be specific to each site. The BAAQMD does not require quantification of construction emissions (BAAQMD, 1999) but considers any project's construction-related impacts to be adequately mitigated if required dust-control measures are implemented. The extent of dust-control measures required by the BAAQMD depends on the size of the project. Since most construction projects would comprise less than one city block (approximately two acres or less), implementation of the BAAQMD's standard dust control procedures would maintain Project construction-related impacts at acceptable levels.

Combustion Emissions

Combustion emissions from construction equipment and vehicles, such as heavy equipment and delivery/haul trucks, air compressors, and generators, may result due to implementation of the Redevelopment Plan's projects, programs and other activities during construction activity. Construction employee vehicles would also result in air pollutant emissions, but the levels would be negligible compared to emissions from on-site heavy equipment and from transport trucks. Equipment exhaust contains both pulmonary irritants and hazardous compounds, which may affect sensitive receptors such as young children, senior citizens, or those susceptible to respiratory disease. Where construction occurs in proximity to residential uses, there may be a potential for unhealthful exposure of sensitive receptors to equipment exhaust.

Similar to dust emissions, the equipment activity level would be related to the project size and extent of earthmoving requirements in site preparation. Emission levels for construction activities would vary depending on the type of equipment, duration of use, operation schedules, and the number of construction workers. Air pollution emissions from construction activity were calculated for a prototype project with a two-acre disturbance "footprint" requiring 200 workdays to complete major construction. Equipment utilization was estimated based on the California Air Resources Board (ARB) area source emissions factor of 300,000 Brake-Horsepower-Hours (BHP-HR) per acre of residential/commercial development. Emissions from average daily construction activity are shown in **Table 6-8**.

This table indicates that although these emissions, in combination with other existing emissions sources, would temporarily contribute to local air quality degradation, the emissions associated with most future development projects pursuant to implementation of the Redevelopment Plan within the Project Area would be less than significant. Short-term construction emissions for a

single prototype project (two acres or less) within the Project Area would typically not exceed BAAQMD significance thresholds, although these thresholds apply to operational, not construction emissions. However, NO_x and PM_{10} thresholds could be exceeded with development of a project that covers an area larger than two acres, or simultaneous development of more than one future project.

Table 6-8: Average Daily Construction Activity Air Pollution Emissions

	Daily Emissions (pounds/day)				
Activity	**CO**	**ROG**	**NOx**	**Sox**	**PM10**
Soil Disturbance[a]					51.0
Equipment Operations[b]	5.7	1.8	25.8	1.8	0.9
Employee Commuting[c]	40.6	3.3	5.7	negl.	1.8
Truck Hauling[d]	16.8	2.4	27.1	3.4	57.0
TOTAL	63.1	7.5	58.6	5.3	58.8
BAAQMD Threshold	n/a	80	80	n/a	80

	Emissions Factors					
Activity	**CO**	**ROG**	**NOx**	**SOx**	**PM10**	**Source**
Soil Disturbance (pounds/acre/day)					51.0	BAAQMD
Equipment Operations (pounds/1,000 BHP-HR)	1.9	0.6	8.6	0.6	0.3	SCAQMD
Employee Commuting (grams/mile)	9.2	0.7	1.3	negl.	0.4	BAAQMD
Truck Hauling (grams/mile)	7.6	1.1	12.3	0.7	0.7	EMFAC7G

Notes: Emissions based on two-acre building footprint and 200 days for construction. Equipment utilization was estimated based on the California Air Resources Board (ARB) area source emissions factor of 300,000 Brake-Horsepower-Hours (BHP-HR) per acre of residential/commercial development.

[a] 2 acres x 51 lbs/acre/day x 50% for use of "standard" dust control measures.
[b] 2 acres x 300,000 BHP-HR/acre ÷ 200 days = 3,000 BHP-HR/day
[c] 50 employees x 40 miles
[d] 20 trucks x 50 miles
BAAQMD: Bay Area Air Quality Management District, 1999.
SCAQMD: South Coast Air Quality Management District, 1993.
EMFAC7G: California Vehicle Emission Computer Model

SOURCE: Orion Environmental Associates, 2003.

Mitigation Measures

The mitigation measures set forth below are intended to address construction-related air quality impacts that may be associated with implementation of the Redevelopment Plan's projects, programs and other activities within the Project Area.

- **Mitigation Measure 6.4.5: Construction Emission Controls.** Contractors for future development projects pursuant to implementation of the Redevelopment Plan shall implement BAAQMD dust control and exhaust emission measures as outlined in BAAQMD *CEQA Guidelines* (1999) or any subsequent applicable BAAQMD updates. These measures include the following:

  Basic Control Measures

  The following Basic Control Measures shall be implemented at all construction sites:

  - Water all active construction areas at least twice daily.
  - Cover all trucks hauling soil, sand, and other loose debris *or* require all trucks to maintain at least two feet of freeboard.
  - Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
  - Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
  - Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

  Enhanced Control Measures

  In addition to the above, the following Enhanced Control Measures shall be implemented at all construction sites when more than four acres are under construction at any one time:

  - Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
  - Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
  - Limit traffic speeds on unpaved roads to 15 mph.
  - Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
  - Replant vegetation in disturbed areas as quickly as possible.

  Exhaust Emission Control Measures

  In addition to the above dust control measures, the following exhaust emission control measures shall be implemented at all construction sites:

  - Use alternative fueled construction equipment.
  - Minimize idling time (e.g., five-minute maximum).
  - Maintain properly tuned equipment.

- Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use.

Resulting Level of Significance:

Implementation of adopted Policy CO-12.6 from the OSCAR Element would help reduce short-term emissions associated with future construction activity pursuant to implementation of the Redevelopment Plan within the Project Area. In addition, the measures recommended above would ensure that construction-related dust impacts are minimized to a *less than significant level*.

6.4.6 Compatibility of Project-Related Population Increases

Potential Impact 6.4.6: Projected population growth in the Project Area would increase more than projected citywide growth. This disproportionate increase could result in more residents being located in proximity to pollutant emission and odor sources, which could increase land use compatibility problems. Such land use conflicts would be an *unavoidable, significant impact* of the Project.

Discussion

As indicated in Impact 6.4.1, population growth in the Project Area is estimated at 21% between 2000 and 2020, while citywide growth is estimated at 9% to 11% for the same period. In year 2000, the population of the Project Area was 20,300, which was 5.1% of the City's total population. By 2020, the population of the Project Area is estimated to reach 24,500, which comprises 5.4% to 5.7% of the estimated total citywide population of 433,334 to 442,800. This disproportionate increase could result in slightly more new residents being located in proximity to existing pollutant emission and odor sources such as three freeways (I-880, I-580, and I-980), arterial streets (including San Pablo, West Grand Avenue, Mandela Parkway, and 7th Street), railroad operations, port facilities, industrial facilities (e.g., food and fabricated metal industries), and ancillary maritime support uses (generating truck traffic).

The discussions under Impacts 6.4.3 and 6.4.4 have demonstrated that future residents of the Project Area would not be subject to unhealthful regional and local air quality associated with Project-related traffic since projected traffic emissions increases would not exceed state and federal standards. Identified toxic air contaminant levels also would not exceed the above significance criteria. However, increasing the number of residential receptors in proximity to existing toxic air contaminants, pollutant, and odor emission sources would increase the potential for future land use conflicts.

The BAAQMD (1999) identifies several types of land use conflicts that should be avoided: location of sensitive receptors in proximity to congested intersections, busy roadways, sources of toxic air contaminants, or sources of odorous emissions. Often provision of an adequate distance, or buffer zone, between the source of emissions and the receptor(s) is necessary to mitigate the problem. In addition, the BAAQMD notes that infill or mixed-use projects, while reducing auto trips, could result in localized health or nuisance impacts on sensitive receptors if they are located near sources of odors or toxic air contaminants.

City Ordinances, Policies and Approved Mitigation Programs

The City of Oakland implements two ordinances that help and will continue to help reduce these potential land use conflicts. Sections 10.52.060 and 10.52.120 of the Oakland Traffic Code prohibit trucks (vehicles over 4.5 tons) from specific street segments and establish truck routes on other roads (see Chapter 5: Traffic and Circulation of this DEIR, Figure 5-3). Most existing prohibitions are within the Prescott neighborhood, which contains a mixture of residential uses and commercial/industrial businesses that generate truck traffic (City of Oakland, 1998). In addition, the City of Oakland's S-16 Industrial-Residential Transition Combining Zone (Ordinance 17.102.380) will eventually reduce ancillary maritime support uses within the Project Area, and many of these uses may relocate to the OARB Redevelopment Area (see also further discussions of this issue in Chapter 4: Land Use and Chapter 5:Traffic and Circulation).

In addition to these ordinances, the Port of Oakland is implementing the Vision 2000 Air Quality Mitigation Program (AQMP), a program to mitigate the potential air quality impacts of the Port's Vision 2000 Program. The AQMP projects are intended to reduce emissions from a variety of maritime and other local sources. These sources include, for example, construction activities, tugboats, cargo-handling equipment, trucks, public buses, other vehicles, and local stationary sources. Phases I and II were complete as of April 2002. Phase III will be complete by October 2003, while Phase IV is scheduled to be completed by April 2005. Program measures include the following:

> *Mitigation Measures 3.3-3/M1, M1A, M2, M3, and M4: The Port will subsidize retrofit of diesel truck engines, diesel cargo-handling equipment (at existing container yards), one diesel tugboat (as a demonstration project), and diesel bus engines (buses operating in the West Oakland, Emeryville, and Alameda areas) with new engines meeting California emission standards for new diesel engines, or add-on exhaust treatment devices, including soot traps and catalytic converters.*
>
> *Mitigation Measure 3.3-3/M5: When the new Joint Intermodal Terminal (JIT) is built, the Port will request the operator of [train] switch engines operating at the terminal to use engines that meet the requirements of the recently promulgated federal regulation limiting locomotive emissions. Implementation of this measure will require that the allocation of switching locomotives with new or rebuilt engines take into account the desire of the Port to minimize emissions related to switching activities.*
>
> *Mitigation Measures 3.3-3/M6.1 through 6.10: These measures include a suite of ten measures to be incorporated into the design and operation of new facilities. The measures include, for example, electric connections so that tugs at Berth 59 can "cold iron" while berthed, subsidized 24-hour truck parking facilities in the maritime area, and encouraging employees and tenants to use alternative transportation on "Spare the Air' days called by the BAAQMD.*
>
> *Mitigation Measure 3.3-3/M7: The Port will subsidize an engineering study to determine whether cost-effective measures exist to reduce ROG emissions from the Red Star Yeast facility in West Oakland, and if cost-effective, subsidize such measures.*
>
> *Mitigation Measure 3.3-3/M8: The Port will subsidize an engineering study and control measures to reduce ROG emissions from the Precision Cast facility in West Oakland.*
>
> *Mitigation Measure 3.3-3/M9: Work with the CARB to determine the feasibility and potential benefits of establishing a heavy-duty diesel truck emissions testing station in the Port area.*

Related Measures and Monitoring Programs. During construction of the Vision 2000 projects, the Port also committed to implement thirteen dust control measures (BAAQMD basic, enhanced, and optional dust control measures); construction-related equipment engine emissions controls (including equipment tune up and use of California low-sulfur, low-aromatic diesel fuel in equipment that is not required under state law to use low-sulfur diesel); and encourage carpooling among construction workers, especially on BAAQMD "Spare the Air" days.

The Port continues to implement an air quality and meteorological monitoring program to measure the levels of particulate matter (PM_{10} and $PM_{2.5}$) in West Oakland. The objective of the program is to characterize the existing particulate air quality conditions in the West Oakland region and to provide baseline, as well as ongoing, data on particulate air pollution prior to and during the construction and operation of the Port's maritime development projects. A summary of the monitoring data collected as part of this program is listed in Table 6-3.

In addition to the Vision 2000 AQMP, the Port is required to implement the following Criteria Pollutant Reduction Program as part of implementation of the OARB Reuse Plan. The Criteria Pollutant Reduction Program is aimed at reducing or offsetting Port-related emissions in West Oakland from its maritime and rail operations. The program shall be sufficiently funded to reduce and/or offset OARB Redevelopment-related contributions to local West Oakland air quality to the maximum extent feasible. Program elements are as follows:

> *This program shall be periodically reviewed and updated every one to three years, corresponding to regular updates of the Clean Air Plan. The review and update shall include a reassessment of funding requirements, technical feasibility, cost benefit assumptions and other factors. The periodic updates shall be submitted to the City/Port Liaison Committee or its equivalent.*
>
> *The pollutant reduction program shall give priority to emission reduction strategies that address PM_{10} emissions, but shall also provide for reductions in NO_x and ROG emissions. The emission reduction program shall include a list of potential emission reduction strategies. Strategies that shall be included in the program and implemented over the buildout period include:*
>
> *The Port shall expand its existing cargo handling equipment re-powering and retrofitting program (part of the Berths 55-58 Project air quality mitigation program) to include marine and rail terminal yard equipment added or relocated as part of redevelopment build-out.*
>
> *The Port shall extend its grant program (part of the Berths 55-58 Project air quality mitigation program) to provide financial incentives to tugboat operators at New Berth 21 and other Port facilities to implement emission reduction control measures or to replace tugboat engines to low NO_x technology.*
>
> *The Port shall require rail terminal operators to use switch engines at the New Intermodal Facility that comply with federal air emission regulations for diesel operated locomotives as set forth in federal air regulations. In addition, the rail terminal operator and the Port are to exchange information with the goal of investigating options to accelerate compliance with Tier 0, 1 and 2 requirements of the federal regulations.*
>
> *The Port shall not preclude in its design of the New Intermodal Facility the installation of an alternative fueling station and shall to the extent feasible accommodate such a fueling station.*

The Port shall encourage ships to implement source control technologies when in the port area (such as reduced hoteling).

When technically and economically feasible, include an alternative fueling facility at the New Intermodal Facility (OARB EIR, City of Oakland 2002).

Mitigation Measures

The mitigation measures set forth below are intended to address potentially significant land use conflicts that could arise with implementation of the Redevelopment Plan's projects, programs and other activities within the Project Area.

- **Mitigation Measure 6.4.6A:** Major new development projects pursuant to or in furtherance of the Redevelopment Plan shall fund on a fair share basis (as appropriate) some or all of the following BAAQMD-recommended feasible Transportation Control Measures (TCMs) for reducing vehicle emissions from commercial, institutional, and industrial operations. Alternatively, at the Redevelopment Agency's sole discretion, redevelopment funds could potentially be used to subsidize these fair-share funding contributions or to implements these measures.

  a) Construct transit facilities such as bus turnouts/bus bulbs, benches, shelters, etc. Improve transit bus service within the Project area.

  b) Design and locate buildings to facilitate transit access, e.g., locate building entrances near transit stops, eliminate building setbacks, etc.

  c) Provide shuttle service between the West Oakland BART station and any future major employers or high-density residential developments.

  d) Encourage future business uses to use car pools, vanpools, and public transit by providing incentives.

  e) Provide on-site shops or provide convenience services (i.e., cafeteria, bank, dry cleaners, convenience market, etc.) nearby for employees.

  f) Provide on-site childcare, or contribute to off-site childcare within walking distance.

  g) Establish mid-day shuttle service from worksites to food service establishments/ commercial areas.

  h) Provide preferential parking for carpool and vanpool vehicles.

  i) Implement parking fees for single occupancy vehicle commuters.

  j) Provide secure, weather-protected bicycle parking for employees.

  k) Provide safe, direct access for bicyclists to adjacent bicycle routes.

  l) Provide showers and lockers for employees bicycling or walking to work.

m) Provide direct, safe, attractive pedestrian access between new developments and transit stops.

n) Provide neighborhood-serving shops and services within or adjacent to residential areas.

- **Mitigation Measure 6.4.6B.** Major new development projects pursuant to or in furtherance of the Redevelopment Plan shall fund on a fair share basis (as appropriate) some or all of the following *Clean Air Plan's* transportation control measures. These measures have been identified by the BAAQMD as appropriate for local implementation. Alternatively, at the Redevelopment Agency's sole discretion, redevelopment funds could potentially be used to subsidize these fair-share funding contributions or to implements these measures.

  a) Support Voluntary Employer-Based Trip Reduction Programs: Promote transit use and support employer-based trip reduction programs through development incentives such as density bonuses, reduced parking requirements, incentives for permanent bicycle facilities, etc. Encourage development of transit transfer stations near employment concentrations.

  b) Improve Bicycle Access and Facilities: Encourage employers and developers to provide permanent bicycle facilities.

  c) Improve Arterial Traffic Management. Improve roadways and intersections to operate at City-standard LOS, to facilitate traffic flow and avoid unnecessary queuing.

  d) Local Clean Air Plans, Policies and Programs: Redevelopment projects should incorporate measures that reduce the number and length of single-occupant automobile trips.

  e) Conduct Demonstration Projects: Using development incentives, encourage implementation of demonstration projects for low emission vehicle fleets and LEV refueling infrastructure.

  f) Pedestrian Travel: Promote development patterns that encourage walking and circulation policies that emphasize pedestrian travel; modify the zoning ordinance to include pedestrian-friendly design standards.

  g) Promote Traffic Calming Measures: Redevelopment will include traffic calming measures to the extent appropriate, consistent with the General Plan and sound traffic management of the project area.

  These transportation control measures shall be coordinated with transportation demand management (TDM) measures listed under Mitigation Measure 6.4.6A as well as similar measures to be implemented pursuant to the *OARB Reuse Plan*.

- **Mitigation Measure 6.4.6C: Upgraded Ventilation Systems.** Future residential development within the Project Area shall be developed with upgraded ventilation systems to minimize exposure of future residents to odors and pollutant emissions. In addition, future

development should limit outdoor use areas where these uses are located in proximity to emission sources.

Resulting Level of Significance:

Implementation of adopted city ordinances, the Vision 2000 AQMP, the Port's Criteria Pollutant Reduction Program, and the above mitigation measure would help reduce the potential for land use conflicts arising from air pollutant emission sources. However, since the cumulative near-Port (local) emissions associated with the Vision 2000 Program could not be mitigated to a *less than significant* level, the exposure of new Project-related residents to regional air quality (with the Vision 2000 Program implemented) would also be *significant and unavoidable*. However, it should be noted that the entire air basin, not just the Project Area, would share this significant and unavoidable impact.

6.4.7 Compatibility of Planned West Oakland Transit Village

Implementation of the Redevelopment Plan would facilitate development of the West Oakland Transit Village. Development of residential and commercial uses at the West Oakland BART station and its vicinity could have exposed future residents, employees, and customers to odor and acetaldehyde emissions associated with the Red Star Yeast facility, had the owners of that facility not permanently ceased production in April of 2003. However, since the plant has been shut down, the air pollution from the plant will not be produced and the potential exposure to odor and acetaldehyde emissions from the Red Star Yeast plant would *not be identified as an environmental impact.*

Discussion

The BAAQMD (1999) identifies several types of land use conflicts that should be avoided: location of sensitive receptors in proximity to congested intersections, busy roadways, sources of toxic air contaminants, or sources of odorous emissions. Often provision of an adequate distance, or buffer zone, between the source of emissions and the receptor(s) is necessary to mitigate the problem. In addition, the BAAQMD notes that infill or mixed-use projects, while reducing auto trips, could result in localized health or nuisance impacts on sensitive receptors if they are located near sources of odors or toxic air contaminants. Planned development of a transit village at the West Oakland BART station would have been inconsistent with these BAAQMD CEQA guidelines had the Red Star Yeast facility not closed down.

The Concept Plan for the West Oakland Transit Village indicates that Primary Opportunity Sites that are designated for apartments with some ground floor retail are located north of now-closed the Red Star Yeast factory. The existing BART tracks separate these opportunity sites from that prior facility, as shown in **Figure 6-1.**

Figure 6-1

Primary Opportunity Site 4, designated for apartments and ground floor retail is located west of the prior Red Star Yeast facility. Mandela Parkway separates this opportunity site from that facility. As indicated in Figure 6-1, Opportunity Sites O.S.2 and O.S.3 are located in areas that would have had predicted concentrations of 2.7 to 12.5 $\mu g/m^3$ of acetaldehyde emissions, while Opportunity Site 4 would have been subject to concentrations as high as 8.6 $\mu g/m^3$. The excess cancer risk[4] for a person exposed to 1 $\mu g/m^3$ of acetaldehyde outdoors for 24 hours per day, 365 days per year, for 70 years, is 2.7 per million (CAPCOA, 1993). Future transit village residents would have been subject to excess cancer risks of 7 to 34 in one million, depending on their proximity to the Red Star/LaSaffre facility. These residents would have also been subject to objectionable odors emitted by this facility.

However, the LeSaffre Yeast Corporation decided to close this facility as of April 2003. This decision was likely made in response to mounting public pressure from the Coalition for West Oakland Revitalization (CWOR), the Chester Street Block Club and other community groups supported by research conducted by the Pacific Institute, as well as anticipated regulatory changes that would have required substantial emission reductions. Given that this facility is no longer in operation, the planned development of a transit village at the West Oakland BART station is no longer inconsistent with BAAQMD CEQA guidelines regarding land use compatibility with sources of toxic air contaminants or sources of odorous emissions.

6.4.8 Effects of Cumulative Development on Regional and Local Air Quality

Cumulative Impact 6.4.8: Implementation of the Redevelopment Plan, in conjunction with the Port's Vision 2000 Program and the adjacent OARB Area Redevelopment Project would cumulatively exceed BAAQMD significance criteria for NO_x and PM_{10}. These cumulative emissions would be an *unavoidable, significant cumulative impact.*

Discussion

NOx and PM10

As indicated in Impact 6.4.3 above, Project-related traffic increases would not significantly degrade regional air quality. However, when Project-related increases (2020) are considered with near-Port emissions associated with the Port's Vision 2000 Program, cumulative emissions would exceed BAAQMD project-specific significance thresholds for NO_x and PM_{10}. Since near-Port cumulative emissions would be *potentially significant*, the Project's contribution to cumulative impacts is also considered significant. **Table 6-9** presents local emissions increases

[4] For TACs that are known or suspected carcinogens, the CARB has consistently found there are no levels or thresholds below which exposure is risk free. Where data are sufficient to do so, a "unit risk factor" and average lifetime exposure combine to estimate cancer risk. The unit risk factor expresses assumed risk to a hypothetical population in terms of the estimated number of individuals in a million who may develop cancer as the result of continuous, lifetime (70-year) exposure to 1 microgram per cubic meter ($\mu g/m^3$) (equal to one part per million) of the TAC. Unit risk factors provide a standard that can be used to establish regulatory thresholds for permitting purposes. However, they are not a measure of actual health risk because actual populations do not experience the extent and duration of exposure that the hypothetical population is assumed to experience (OARB, 2002).

attributable to growth and development within the Project Area as well as probable future projects associated with the Port's Vision 2000 Program that are expected to be completed by 2010. Near-port (local) cumulative increases would significantly contribute to recent exceedances of applicable state PM_{10} standards in the region.

Table 6-9: Estimated Daily Near-Port Cumulative Emissions, 2020

	Projected Emissions (Pounds per Day)		
	NO_X	**SO_X**	**PM-10**
Project Emissions	65.7	0.6	79.7
Probable Port Projects	2,772	1,745	417
Cumulative Total	2,838	1,746	497
BAAQMD Threshold	80	- -	80

NOTES: Probable Port projects are those that the Port anticipates will be completed by 2010 and they include the Joint Intermodal Terminal Project, Berths 55-58, -50 Dredge Projects, Port roadway improvements, and new Berth 21. Since this analysis examines planning year 2020, the 2010 Port-related near-port emissions have been adjusted to reflect 2020 emissions rates. However, any Port projects planned between 2010 and 2020 are not included in these estimates.

SOURCE (Port Projects): Port of Oakland (1999)

CO

As indicated in Table 6-7, traffic generated by projected growth and development within the Project Area would not significantly increase CO emissions along roadways and at intersections within the Project Area or its vicinity. Combined CO emissions associated with project emissions in conjunction with cumulative development in the region are presented in Table 6-7 under "Future + Plan" for 2025. Estimated cumulative emissions listed in this table indicate that the state and federal one-hour ambient standards for CO would not be violated at study intersections during worst-case atmospheric conditions (wintertime conditions when CO concentrations are typically greatest). In addition, CO concentrations will continue to decrease in the future due to attrition of older, high polluting vehicles, improvements in the overall automobile fleet, and improved fuel mixtures (as a result of on-going state and federal emissions standards and programs for on-road motor vehicles). Since cumulative CO levels would not exceed CO ambient air quality standards, cumulative impacts at local intersections would be *less than significant.*

Mitigation Measures

As indicated in Table 6-9, most of the cumulative emissions in the Project Area can be attributed to Port-related projects. The Port of Oakland is implementing the Vision 2000 AQMP, a program to mitigate the potential air quality impacts of the Port's Vision 2000 Program. The primary components of the AQMP are summarized under Impact 6.4.6 above.

Potential Benefits of Redevelopment

While the Project-related emissions would be less than significant when considered alone, they would contribute to significant cumulative emissions in the area. Implementation of the Redevelopment Plan's projects, programs and other activities within the Project Area would include the West Oakland Transit Village, which is a project that would increase use of transit, thereby reducing traffic-related emissions. In addition, existing policies contained in the Open Space, Conservation, and Recreation Element as well as the Land Use and Transportation Element would also help reduce potential regional and local air quality emissions by encouraging use of transit, alternative transportation modes, and sustainable development patterns. These policies are listed under Impact 6.1 above. Future Redevelopment Plan implementation projects, programs and other activities will be required to be consistent with these General Plan policies, which would help to reduce project-related emissions.

Resulting Level of Significance

Implementation of adopted city general plan policies and the Vision 2000 AQMP would help reduce projected emissions from Port activities as well as the project. However, emissions reductions resulting from the Vision 2000 AQMP would not be sufficient to reduce cumulative near-port (local) emissions to a *less than significant* level. Therefore, the cumulative impact on near-port (local) air quality would be *significant and unavoidable*.

7

Noise

7.1 Introduction

This chapter of the EIR describes existing noise conditions within the Project Area. It also identifies potential impacts associated with implementation of the Redevelopment Plan's projects, programs and other activities within the Project Area on existing noise levels and recommends, where necessary and feasible, mitigation measures to reduce and or avoid potentially significant noise impacts. Noise issues discussed in this section of the EIR include:

- Construction noise impacts,
- Noise generated by traffic attributed to growth and development within the Project Area, and
- Compatibility with City Land Use Compatibility Guidelines and ordinances.

Significance thresholds for noise impacts would generally be reached if implementation of the Redevelopment Plan's projects, programs or other activities were to expose persons to, or generate noise levels in excess of guidelines established in the Oakland General Plan or applicable standards of other agencies. Additionally, thresholds would be reached if implementation of the Redevelopment Plan would conflict with city/state land use compatibility guidelines or violate the City of Oakland Noise Ordinance.

7.2 Environmental Setting

7.2.1 Noise Descriptors

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is unwanted sound. Sound is characterized by various parameters that describe the rate of oscillation of sound waves, the distance between successive troughs or crests, the speed of propagation, and the pressure level or energy content of a given sound. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The decibel (dB) scale is used to quantify sound intensity. Because sound or noise can vary in intensity by over one million times within the range of human hearing, a logarithmic loudness scale is used to keep sound intensity numbers at a convenient

and manageable level. Since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, human response is factored into sound descriptions in a process called "A-weighting", written as "dBA".

Environmental noise is measured in units of dBA. The dBA, or A-weighted decibel, refers to a scale of noise measurement, which approximates the range of sensitivity of the human ear to sounds of different frequencies. On this scale, the normal range of human hearing extends from about zero dBA to about 140 dBA. A ten-dBA increase in the level of a continuous noise represents a perceived doubling of loudness; a five-dBA increase is readily noticeable while a three-dBA increase is barely noticeable to most people.

Time variations in noise exposure are typically expressed in terms of a steady-state energy level (called Leq), which represents the acoustical energy of a given measurement. Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, State law requires that for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL). CNEL adds a 5-dB penalty during the evening hours (7:00 p.m. to 10:00 p.m.) and a 10-dB penalty during the night hours (10:00 p.m. to 7:00 a.m.). Another 24-hour noise descriptor, called the day-night noise level (Ldn), is similar to CNEL. While each adds a 10-dB penalty to all nighttime noise events between 10:00 p.m. and 7:00 a.m., Ldn does not add the evening 5-dB penalty. In practice, Ldn and CNEL usually differ by less than one dBA at any given location for transportation noise sources.

Human response to noise varies from individual to individual and is dependent upon the ambient environment in which the noise is perceived. The same noise that would be highly intrusive to a sleeping person or in a quiet park might be barely perceptible at an athletic event or in the middle of the freeway at rush hour. Therefore, planning for an acceptable noise exposure must take into account the types of activities and corresponding noise sensitivity of any particular set of land uses. For example, sleep disturbance may occur at less than 50 dB, interference with human speech begins at around 60 dB, and hearing damage may result from prolonged exposure to noise levels in excess of 90 dB.

7.2.2 Existing Noise Sources

The City's Noise Element identifies the major transportation facilities as the primary noise generators within the City (City of Oakland, 1974). Three freeways generally surround the entire Project Area. Interstate 880 (I-880) is one of the major transportation facilities within the City, and it traverses the southern portion of the Project Area (the Prescott/South Prescott Subarea) and then roughly follows the western boundary of the Project Area (the Prescott/South Prescott and the Clawson/McClymonds/Bunche Subareas). Interstate 580 (I-580) traverses the northern portion of the Project Area, and it affects the noise environment in the northern portions of the Clawson/McClymonds/Bunche and Hoover/West MacArthur Subareas. Interstate 980 (I-980) is located east along the eastern boundary of the Project Area, following the eastern boundary of the Hoover/West MacArthur Subarea and bounding the southeastern corner of the Clawson/McClymonds/Bunche Subarea.

Other transportation facilities that also contribute to the local noise environment include the following arterial streets (as defined by the Oakland Land Use and Transportation Element [LUTE]):

- Mandela Parkway in the Prescott/South Prescott and Clawson/McClymonds/Bunche Subareas,
- San Pablo Avenue and Market Street in the Clawson/McClymonds/Bunche and Hoover/West MacArthur Subareas,
- 7th Street in the Prescott/South Prescott Subarea,
- West Grand Avenue, Adeline Street, Peralta Street, and Hollis Street in the Clawson/McClymonds/Bunche Subarea,
- 27th Street, Martin Luther King Jr. Way, West MacArthur Boulevard, and 40th Street in the Hoover/West MacArthur Subarea.

In addition to traffic noise, other major sources of noise in the Project Area include noise associated with train operations of Bay Area Rapid Transit (BART) and Union Pacific Railroad. BART facilities traverse the southern portion of the Project Area, generally parallel to and south of 7th Street. BART operations generate noise in the Prescott/South Prescott Subarea where tracks are elevated. The West Oakland BART Station, also elevated, is located within the Prescott/South Prescott subarea. In addition to BART facilities, the Union Pacific West Oakland Railyard comprises the southern portion of the Project Area located south of the I-880 freeway.

7.2.3 Existing Noise Levels

In order to characterize the current noise environment within the Project Area, seven short-term noise measurements were collected. Measurement results are presented in **Table 7-1**. Measurement locations are indicated on **Figure 7-1**. These measurements, as well as other measurements taken previously within the Project Area[1], indicate that:

- Noise levels are generally highest along the elevated sections of the I-580 and I-880 freeways, with CNEL noise levels estimated at 68 to 71 dBA at 400 feet from both freeway centerlines; freeway noise levels are relatively lower in areas protected by sound walls (less than 60 dBA at 400 feet from the I-880 freeway centerline).
- Noise levels are relatively lower along major arterial streets such as Mandela Parkway, San Pablo Avenue, 7th Street, and West Grand Avenue with daytime levels mostly between 66 to 68 dBA (Leq) and CNEL levels mostly between 68 and 72 dBA at 50 feet from roadway centerlines.

[1] Additional noise measurements within the Project Area were obtained during preparation of the adjacent *Oakland Army Base Area Redevelopment Project EIR* (City of Oakland, 2002)

- Noise levels in the West Oakland BART station south parking lot reach 67 dBA (Leq) during the day in the southeastern portion of the station parking lot where noise levels are influenced by noise generated by the adjacent Red Star Yeast facility. Noise levels at the station's northern boundary on 7th Street reach 68 dBA (Leq) during the day.
- In areas away from arterials, freeways, and BART facilities (where there are no adjacent major noise sources), noise levels are relatively lower (CNELs of less than 65 dBA).

Table 7-1: Existing Noise Levels in Project Area

	Measured Noise Level[1]		
Noise Measurement Locations (see Figure 7-1)	**Daytime Leq (dBA)**	**CNEL (dBA)[2]**	**Distance to Centerline or Noise Source (feet)**
1. I-580 Freeway (At Peralta & 34th Streets)	66	71	400
2. San Pablo Avenue (At 32nd Street)	66	69	50
3. West Grand Avenue (At Chestnut Street)	68	71	50
4. Mandela Parkway (At 17th Street)	62	64	50
5. 16th Street (West of Wood Street)	64	66	N/A
6. Peralta Street (At 8th Street)	66	69	50
7. 7th Street (At Mandela Parkway)	68	72	50
8. Mandela Parkway (At 5th Street; BART Parking Lot)	70[3]	74	50
9. I-880 Freeway (Near 3rd and Lewis Streets)	54	59	400

1 Noise measurements were taken using a Larson-Davis modified 700b meter.

2 CNEL levels were estimated for Locations 1-4 & 6-8 based on 15-minute noise measurements taken on Tuesday, January 21, 2003 as well as on measured 2-5 dBA differences between the daytime Leq and CNEL at other Oakland locations including Locations 5 & 9. Location 9 is a long-term measurement collected on September 23-25, 1997 at the I-880 Freeway near 3rd and Lewis streets and there is a sound wall along this section of I-880. Location 5 is a long-term measurement collected at 16th Street near an elevated section of I-880 on January 13, 1999. It is estimated that CNELs are approximately 5 dBA higher than the daytime Leq where the freeways or port activities influence the noise environment, and 2-3 dBA higher in neighborhoods where there is less nighttime activity.

3 At this measurement location, noise generated by Red Star Yeast was the predominant noise source. Other noise sources included buses and cars in BART parking lot, BART trains, and equipment operation in other adjacent industrial uses.

SOURCE: Orion Environmental Associates (2003)

Figure 7-1

When measured noise levels are compared to City noise and land use compatibility guidelines, they indicate that the existing noise environments adjacent to or near the elevated sections of the I-580 and I-880 freeways (areas unprotected by sound walls) and within the vicinity of elevated BART tracks and West Oakland BART station are generally incompatible with residential and other noise-sensitive uses. Noise levels along many major arterials (including those listed above under Existing Noise Sources and those listed in Table 7-1) generally meet the threshold for conditionally acceptable noise levels for residential uses.

7.2.4 Existing Sensitive Receptors

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication, physiological and psychological stress, and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools (which can include childcare centers), hospitals, and nursing homes are considered to be the most sensitive to noise. Neighborhood parks are not considered to be noise-sensitive.

With respect to residential sensitive receptors, the City's Noise Element identifies nine areas, Areas A through I, which were considered to be "critical noise impact areas" in 1974. The Noise Element identifies these areas as areas that are "noisier than is desirable," when compared to noise compatibility criteria developed by U.S. Department of Housing and Urban Development and U.S. Environmental Protection Agency. Although some of the identified area boundaries are outdated due to the change in location of the Cypress (I-880) Freeway, they can be extrapolated based on the text descriptions of these areas.

Two of the identified areas, Areas D and E, include portions of all three subareas. Area D, located in the northern portions of the Clawson/ McClymonds/Bunche and Hoover/West MacArthur Subareas, includes many older, small-scale homes that are exposed to noise from the elevated, heavily-traveled I-880 and I-580 freeways. These residences are subject to additional noise impact from industrial uses interspersed among them, as well as from local truck traffic. Area E is located primarily in the southern portion of the Prescott/South Prescott Subarea, and it identifies residential uses in this area as being subject to noise from the I-880 Freeway, local truck traffic, nearby railroad yards and lines, local industries, and BART. It is noted in the Noise Element that these identified impact areas were areas that were having the "most serious" noise problems in 1974, and identification of these areas is not intended to imply a lack of problems elsewhere.

7.3 Regulatory and Policy Setting

7.3.1 State Standards and Guidelines

Noise Insulation Standards

Title 24, Part 2 of the *California Code of Regulations* contains requirements for construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings

intended to limit the extent of noise transmitted into habitable spaces. These requirements are collectively known as California Noise Insulation Standards. For limiting noise transmitted between adjacent dwelling units, the Standards specify the extent to which walls, doors, and floor ceiling assemblies must block or absorb sound. For limiting noise from exterior sources, the Standards set forth an interior standard of 45 dBA (CNEL or Ldn) in any habitable room with all doors and windows closed, and require an acoustical analysis demonstrating the manner in which dwelling units have been designed to meet this interior standard where such units are proposed in areas subject to noise levels greater than 60 dBA (CNEL or Ldn).

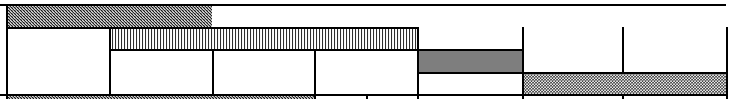
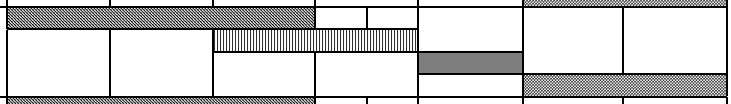
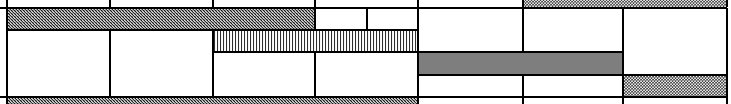
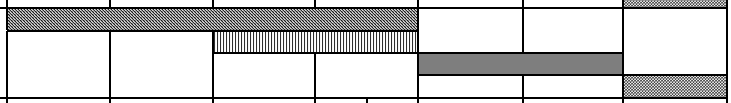
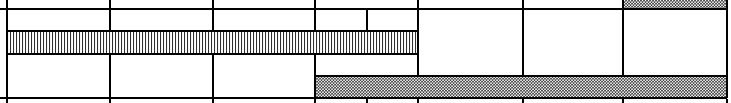
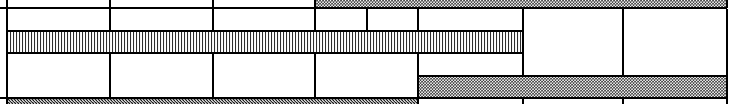
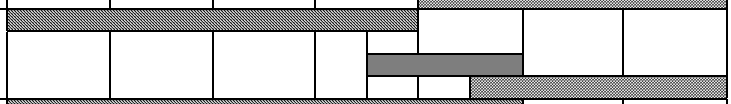
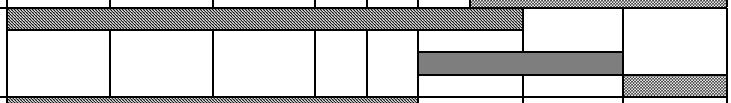
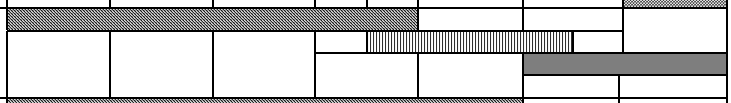
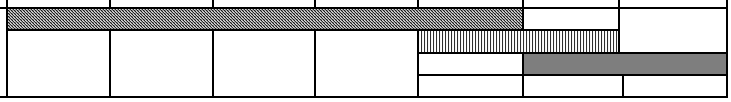
California Governor's Office of Planning and Research Guidelines

Section 65302(f) of the CCR establishes the requirement that local land use planning jurisdictions prepare a General Plan. In 1998, the Office of Planning and Research published the most recent edition of its *General Plan Guidelines* (GPG). The GPG advises local jurisdictions in preparing their comprehensive long-term general plans. The Noise Element is a mandatory component of the General Plan and includes general community noise guidelines and specific planning guidelines for noise/land use compatibility developed by the local jurisdiction. State guidelines are presented in **Table 7-2**.

7.3.2 City of Oakland Planning Guidelines and Noise Standards

Noise exposure standards are implemented at either the receiver or source, and generally fall into two categories: (1) receiver-based noise compatibility guidelines for various land uses, and (2) ordinance limits for non-transportation-related noise. Since local jurisdictions are preempted from regulating noise generation from noise sources such as cars, trucks, trains, airplanes, etc., the City of Oakland implements noise controls through receiver-based noise compatibility guidelines and its noise ordinance. The adopted noise compatibility guidelines identify allowable noise exposures for various land uses from such sources, even if the source itself cannot be regulated. The City's Noise Ordinance regulates activities that may include such sources as mechanical equipment, amplified sounds, or hours of heavy equipment operation. Standards in local noise ordinances may be in the form of quantitative noise performance levels (as they are in the Oakland Noise Ordinance), or they may simply be in the form of a qualitative prohibition against creating a nuisance. Numerical standards are generally preferred because compliance is easier to document utilizing objective, rather than subjective (e.g., nuisance), standards.

Table 7-2: State and City Land Use Compatibility Guidelines, Community Noise

Land Use Category	Community Noise Exposure Ldn or CNEL, dBA 55 60 65 70 75 80
Residential - Low Density, Single Family, Duplex, Mobile Homes	
Residential - Multi-Family	
Transient Lodging – Motels, Hotels	
Schools, Libraries, Churches, Hospitals, Nursing Homes	
Auditoriums, Concert Halls, Amphitheaters	
Sports Arena, Outdoor Spectator Sports	
Playgrounds, Neighborhood Parks	
Golf Courses, Riding Stables, Water Recreation, Cemeteries	
Office Buildings, Business Commercial and Professional	
Industrial Manufacturing, Utilities, Agriculture	

Interpretation

Normally Acceptable. Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable. New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

Normally Unacceptable. New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements and needed noise insulation features included in the design.

Clearly Unacceptable. New construction or development should generally not be undertaken.

Source: California Governor's Office of Planning and Research (1990)

City of Oakland Noise Compatibility Guidelines

The City of Oakland noise guidelines recognize the variable sensitivity of certain activities to noise, and establish noise exposure criteria defining acceptable noise levels. The City uses the land use compatibility noise guidelines developed by the State of California (**Table 7-2**). For residential and transient lodging uses, these guidelines indicate that noise levels up to 60 to 65 dBA (Ldn or CNEL) are normally acceptable depending on the type of residential use. For office/commercial uses as well as parks, schools, libraries, churches, hospitals and nursing homes, guidelines indicate that noise levels up to 70 dBA (Ldn or CNEL) are considered normally acceptable. For industrial uses, noise levels up to 75 dBA are considered normally acceptable.

"Normally acceptable" is defined as satisfactory for the specified land use, assuming that normal conventional construction is used in buildings. Under most of these land use categories, overlapping ranges of acceptability and unacceptability are presented, leaving some ambiguity in areas where noise levels fall within the overlapping range. For purposes of this analysis, the most conservative interpretation is followed where noise levels fall within this range (if a noise level falls within the overlapping range for normally and conditionally acceptable, it is identified as conditionally acceptable).

City of Oakland Noise Ordinance

Section 7710 of the Oakland Planning Code specifies maximum allowable noise levels for various land uses (**Table 7-3**). The first set of standards apply to long-term noise exposure for specific land uses, while the second set of standards apply to temporary exposure to short- and long-term construction noise. Standards also indicate that in areas where the measured ambient noise level exceeds the applicable noise level standard, the ambient noise level becomes the applicable standard.

Table 7-3: City of Oakland Maximum Allowable Receiving Noise Standards

Operational Noise Standards at Receiving Property Line

Receiving Land Use	Cumulative Number of Minutes in One-hour Time Period	Maximum Allowable Noise Level, dBA: Daytime 7 a.m. to 10 p.m.	Maximum Allowable Noise Level, dBA: Nighttime 10 p.m. to 7 a.m.
Residential, School, Child Care, Health Care or Nursing Home, and Public Open Space	20 (L_{33})	60	45
	10 ($L_{16.7}$)	65	50
	5 ($L_{8.3}$)	70	55
	1 ($L_{1.7}$)	75	60
	0 (L_{max})	80	65
Commercial	20 (L_{33})	65	65
	10 ($L_{16.7}$)	70	70
	5 ($L_{8.3}$)	75	75
	1 ($L_{1.7}$)	80	80
	0 (L_{max})	85	85
Manufacturing, Mining, and Quarrying	20 (L_{33})	70	70
	10 ($L_{16.7}$)	75	75
	5 ($L_{8.3}$)	80	80
	1 ($L_{1.7}$)	85	85
	0 (L_{max})	90	90

Noise Level Standards for Temporary Construction or Demolition Activities

Operation/Receiving Land Use	Daily 7 a.m. to 7 p.m.	Weekends 9 a.m. to 8 p.m.
Short Term Operation (less than 10 days)		
Residential	80	65
Commercial, Industrial	85	70
Long Term Operation (more than 10 days)		
Residential	65	55
Commercial, Industrial	70	60

NOTE: These standards are reduced 5 dBA for simple tone noise, noise consisting of speech or music, or recurring impact noise. If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level.

L_{max} is the maximum noise level; L_{33} is the noise level exceeded 33 percent of time, etc.

SOURCE: City of Oakland (1996, as revised April 2002)

7.4 Impacts and Mitigation Measures

Significance Criteria

The Project would have a significant impact on the environment if it would:

- Expose persons to or generate noise levels in excess of guidelines established in the Oakland General Plan or applicable standards of other agencies (*e.g.*, the Occupational Health and Safety Administration);
- Conflict with city/state land use compatibility guidelines for all specified land uses for determination of acceptability of noise levels as shown in Table 7-2;
- Violate the City of Oakland Noise Ordinance (Oakland Planning Code § 17.120.050) regarding construction noise, except if an acoustical analysis is performed and all feasible mitigation measures imposed, including the standard City of Oakland noise measures adopted by the Oakland City Council on January 16, 2001. These standards include:
  - During the hours of 7 p.m. to 7 a.m. on weekdays and 8 p.m. to 9 a.m. on weekends and federal holidays, noise levels received by any land uses from construction or demolition shall not exceed the applicable nighttime operational noise level standard.[2]
- Violate the City of Oakland Noise Ordinance (Oakland Planning Code § 8.18.020) regarding nuisance of persistent construction-related noise;
- Create a vibration that is perceptible without instruments by the average person at or beyond any lot line containing vibration-causing activities not associated with motor vehicles, trains, and temporary construction or demolition work, except activities located within the (a) M-40 zone or (b) M-30 zone more than 400 feet from any legally occupied residential property (Oakland Planning Code § 17.120.060);
- Maintain interior Ldn or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories, or long-term care facilities (and if extended by local legislative action, single-family dwellings) per California Noise Insulation Standards (CCR Part 2, Title 24);
- Result in a 5-dBA permanent increase in ambient noise levels in the vicinity above levels existing without redevelopment;
- Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and would expose people residing or working in the project area to excessive noise levels; or
- Be located within the vicinity of a private airstrip, and would expose people residing or working in the project area to excessive noise levels.

Not all of the above criteria would apply to the proposed Project. Pile-driving activities during any future construction activities in the Project Area could result in vibration perceptible at residential receptors, but construction activity is managed through a set of City Council-adopted

[2] Table 7-3 applies to construction noise, except if an acoustical analysis is performed and all feasible mitigation measures imposed, including standard noise measures adopted by the City Council in January 2001.

standard requirements and conditions. It is speculative as to whether any future uses under the Project could generate operational vibration effects. The southern boundary of the Project Area is located more than five miles from the Metropolitan Oakland International Airport and outside existing and future (2010) airport noise contours; therefore, excessive airport-related noise is not anticipated in the Project Area.

7.4.1: Construction Noise Impacts

Potential Impact 7.4.1: Construction Noise. Implementation of the Redevelopment Plan's projects, programs and other activities could generate short-term increases in noise and vibration due to construction. This would be a short-term adverse impact, and would be *potentially significant*.

Discussion

During construction that may be required in furtherance of the Redevelopment Plan's implementation projects, programs or other activities, temporary noise increases would result from the operation of heavy equipment. Construction noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between noise source and receptor, and presence or absence of barriers between noise source and receptor. Typical construction noise sources range from about 76 to 85 dBA at 50 feet for most types of construction equipment, with slightly higher levels of about 88 to 89 dBA for certain types of earthmoving (e.g., scrapers, pavers). The highest noise levels would be generated by rock drills and pile drivers, which can generate noise peaks of approximately 98 and 101 dBA at 50 feet, respectively. The rate of attenuation is about 6 dBA for every doubling of distance from a point source. Typical noise levels at 50 feet from the noise source for several types of construction equipment and potential noise attenuation with feasible noise controls are shown in **Table 7-4**.

Oakland Noise Ordinance Limits

The Oakland Noise Ordinance limits construction noise levels to certain maximum levels during certain hours. The Noise Ordinance limits vary depending on the affected land use. Depending on the size of future projects, either short-term (less than 10 days) or long-term (more than 10 days) noise limits would be applied, and they require construction noise levels to be limited to 80 dBA (short-term) or 65 dBA (long-term) at the nearest residence during the weekdays (7:00 a.m. to 7:00 p.m.) and 65 dBA (short-term) or 55 dBA (long-term) on weekends (9:00 a.m. to 8:00 p.m.). Except for emergencies or in cases where nighttime roadway construction is carried out to minimize congestion, construction is not allowed during the nighttime hours. In general, construction noise levels (as listed in Table 7-4) would be consistent with the Noise Ordinance's weekday limits wherever construction occurs more than 50 feet from any receptor and recommended noise controls are implemented. At distances closer than 50 feet, noise generated by construction equipment would generally exceed weekday and weekend Noise Ordinance limits. Therefore, in order to comply with Noise Ordinance limits at distances of less than 50 feet, operation of heavy equipment will need to be limited to less than 10 days, or construction practices may need to be modified to comply with Noise Ordinance limits.

Table 7-4: Estimated Construction Noise Levels

Equipment	Noise Level (dBA) @ 50 Feet	With Feasible Noise Control[1]
Earthmoving:		
Front Loader	79	75
Backhoe	85	75
Dozer	80	75
Tractor	80	75
Scraper	88	80
Grader	85	75
Paver	89	80
Materials Handling:		
Concrete Mixer	85	75
Concrete Pump	82	75
Crane	83	75
Stationary:		
Pump	76	75
Generator	78	75
	81	75
Impact:		
Pile Driver	101	95
Jack Hammer	88	75
Rock Drill	98	80
Pneumatic Tools	86	80
Other:		
Saw	78	75
Vibrator	76	75

[1] Estimated levels obtainable by selecting quieter procedures or machines and implementing noise-control features requiring no major redesign or extreme cost.

SOURCE: U.S. Environmental Protection Agency (1971)

Pile Driving

For some types of development projects that may be pursuant to or in furtherance of implementation of the Redevelopment Plan, pile driving could be required as part of foundation construction. Conventional unmuffled, unshielded pile drivers generate noise peaks of 101 dBA at 50 feet each time the driver strikes the pile. Depending on the proximity of pile driving to the adjacent sensitive receptors, noise levels could exceed short-term (less than 10 days) and long-term noise limits specified in the Noise Ordinance. Implementation of feasible noise controls (which could provide a 6-dBA reduction) or vibratory pile drivers (which are 15 dBA quieter than impact drivers) could help reduce noise levels at sensitive receptors to acceptable levels depending on their proximity. Implementation of such measures would be required as necessary to reduce these potential impacts to a *less than significant* level.

Pile driving is known to cause vibrations in adjacent structures. The nature and extent of vibration would depend on a number of factors including: the type of equipment used (such as

impact or vibratory tools), the type of activity, the depth of construction and the type and conditions of geologic materials. While the potential for structural damage cannot be specifically predicted, vibration can be maintained at levels that would not cause structural damage if vibratory pile drivers were used. Pre-drilling of pile holes would also reduce the potential adverse vibration effects of pile driving. With such measures, vibration effects would be noticeable but would not be expected to result in structural damage to buildings if pile driving occurs as part of construction of future development projects within the Project Area.

Mitigation Measures

The following mitigation measures are recommended for all construction projects that may be proposed pursuant to, or in furtherance of implementation of the Redevelopment Plan's projects, programs and other activities:

- **Mitigation Measure 7.4.1: Construction Noise.** The following measures shall be required as necessary as part of future development projects pursuant to implementation of the Redevelopment Plan in order to comply with the City Noise Level Standards for Temporary Construction or Demolition Activities, as well as to minimize any potential pile driving noise and vibration impacts:

    1. Equipment and trucks used for construction should utilize the best available noise control techniques (improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) in order to minimize construction noise impacts. Construction equipment should not generate noise levels above the mitigated levels listed in Table 7-4 (75 dBA to 80 dBA at 50 feet, depending on equipment type).

    2. Equipment used for project construction should be hydraulically or electrical powered impact tools (e.g., jack hammers, pavement breakers, and rock drills) wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust should be used; this muffler could lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves should be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures should be used such as drilling rather than impact equipment whenever feasible.

    3. Stationary noise sources should be located as far from adjacent uses as possible, particularly, any adjacent residences receptors. If they must be located near such receptors, they should be adequately muffled and enclosed within temporary sheds.

    4. Where existing residences are located within 50 feet of the project construction activities, operation of heavy equipment should be limited to 10 or less days at one time and weekend construction activities should be prohibited.

    5. Pile holes should be pre-drilled to reduce potential noise and vibration impacts. City pile driving noise attenuation requirements should be implemented as necessary.

Limit pile driving from 8:00 a.m. to 4:00 p.m. Monday through Friday, with no pile driving or other extreme noise generating activity permitted between 12:30 and 1:30 p.m., or other mid-day hour as established and noticed. Prohibit pile driving or other extreme noise generating activity on Sundays and holidays. Pile driving on Saturdays will be evaluated on a case-by-case basis, with criteria including the proximity of residential uses and a survey of business preferences for whether Saturday activity is acceptable if the overall duration of the pile driving is shortened. Avoid times when the most disturbance could occur, during business hours (to the extent practically feasible), the noon lunch hour, and evening and nighttime hours (7:00 p.m. to 7:00 a.m.). It is recommended that pile driving activities be limited to 1:00 p.m. to 7:00 p.m. on weekdays and 9:00 a.m. to 8:00 p.m. on Saturdays. Use sonic or vibratory pile drivers where feasible instead of impact pile drivers (sonic pile drivers are only effective in some soils). Vibratory pile drivers could reduce noise levels by as much as 16 dBA, but can cause disturbance to adjacent uses. Use engine and pneumatic exhaust controls on pile drivers as feasible to ensure that exhaust noise from pile driver engines is minimized. Such controls could reduce exhaust noise by up to 6 dBA.

Resulting Level of Significance

Noise impacts related to construction activities that may be pursuant to or in furtherance of implementation of the Redevelopment Plan would be mitigated to a *less than significant* level by implementation of recommended mitigation measures.

7.4.2: Project-Related Traffic Noise Impacts

The increase in traffic noise associated with growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan, would result in future noise levels that are generally the same as or slightly higher than future noise levels that would occur without such growth and development. This impact is considered *less than significant*.

Discussion

Future (year 2025) increases in traffic as a result of growth and development within the Project Area would result in higher noise levels along some streets within the Project Area (see **Table 7-5**). As indicated in the Significance Criteria listed above, a significant noise impact would occur if traffic noise due to new development within the Project Area were to result in a 5-dBA permanent increase in ambient noise levels in the vicinity. Generally, a doubling in traffic levels typically results in a 4.5-dBA increase in noise. . For analysis purposes, a conservative "first-cut" criteria was used to identify those roadway segments that could be most affected by traffic generated by new development within the Project Area. This conservative criteria was used to identify all street segment approaches where traffic volumes would increase by 25% when traffic generated by new development within the Project Area was added. Of the 48 intersections (or 192 intersection approaches or street segments) examined in the traffic analysis (see Chapter 5: Traffic and Circulation), there are fourteen street segments where traffic volumes would increase

by 25% or more when traffic generated by growth and development in the Project Area is added. As indicated in Table 7-5, traffic increases attributable to growth and development within the Project Area would increase existing noise levels by only 1 - 2 dBA along all but three of these fourteen roadway segments:

- 32nd Street would be subject to noise increases of 3 to 3.6 dBA,
- 26th Street east of Peralta would experience the highest noise increase of 4.6 dBA, and
- Mandela Parkway south of 7th Street would experience a noise increase of approximately 2.4 dBA.

Traffic increases due to new growth and development within the Project Are would increase future baseline noise levels (2025) by less than 2 dBA on all other segments.

Increases of less than 3 dBA are generally not perceptible to most people. The projected 3 to 3.6-dBA increase on 32nd Street west and east of Mandela Parkway would be barely perceptible. These street segments are located in an area designated under the Oakland General Plan for "Business Mix" uses generally west of Mandela Parkway, and "Mixed Housing Type Residential" and "Business Mix" to the east of Mandela Parkway. The 4.6-dBA noise increase on 26th Street (east of Peralta) would be noticeable, but this street segment is located in an area designated under the Oakland General Plan for "Business Mix" uses. When compared to the significance criteria above, noise increases attributable to traffic generated by new growth and development within the Project Area, which would be less than 5 dBA CNEL, would be *less than significant*.

7.4.3: Noise Compatibility of Future Development

Potential Impact 7.4.3: Noise Compatibility. Depending on the precise location of new residential uses that may be constructed pursuant to or in furtherance of the Redevelopment Plan, future noise levels within some portions of the Project Area could be incompatible with such residential use. This impact is considered to be *potentially significant*.

Discussion

Future growth and development within the Project Area, as may be assisted or facilitated by implementation of the Redevelopment Plan, would occur in accordance with the Oakland General Plan and more specifically the LUTE and Housing Element. Consistent with the LUTE and as more fully described in Chapter 3: Project Description, it is anticipated that future residential, commercial and industrial development pursuant to the Redevelopment Plan would occur primarily along major transit corridors and transit-accessible sites within the Project Area, including the West Oakland Transit Village. As indicated in Table 7-1, noise levels could approach or exceed 70 dBA (CNEL) in certain locations within the Project Area, primarily along arterial streets and in the vicinity of the I-580 and I-880 freeway corridors (sections not protected by sound walls).

Land Use Compatibility Guidelines

The City's Land Use Compatibility Guidelines for Community Noise indicate that noise levels between 55 and 70 dBA (CNEL) are "conditionally acceptable" for residential uses, while noise levels above 70 dBA (CNEL) are considered "normally unacceptable." For business commercial uses, the City's Guidelines indicate that noise levels up to 70 dBA (CNEL) are "normally acceptable," while noise levels between 67 and 77 dBA (CNEL) are "conditionally acceptable." Above 75 dBA (CNEL), noise levels are considered "normally unacceptable" for business commercial uses.

Traffic Noise, Major Arterial Streets

When comparing noise levels presented in **Tables 7-1 and 7-5**, noise levels adjacent to most major arterial streets within the Project Area (including those identified in the LUTE and listed above under Existing Noise Sources) could reach 60 to 70 dBA (CNEL). Such noise levels would be conditionally acceptable for residential and business commercial uses. Where noise levels are "conditionally acceptable," a detailed noise analysis is required, but conventional construction with closed windows and fresh air supply systems or air conditioning will normally suffice. Where noise levels exceed 70 dBA (CNEL), which could include Peralta Street, San Pablo Avenue, West Grand Avenue, 7th Street, and Mandela Parkway, noise levels would be "normally unacceptable" for residential uses and "conditionally acceptable" for business commercial uses.

Table 7-5: Future Noise Level Changes Along Selected Roadways

	Noise Level (CNEL @ 50 feet from Roadway Centerline)						
Street Segment	**Existing**	**With Project**	**dBA Change**	**Cumulative Baseline (2025)**	**Cumulative Plus Project (2025)**	**dBA Change**	**Cumulative dBA Change from Existing**
Adeline Street (West of San Pablo)	60.5	61.1	0.6	62.4	62.8	0.4	2.4
Hollis Street (North of Peralta)	59.2	60.4	1.2	60.3	61.3	1.0	2.1
Mandela Parkway (South of 32nd St.)	60.0	62.1	2.0	62.1	64.0	1.9	3.9
32nd Street (East of Mandela)	53.9	56.9	3.0	56.6	58.5	1.8	4.6
32nd Street (West of Mandela)	52.9	56.5	3.6	56.7	58.6	1.8	5.7
26th Street (East of Peralta)	49.8	54.4	4.6	57.8	58.9	1.1	9.1
26th Street (East of Market)	55.8	57.9	2.1	58.9	60.1	1.1	4.2
27th Street (West of San Pablo)	56.6	58.4	1.8	59.5	60.5	1.0	3.9
Mandela Parkway (North of West Grand)	64.1	64.9	0.8	66.8	67.3	0.4	3.1
Mandela Parkway (South of 7th Street)	60.7	63.1	2.4	62.4	64.1	1.8	3.4
7th Street (East of Mandela)	66.6	67.4	0.9	67.5	68.2	0.7	1.6
7th Street (East of Union)	66.0	66.8	0.8	66.7	67.4	0.7	1.4
Adeline Street (South of 7th)	59.0	60.5	1.5	60.2	61.4	1.1	2.3
I-880 Off-Ramp (East of Market)	60.2	61.2	1.0	61.9	62.6	0.7	2.4

NOTES: Estimates were calculated noise modeling techniques specified by the Federal Highway Administration (FHWA-RD-77-108 with updated California Vehicle Noise Emission [CALVENO] factors) and traffic volumes in this report. The "Existing" scenario represents 2003 baseline (without project) road link volumes (refer to the traffic section for more information). Noise levels assume 3% heavy trucks, 2% medium trucks, travel speeds of 30 to 45 miles per hour depending on the street. Noise measurements collected within the Plan Area (and Oakland area in general) suggest that noise levels may actually be higher than noise model estimates. Noise measurements taken in other areas of Oakland indicate that actual noise levels could be as much as 3 dBA higher than those listed above, depending on location.

SOURCE: Orion Environmental Associates (2003)

Based on the significance criteria outlined above (which include these guidelines), any future residential or business commercial development located adjacent to many of the major arterials in the Project Area would be "conditionally acceptable" or "normally unacceptable" and therefore, noise impacts would be potentially significant.

Freeway Noise

Within approximately 500 feet of elevated sections of the I-580 freeway centerline and within approximately 300 feet of the I-880 freeway centerline (with a direct line-of-sight to the freeway), noise levels could exceed 70 dBA (CNEL), which would be considered "normally unacceptable" for residential uses and "conditionally acceptable" for business commercial uses. Noise levels are relatively lower in areas protected by sound walls (less than 60 dBA at 400 feet from the I-880 freeway centerline), and acceptability of noise levels along protected freeway sections would depend on proximity to the freeway. Based on the significance criteria outlined above (which include these guidelines), any future residential or commercial development located near the I-580 and I-880 freeway corridors could be "conditionally acceptable" for business commercial uses or "normally unacceptable" for residential uses and therefore, noise impacts would be potentially significant.

BART Train and Station Noise

BART facilities extend through the Prescott/South Prescott subarea, and the West Oakland BART station is located in this subarea. Noise levels exceed 70 dBA (Leq and CNEL) within the vicinity of the BART station and elevated sections of the BART tracks, which would be "normally unacceptable" for residential uses and "conditionally acceptable" for business commercial uses. In addition, traffic noise generated along 7th Street as well as noise from industrial uses located adjacent to the BART station contribute significantly to the ambient noise environment in the BART station vicinity. Based on the significance criteria outlined above (which include these guidelines), any future mixed-use development located near the BART station and/or tracks would be " conditionally acceptable" for business commercial uses or "normally unacceptable" for residential uses and therefore, noise impacts would be potentially significant.

City General Plan Policies

The following General Plan policies would apply to all new development within the Project Area, including development pursuant to implementation of the Redevelopment Plan:

Policy I/C4.2: Minimizing Nuisances: The potential for new or existing industrial or commercial uses, including seaport and airport activities, to create nuisance impacts on surrounding residential land uses should be minimized through efficient and appropriate implementation and monitoring of environmental and development controls.

Policy N1.5: Designing Commercial Development: Commercial development should be designed in a manner that is sensitive to surrounding uses.

Policy N3.9: Orienting Residential Development: Residential developments should be encouraged to face the street and to orient their units to desirable sunlight and views, while avoiding unreasonably blocking sunlight and views for neighboring buildings, respecting the

privacy needs of residents of the development and surrounding properties, providing for sufficient conveniently located on-site open space, and avoiding undue noise exposure.

Compliance with the General Plan Policies identified above would address the issues of noise and land use compatibility, but may not be capable of effectively reducing noise impacts to levels of less than significant. Therefore the following mitigation measures are recommended:

Mitigation Measures

- **Mitigation Measure 7.4.3A: Noise Reduction Requirements**. The City of Oakland Land Use Compatibility Guidelines for Community Noise sets limits on the level of noise that new land uses may be subjected to, and requires analysis and mitigation should these noise levels be exceeded. In accordance with these guidelines, the following specific mitigation measures would apply to new development projects that may be in furtherance of implementation of the Redevelopment Plan.

    - Future residential development that may be proposed within approximately 2,000 feet of the I-580 freeway corridor and 1,400 feet of the I-880 freeway corridor (sections not protected by sound walls), along major arterials identified in the LUTE, adjacent to industrial or business uses that generate noise, or in the vicinity of BART facilities where noise levels exceed 60 dBA CNEL (if a direct line-of-sight is available) shall be required to complete a detailed analysis of noise reduction requirements.

    - A detailed analysis of noise reduction requirements shall also be required if any future business commercial uses are proposed within approximately 700 feet of the I-580 freeway corridor and 450 feet of the I-880 freeway corridor (sections not protected by sound walls), along major arterials identified in the LUTE, or in the vicinity of BART facilities where noise levels could exceed 67 dBA CNEL (if a direct line-of-sight is available).

    - Recommended noise insulation features shall be included in the designs of such future development.

- **Mitigation Measure 7.4.3B: Freeway Sound Walls**. The City of Oakland should coordinate with Caltrans to investigate the potential for constructing new sound walls along those portions of I-880 where no sound walls are currently provided to protect the adjacent neighborhoods. Redevelopment funding could potentially be used to supplement the costs for such walls.

- **Mitigation Measure 7.4.3C: BART Train Noise Reduction**. The City of Oakland should coordinate with BART to investigate potential techniques for reducing the noise generated by BART trains, especially near the West Oakland BART station. Redevelopment funding could potentially be used to supplement the costs associated with the investigation of such techniques and potentially to supplement the costs for implementation.

Resulting Level of Significance

The impacts of noise on future development projects pursuant to the Redevelopment Plan can be mitigated to a *less than significant* level by implementation of the above recommended mitigation measures.

Potential Benefits of Redevelopment

Implementation strategies may be included in the Redevelopment Plan that could help to minimize potential noise conflicts. Such strategies may include Redevelopment Agency assistance in:

- the acquisition of properties and relocation of problem uses contributing to conflicts between adjacent residential and industrial uses,
- the provision of financial assistance through business façade programs that might include screening of noise generating uses; and
- providing financial resources that might be used to assist in decreasing the noise levels that portions of the Project Area are exposed to from I-880 and BART operations.

7.4.4: Noise Compatibility of Mixed Use Developments

Implementation of the Redevelopment Plan would encourage development of mixed-use projects along key corridors, transit-oriented districts and neighborhood activity centers where noise levels may be appropriate for commercial uses but either "conditionally acceptable" or "normally unacceptable" for residential use. However, implementation of City Noise Ordinance limits and General Plan policies would reduce the potential for noise compatibility problems in mixed-use developments to a *less than significant level*.

Discussion

The Redevelopment Plan's projects, programs and other activities, in accordance with the LUTE, would encourage development of mixed-use projects along key corridors, transit-oriented districts, and neighborhood activity centers. In particular, the Redevelopment Plan would facilitate development of the West Oakland Transit Village. The potential for noise compatibility problems associated with the West Oakland Transit Village would relate to the proximity of planned residential uses to noise sources such as planned commercial uses, existing BART facilities, existing industrial uses located adjacent to the BART station, and 7th Street. These sources of noise would contribute to the existing noise environment, where daytime noise levels are measured at 68 to 70 dBA (Leq) at the BART station's northern and eastern boundaries (adjacent to 7th Street and Mandela Parkway, respectively). Based on these measurements, CNEL noise levels at the station boundaries would exceed 70 dBA, and noise levels over 70 CNEL are considered to be "normally unacceptable" for residential uses and "conditionally unacceptable" for commercial uses.

In general, noise compatibility in mixed-use developments, including the Transit Village, would be a concern due to the proximity of residential uses with other commercial and employment uses. Sources of noise typically associated with commercial uses can include loading/unloading activities, delivery trucks, parking cars, garbage trucks, and use of refuse bins. Stationary sources of noise from commercial uses can include refrigeration, air conditioning, and heating units. Depending on the type of commercial or employment activities, noise generated during the evening or nighttime hours can result in noise conflicts between residential and commercial uses.

As described above under Section 7.4.3, the City of Oakland Land Use Compatibility Guidelines for Community Noise sets limits on the level of noise that new land uses may be subjected to, and requires analysis and mitigation should these noise levels be exceeded. Pursuant to Mitigation Measure 7.4.3, future mixed-use developments that may be proposed along arterials (such as 7th Street and Mandela Parkway), in the BART station vicinity, within approximately 2,000 feet of the I-580 freeway corridor or 1,400 feet of the I-880 freeway corridor (sections not protected by sound walls), adjacent to industrial or business uses that generate noise where noise levels exceed 60 dBA CNEL (if a direct line-of-sight is available) shall be required to complete a detailed analysis of noise reduction requirements. Recommended noise insulation features shall be included in the designs of such future development.

General Plan Policies

The Oakland Noise Ordinance sets limits on the level of noise that any noise source could generate at any adjacent receiving residential uses. Implementation of the City's Land Use Compatibility Guidelines, Noise Ordinance limits and the following General Plan policies would reduce the potential for noise compatibility problems in mixed-use developments to a *less than significant* level.

Policy I/C4.1: Protecting Existing Activities: Existing industrial, residential, and commercial activities and areas which are consistent with long-term land use plans for the City should be protected from the intrusion of potentially incompatible uses.

Policy I/C4.2: Minimizing Nuisances: The potential for new or existing industrial or commercial uses, including seaport and airport activities, to create nuisance impacts on surrounding residential land uses should be minimized through efficient and appropriate implementation and monitoring of environmental and development controls.

Policy D11.2: Locating Mixed-Use Development: Mixed-use development should be allowed in commercial areas, where the residential component is compatible with the desired commercial function of the area.

Policy N1.5: Designing Commercial Development: Commercial development should be designed in a manner that is sensitive to surrounding uses.

Policy N3.9: Orienting Residential Development: Residential developments should be encouraged to face the street and to orient their units to desirable sunlight and views, while avoiding unreasonably blocking sunlight and views for neighboring buildings, respecting the privacy needs of residents of the development and surrounding properties, providing for sufficient conveniently located on-site open space, and avoiding undue noise exposure.

7.4.5 Cumulative Traffic Noise Impacts

Cumulative Impact 7.4.5: Cumulative Traffic Noise. New growth and development within the Project Area, combined with other past projects, other current projects and probable future projects would generate cumulative noise increases along local streets. This increase in noise levels is projected to be cumulatively significant, and the Project's contribution to this cumulative condition is *cumulatively considerable*.

Discussion

As indicated in Impact 7.4.2 above, Project-related traffic increases would not result in a significant noise increase on local roads. However, when future cumulative noise levels (Cumulative plus Project, year 2025 as shown on Table 7-5) are compared to existing noise levels, noise will increase along local streets in the Project Area due to this cumulative development. Of the fourteen street segments analyzed, cumulative traffic increases (as reflected in Cumulative dBA Change from Existing in Table 7-5) would result in noise increases of less than 5 dBA along all but two of the fourteen analyzed street segments:

- A 5.7-dBA increase is estimated to occur on 32nd Street west of Mandela Parkway, and
- a 9.1-dBA increase would occur on 26th Street east of Peralta.

When compared to significance criteria above, these cumulative noise increases would be significant (i.e., greater than 5 dBA) and readily noticeable.

Comparing the noise levels shown on Table 7-5 under the Cumulative Baseline (or year 2025 conditions without the Project) to the Cumulative Plus Project conditions, none of these cumulatively significant increases in noise levels are individually attributable to increased noise due to the Project. However, on 32nd Street east of Mandela, approximately 1.8 dBA of the 5.7-dBA cumulative increase is attributable to the Project. Similarly on 26th Street east of Peralta, approximately 1.1 dBA of the 9.1-dBA cumulative increase is attributable to the Project. Thus, noise levels due to cumulative traffic conditions are projected to be significant at these locations (i.e., greater than a 5dBA increase), and the Project's contribution to these cumulative conditions would be cumulatively considerable.

Existing noise levels along these two road segments are relatively low (less than 60 dBA CNEL) and these street segments are located in areas designated by the Oakland General Plan for "Business Mix" uses. Business commercial uses are not considered noise-sensitive, and projected future noise levels are considered "normally acceptable" for business commercial uses. It should be noted that, when compared to the City's Land Use Compatibility Guidelines for Community Noise, these cumulative noise increases would not result in land use compatibility impacts on existing and future business uses along these street segments (cumulative impacts would be *less than significant*), but would be considered incompatible with existing residential uses (i.e. *significant and unavoidable*).

8

Hazards and Hazardous Materials

8.1 Introduction

This chapter of the EIR describes the following topics pertaining to hazardous materials relative to the Redevelopment Plan:

- a definition of hazardous materials and waste;
- an overview of the most relevant regulations and programs pertaining to hazardous materials and waste that may apply to the Project Area;
- a description of general soils and groundwater conditions in the Project Area; and
- a general description of hazardous building materials that are present within the Project Area.

This discussion addresses hazardous materials that may be encountered during implementation of the Redevelopment Plan's projects, programs and other activities, and provides a program-level analysis of potential impacts with respect to hazards and hazardous materials together with identification of program-level mitigation measures.

Information on toxic air contaminants is not included within this chapter, but is addressed in Chapter 6: Air Quality.

8.1.1 Definitions

Hazardous materials and hazardous wastes are defined in the California Code of Regulations, Title 22, Sections 66260 through 66261.10. As defined in Title 22, *hazardous materials* are grouped into four general categories: toxic (causes human health effects); ignitable (has the ability to burn); corrosive (causes severe burns or damages materials); or reactive (causes explosions or generates toxic gasses). They are generally considered to be substances with certain chemical or physical properties that may pose a substantial present or future hazard to human health or the environment when improperly handled, stored, disposed or otherwise managed. In general, discarded, abandoned, or inherently waste-like hazardous materials are referred to as *hazardous wastes*. A hazardous material or waste can be present in a liquid, semi-solid, solid, or gaseous form.

8.2 Environmental Setting

This section describes existing general environmental conditions in terms of potential sources of hazardous materials in soil or groundwater that may affect future development in the Redevelopment Area. The discussion of environmental conditions is based primarily on information from a review of environmental regulatory databases conducted for this EIR (Environmental Data Resources, Inc. [EDR], 2002). Appendix F presents the name and date of each database reviewed for this inventory and describes each database. The following potential sources of hazardous materials are present in the Project Area:

- historic land uses which involved the use of hazardous materials;
- existing permitted uses of hazardous materials including underground storage tanks (USTs) and permitted handling of hazardous wastes;
- sites in the Project Area where soil or groundwater has been affected or is suspected to be affected by a chemical release(s) from past or present site uses (referred to as environmental cases) that have been identified on regulatory databases; and
- soil and/or groundwater quality at land uses adjacent to the Project Area, if contamination is present and extends off-site to the Project Area.

8.2.1 Historic Land Uses

Historically, the Redevelopment Area was one of the first industrial areas of Oakland. Because of its excellent access by rail and sea, the area has been a major transportation node and location of large industrial plants, many of which involved food processing, since the late 1800s. During the First and Second World Wars, West Oakland also became a center for defense related industries because of its port and rail facilities. Over the years, many industrial operations have modernized and relocated or closed due to economic decline and a move away from war time industries. As a result, many of the industrial properties have been abandoned and left in dilapidated and contaminated condition. As this occurred, transportation uses became more prevalent because of increased activities at the Port of Oakland and because of West Oakland's central location and freeway accessibility.

8.2.2 Current Land Uses

The Project Area currently includes a mix of older residential, industrial, and commercial uses and structures. Industrial uses include warehousing, transportation related uses, food processors, various types of smaller manufacturers, building construction and related businesses, metal works and fabrication uses, various auto dismantling activities and junkyards, and large public sector facilities such as the Post Office's mail distribution center. These uses are concentrated in the vicinity of West Grand Avenue, Mandela Parkway, and Peralta Street. Commercial and auto-related uses are distributed throughout the project area, particularly in the vicinity of San Pablo Avenue and West Grand Avenue. Utilities and government agencies use some of the Project Area.

Within the Clawson/McClymonds/Bunche and Prescott/South Prescott subareas, industrial uses are often in close proximity to residential uses and other sensitive land uses such as parks and schools to the extent that in some areas sensitive uses are completely surrounded by industrial uses or small industrial uses are completely surrounded by sensitive land uses. These areas lack a transition zone to reduce conflicts between industrial and sensitive land uses.

8.2.3 Permitted Hazardous Materials Uses

To identify land uses that involve the use of hazardous materials, the environmental database review identified facilities that use hazardous materials or handle hazardous wastes, in accordance with current hazardous materials and hazardous waste regulations. Permitted uses of hazardous materials within the Project Area are tracked by regulatory agencies and include facilities that:

- have permitted or historic USTs;
- have registered aboveground petroleum storage tanks;
- have reported releases of hazardous materials to the air, water, or land;
- generate, transport, store, or dispose of polychlorinated biphenyls (PCBs);
- manufacture or handle materials regulated under the Toxic Substances Control Act (TSCA);
- are registered pesticide producing facilities;
- conduct dry cleaner-related operations; or
- have historically conducted mining operations.[1]

Permitted uses associated with handling of hazardous wastes includes generators, transporters, and disposal facilities permitted under the federal Resource Conservation and Recovery Act (RCRA) and facilities that have submitted hazardous waste manifests to the California Department of Toxic Substances Control (DTSC).

In addition, the City of Oakland maintains an inventory of sites that have filed a Hazardous Materials Business Plan or Risk Management and Prevention Plan, have registered USTs, or have registered as a hazardous waste generator or hazardous waste treatment facility. These sites are categorized by approximate risk to the public:

- P1 sites are considered high hazard sites. These sites store acutely hazardous chemicals or hazardous chemicals in high quantities (including hazardous waste generators generating greater than 1,000 kg/month of waste or a UST site with more than four

[1] Properties that have been involved in mining - including coal mining, quarrying, or sand and gravel operations – are not necessarily permitted for the use of hazardous materials but mining operation have historically involved the use of hazardous materials and are included in the summary table.

tanks), or are sites with an independent operator with on-site contamination or a poor inspection history.

- P2 sites are considered medium hazard sites, such as auto body shops and drycleaners.
- P3 are considered low hazard sites and are any site included in the Office of Emergency Services database that do not meet the criteria for classification as P1 or P2.

Because the use and handling of hazardous materials at permitted sites are subject to strict regulation, the potential for a release of hazardous materials from these sites is considered low unless there is a documented chemical release at that same site. In such cases, the site would be also tracked in the environmental databases as an environmental case (described separately below). Permitted sites without documented releases are nevertheless potential sources of hazardous materials to the soil and/or groundwater (compared to sites where there are no hazardous materials) because of accidental spills, incidental leakage or spillage that may have gone undetected.

Table 8-1 summarizes the total number of permitted facilities within the Project Area identified in the record search for each regulatory database. Many of the facilities are permitted for more than one hazardous material use and appear in more than one database. After compiling the information from each database by address, a total of 475 distinct properties with permitted hazardous materials uses were identified. Appendix F includes a summary of each regulatory database reviewed and the date of the database, and Appendix G includes a compilation of permitted uses by address.

As indicated in **Table 8-1**, the primary permitted uses of hazardous materials identified within the Project Area include small quantity generators permitted under RCRA (RCRIS SQG); underground storage tanks which would typically contain petroleum products (UST, CA FID UST, and HIST UST); facilities that have transported hazardous wastes off-site (HAZNET); and hazardous materials uses tracked by the City of Oakland. Of those facilities tracked by the City 15 are classified as P1 sites, 10 are classified as P2 sites, and 125 are classified as P3 sites; the remaining facilities have not been assigned a priority by the City.

The database review also identified four large quantity generators permitted under RCRA (RCRA LQG), seven facilities with an above ground storage tank (AST), three facilities that report releases of chemicals to the air, land, or water (TRIS); two facilities that generate, transport, store, broker, or dispose of PCBs (PADs); one facility that manufactures or imports chemical substances regulated under the Toxic Substances Control Act (TSCA); 14 sites undergoing administrative, enforcement, and compliance actions related to the Federal Insecticide, Fungicide, and Rodenticide Act; five identified dry cleaner-related facilities (CLEANERS); and one property that has historically been involved in mining (MINES). The Facility Index System (FINDS) typically includes pointers to facilities identified in other regulatory databases.

Table 8-1: Summary of Permitted Facilities Using Hazardous Materials in the Project Area

No. of Facilities on List*	Name and Description of Regulatory Database
4	Resource Conservation and Recovery Act Information System Large Quantity Generators (RCRIS LQG) – facilities permitted to generate more than 1,000 kilograms per month of non-acutely hazardous waste.
78	RCRIS Small Quantity Generators (RCRIS SQG) – facilities permitted to generate more than 100 kilograms per month but less than 1,000 kilograms per month of non-acutely hazardous waste.
3	Toxic Chemical Release Inventory System (TRIS) – facilities that report releases of chemicals to the air, water, or land.
2	PCB Activity Database (PADS) – facilities that generate, transport, commercially store, broker, or dispose of PCBs.
1	Toxic Substances Control Act (TSCA) – facilities that manufacture or import chemical substances included on the TSCA Chemical Substances Inventory list.
14	Federal Insecticide, Fungicide, and Rodenticide/TSCA (FTTS) – administrative, enforcement, and compliance actions related to the Federal Insecticide, Fungicide, and Rodenticide Act.
109	Facility Index System (FINDS) – a database that includes information on facilities included in other more detailed databases.
294	Hazardous Waste Information System (HAZNET) – facilities that have filed hazardous waste manifests with the DTSC.
5	Dry cleaner-related facilities (CLEANERS)
169	Oakland HAZMAT Sites (P1, P2, or P3)
158	Underground Storage Tanks (UST) – facilities permitted to maintain underground storage tanks.
98	Facility Inventory Database (CA FID UST) – facilities on a historical listing of active and inactive USTs.
90	Hazardous Substances Storage Container Database (HIST UST) – facilities on a historic list of UST sites.
7	Above-ground Petroleum Storage Tank Facilities (AST) – facilities with registered above-ground storage tanks.
1	Mines Master Index File (MINES) – properties that have been involved in mining including coal mining, quarrying, or sand and gravel operations.

*Some of the sites may appear on more than one list.

Source: Orion Environmental Associates; City of Oakland, 2002; and Environmental Data Resources, 2002.

8.2.4 Environmental Cases

Environmental cases are those sites suspected of releasing hazardous substances or that have had cause for hazardous substances investigations and are identified on regulatory agency lists. Identification of hazardous substances at these sites is generally due to site disturbance activities such as removal or repair of an underground storage tank, a spill of hazardous substances, or excavation for construction. The status of each environmental case varies and can be either active (ongoing investigations or remediation), closed (remediation or clean-up completed and approved by the regulatory agency), or unknown. However, the status of each case can change with time, and new cases are periodically added to the databases. Therefore, as discussed below under Impacts and Mitigation Measures, it would be necessary to update the status of environmental cases as well as identify any additional cases in the future when site-specific development occurs.

Table 8-2 summarizes the number of environmental cases within the Project Area identified in the record search of regulatory databases. Many sites appear in more than one database. After compiling the information from each database by address, a total of 208 distinct properties were identified as environmental cases. Appendix F includes a summary of each regulatory database reviewed and the date of the database, and Appendix G includes a compilation of environmental cases by address.

Table 8-2: Summary of Environmental Cases and Reported Spills

No. of Cases on List*	Name and Description of Regulatory Database
1	List of Deed Restrictions (DEED) – sites which have been issued a deed restriction because of the presence of hazardous substances
2	Annual Work Plan (AWP) – sites targeted for cleanup by the DTSC.
1	California Bond Expenditure Plan (CA BOND EXP PLAN) – sites with a site-specific expenditure plan for the appropriation of state funds.
11	Spills, Leaks, Investigation, and Cleanup Cost Recovery Listing (SLIC Reg2) – sites under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board.
161	Leaking Underground Storage Tanks (LUST).
4	Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) of potential Superfund sites. These are generally sites with documented releases of hazardous materials.
9	CERCLIS No Further Action Planned (CERCLIS NFRAP) – sites previously identified under CERCLIS but designated for no further action.
47	Cal Sites (CAL-SITES) – potential hazardous waste sites identified by the DTSC.
9	Proposition 65 Records (NOTIFY 65) – facilities that have reported a release that could threaten a drinking water source.
1	Toxic Pits Cleanup Act Sites (TOXIC PITS) – sites suspected of containing hazardous materials.
2	Solid Waste Information System (SWF/LF) – active, inactive, or closed solid waste disposal sites.
135	Cortese Hazardous Waste and Substances Site List (CORTESE) – a compilation of sites listed in the LUST, SWF/LF, and CAL-SITES databases.
42	Emergency Response Notification System (ERNS). These cases are usually spills or releases of chemicals reported to federal authorities
39	California Hazardous Materials Incident Reporting System (CHMIRS) – hazardous materials spills and releases reported to the California Office of Emergency Services
5	Hazardous Materials Incident Reporting System (HMIRS) – hazardous materials spills and releases reported to the US Department of Transportation.

* Some of the sites may appear on more than one list.

As summarized in Table 8-2, the primary environmental cases identified within the Project Area include sites with leaking underground storage tanks (LUST) which would generally involve a release of petroleum products and potential hazardous waste sites identified by the DTSC (CAL-SITES), which would generally include sites with releases of chemicals other than petroleum products. The database review also identified:

- 1 site with a deed restriction (DEED),
- 2 sites targeted for cleanup by the DTSC under the Annual Work Plan (AWP),
- 1 site identified under the California Bond Expenditure Plan (CA BOND EXP PLAN),
- 11 sites under the jurisdiction of the RWQCB (SLIC Reg2),
- 4 potential Superfund sites (CERCLIS),
- 9 sites identified under the Comprehensive Environmental Response, Compensation, and Liability Information System but designated for no further action (CERCLIS NFRAP),
- 9 facilities that have reported a release that could threaten a drinking water source (NOTIFY 65),
- 1 site suspected of containing hazardous materials (TOXIC PITS),
- 2 active, inactive or closed solid waste disposal sites (SWF/LF), and

The CORTESE database lists sites that are included in other databases including LUST and CAL-SITES.

Known Groundwater Plume

There is one major groundwater plume[2] in the Project Area that is undergoing further characterization. The U.S. EPA is currently in the process of conducting a Remedial Investigation of this site to collect further information to evaluate the extent vinyl chloride and other chemicals in the soil, groundwater, and soil gas at the AMCO Chemical site. The information obtained will be used to evaluate the site for inclusion on the National Priorities List (NPL). The AMCO Chemical site is located within the City of Oakland's Transit-Oriented Development Zoning District, adjacent to the proposed West Oakland Transit Village.

The plume of vinyl chloride and other chemicals was first identified in 1996 when sampling performed in response to complaints from utility workers in 1995 confirmed the presence of vinyl chloride and chlorinated solvents in soil and groundwater downgradient of the AMCO Chemical Corporation site at 1414 Third Street (CH2MHILL, 2002). Subsequent sampling documented the presence of vinyl chloride and other chemicals at the AMCO Chemical site.

[2] A groundwater plume is an area where chemicals have entered the groundwater. The extent of the plume is the extent of chemicals identified in the groundwater.

To ensure that people living near the site were protected, the U.S. EPA initiated an Emergency Response action in 1996, installing a groundwater and soil vapor treatment system which operated until July 1998 when the system was shut down in response to community concerns over exposure to contaminants in the exhaust.

Based on sampling activities conducted since shut down of the system, the U.S. EPA has concluded that:

- Elevated concentrations of vinyl chloride and other chemicals found in soil at the AMCO property do not extend off-site and the entire site is covered by concrete which would prevent direct contact with the contaminated soil by the community;

- Elevated levels of vinyl chloride and other chemicals have been identified in groundwater beneath the site and off-site although the groundwater is not used as a drinking water source and no drinking water wells exist within ¼ mile of the site; and

- Levels of vinyl chloride exceeding action levels were identified in crawl-space air and soil gas in September 1999 although vinyl chloride was not detected in either crawl-space air or soil gas samples collected in April 2000. The U.S. EPA does not believe that the very low levels of vinyl chloride found in 1999 could affect the health of the people living in the homes where samples were collected.

History of Accidental Hazardous Materials Releases

In support of the Defensible Space Assessment, a community emergency preparedness training program, The Neighborhood Information on Chemical Hazards in the Environment (NICHE) Project conducted a project to analyze accidental releases within West Oakland during the 10 year period from 1987 to 1996 including the release location, cause, and hazardous material released (NICHE, 1997).[3] The analysis, referred to as the West Oakland Pilot Program, concluded that over 50% of the spills were reported by someone other than the responsible party which supports the need for community training in response to hazardous materials incidents.

The analysis also found that during the period reviewed, there were an average of approximately 96 reported hazardous substances spills reported each year in Oakland. The most spills reported in a year was 149, reported in 1992. The number of spills declined each year after this to a low of 44 spills reported in 1996. Approximately two events each year resulted in an injury requiring a hospital visit. The most injury related incidents occurred in 1992 when a total of five spills injured 24 people. The most people injured during a single year was 36 in 1994. In one 1994 incident, 33 individuals were sent to the hospital for decontamination after a firearm was discharged into an electrical transformer causing it to explode and spray transformer oil.

Of the reported spills in Oakland, the most commonly spilled substance was a petroleum product, accounting for 41% of all spills. Chemicals and unknown materials accounted for 24% and 16%

[3] The analysis included only spills reported to the Emergency Response Notification System, a database of spills reported to federal agencies. The analysis did not consider releases reported only to state or local agencies.

of the spills, respectively. Other substances spilled include, waste, paint, gas, asbestos, sewage, and radioactive materials. Of the chemical spills reported, 21 involved the release of transformer and PCB containing materials.[4] Other chemicals released include acids and cyanides used by the plating industries, asbestos, drug lab wastes, and chemicals used to make polyurethane foam. One release from a plating shop culminated in a fire that resulted in the evacuation of several hundred people.

Gases involved in accidental gas releases included liquefied petroleum gas, ammonia, and chlorine; ammonia and chlorine are considered acutely toxic gasses. Four releases of radioactive materials were reported; one involved a leaking container of radioactive materials, two involved the theft of radioactive materials, and one involved the illegal dumping of a cylinder commonly used by hospitals to hold radioactive materials.

Of the reported spills in Oakland, 17% occurred in West Oakland mixed industrial/residential land use areas. Illegal dumping is the largest reported cause of spills within Oakland. Other causes of spills include freight accidents, spills, releases from vessels, public observations, human error and equipment failure, traffic accidents, fires, fumes, and buried utilities. The environmental database review conducted for this EIR confirms that there have been hazardous materials spills reported within much of the Project Area (ERNS, CHMIRS, and HMIRS databases – see **Table 8-2**).

Adjacent Land Uses

The Oakland Army Base Redevelopment Area lies directly to the west and south of the West Oakland Redevelopment Area. The Maritime Sub-district borders the redevelopment area directly to the south and the 16th/Wood Sub-district borders the redevelopment area to the west. The Oakland Army Base Sub-district is located further to the east of the West Oakland Redevelopment Area (City of Oakland, 2002).

The Maritime Sub-district has been historically and currently used for industrial purposes including the Port of Oakland and the Former Fleet and Industrial Supply Center. Numerous leaking underground storage tank sites and other environmental cases have been identified within this area. Those cases located nearest to the Redevelopment Area include the Former Union Pacific Roundhouse Property where free product[5] has been identified on the groundwater; Schnitzer Steel where concrete pavement has been placed over the exposed soil to eliminate exposure to hazardous substances at the site and a subterranean cutoff wall has been installed to prevent migration of contaminated groundwater to the bay; and the Union Pacific Desert Railyard.

Several environmental cases were identified in the 16th/Wood Sub-district including the Former Amtrak Station/14th Street Area and the Former Phoenix Ironworks. The primary chemicals

[4] Nine of these incidents were caused by the Oakland Hills fire in 1991.

[5] Where present in a sufficient quantity, petroleum products will float on the groundwater surface because they are less dense than water; the presence of petroleum products in this form is referred to as "free product".

detected in soil and/or groundwater at the Former Amtrak Station/14th Street Area include petroleum hydrocarbons, lead, and chlorinated hydrocarbons. With few exceptions, these chemicals were detected at concentrations below Risk-Based Screening Levels (RBSLs) for industrial/commercial land uses. Chlorinated hydrocarbons identified in soil and groundwater at this site are suspected to originate from another site. Elevated levels of lead and petroleum hydrocarbons were identified in the soil at the Former Phoenix Ironworks and the groundwater contained metals and chlorinated hydrocarbons. Soil at both sites would be classified as a hazardous waste on the basis of soluble lead concentrations.

The OARB Sub-district has been used for industrial purposes for some time, with previous land uses including an oil reclaiming plant, a ship manufacturing facility, and metal working operations. In the 1940s, the area was filled for the construction of the OARB which was operated as a U.S. Army military installation until it was closed in 1995. The Army operated the OARB as a distribution center, and primary operations by the Army involved mostly warehousing and shipping of cargo overseas. Locomotive engines and trucks involved in the transport of cargo were serviced at this facility. In addition, hazardous materials may have been shipped either to or from the OARB during its operation. The DTSC, ORA, and OBRA have entered into a Consent Agreement for the cleanup of contaminated soil and groundwater at the OARB. Under this agreement, contaminated sites within the OARB will be cleaned up to risk based cleanup levels suitable for the planned future land use of the site.

8.2.5 Hazardous Building Materials

Hazardous building materials are included in this discussion because future implementation projects, programs and other activities associated with redevelopment would likely involve demolition or renovation of existing structures. Some building materials commonly used in older buildings could present a public health risk if disturbed during demolition or renovation of an existing building. Hazardous building materials often present in older buildings include asbestos, electrical equipment such as transformers and fluorescent light ballasts that contain PCBs, fluorescent lights containing mercury vapors and lead-based paints. Asbestos and lead-based paint may also present a health risk to existing building occupants if they are in a deteriorated condition. If removed during demolition of a building, these materials would also require special disposal procedures.

8.3 Regulatory and Policy Setting

Hazardous materials and hazardous wastes are subject to numerous federal, state and local laws and regulations intended to protect health and safety and the environment. Many of these regulations would apply to future redevelopment activities within the Project Area. The overall regulatory framework for hazardous materials is discussed in Appendix E.

Of particular relevance to the West Oakland Project area are “Brownfields Initiatives” that have been developed to remove barriers to development of properties with real or perceived contamination. Abandoned, idled, or underused industrial and commercial facilities are referred to as “brownfields”. Historically, development of these sites has not been favored because of the unknown costs associated with cleanup of existing contamination and because of the potential

for taking on long-term liability associated with contamination at a property. Faced with these unknowns, developers have often preferred development of "greenfields"[6] in outlying areas where there are no contamination concerns but where there is generally a greater overall burden on the environment.

The sections below focus on those regulatory and policy-based initiatives that have been developed to promote reuse of "brownfields" by facilitating cleanup of abandoned, idled, and underutilized properties such as those that would be encountered within the Project Area. Regulations that have been enacted to ensure safe handling of hazardous materials, appropriate response to releases of hazardous materials, appropriate closure of permitted facilities, and safe handling of hazardous materials near a sensitive receptor are also identified.

8.3.1 Federal Regulations

The U.S. Environmental Protection Agency (U.S. EPA) is the lead agency responsible for enforcing federal regulations that affect public health or the environment. The primary federal laws and regulations include the Resource Conservation and Recovery Act of 1974 (RCRA); the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA); and the Superfund Act and Reauthorization Act of 1986 (SARA). Federal statutes pertaining to hazardous materials and wastes are contained in the Code of Federal Regulations (40 CFR).

The U.S. Environmental Protection Agency (U.S. EPA) has developed numerous "brownfield" programs to promote and expedite the cleanup of brownfields while reducing the potential liability to lenders and developers of contaminated properties. These programs are more fully described in Appendix E.

8.3.2 State of California Regulatory/Policy Setting

The California Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Board (RWQCB) are the primary state agencies regulating hazardous materials in California. These agencies are part of the California EPA. The RWQCB is authorized by the State Water Resources Control Board to enforce provisions of the Porter - Cologne Water Quality Control Act of 1969. This act gives the RWQCB authority to require groundwater investigations when the quality of groundwater or surface waters of the state is threatened, and to require remediation of the site, if necessary. The DTSC is authorized by the U.S. EPA to regulate the management of hazardous substances including the remediation of sites contaminated by hazardous substances.

The DTSC has also developed "brownfield" programs to promote and expedite the cleanup of brownfields. Those state programs developed with or in association with the DTSC most applicable to the Project Area are further described below.

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[6] Greenfields are land where there have been no previous commercial or industrial land uses.

Polanco Redevelopment Act

The Polanco Redevelopment Act, applicable only in redevelopment areas, authorizes a redevelopment agency to take action to require the investigation and clean up of an identified release of hazardous materials in accordance with applicable state and federal laws. The redevelopment agency may also perform the cleanup itself with the oversight of the DTSC, the San Francisco Bay Regional Water Quality Control Board (RWQCB) or local agency if the site owner or operator refuses to do so. If the clean up is completed in accordance with an approved clean up plan and is performed to the satisfaction of the responsible agency, redevelopment agencies, developers, subsequent land owners, and lenders receive immunity from liability for the contamination under this legislation. This act also includes cost recovery provisions to allow the redevelopment agency to pursue cost reimbursement from the responsible party for actions taken by the agency. Senate Bill 1684, passed in September 2002, was enacted to make this act permanent.

In the San Francisco Bay Area, examples of where redevelopment agencies have used the Polanco Redevelopment Act to expedite the clean up "brownfield" sites include a 12-acre industrial site in Emeryville, a former 3-acre trucking and fuel distribution facility in San Leandro, and a former gas station and asphalt manufacturing facility site in Redwood City (California Redevelopment Association, 2002). Advantages of invoking the Polanco Act for these cleanups include speeding up the cleanup process, immunity from liability to facilitate financing for the development projects and shifting the cleanup costs to the responsible parties.

California Land Environmental Restoration and Reuse Act

The California Land Environmental Restoration and Reuse Act (CLERRA) was enacted on October 12, 2001, to promote the restoration and reuse of brownfields sites in California. This act authorizes local regulatory agencies to require property owners to provide information related to potential past or present hazardous material releases at a property and to require a Phase I environmental assessment if a release is indicated. In the event that a potential release is indicated by the Phase I environmental assessment, the act requires the California EPA to assign the DTSC, RWQCB, or a local agency as the lead oversight regulatory agency for further investigation and remediation of the site. These actions include a preliminary endangerment assessment, additional site investigations, and implementation of remedial action in accordance with an approved Remedial Action Plan (RAP). Oakland has not completed the process to authorize a local agency under the CLERRA.

8.3.3 City of Oakland Regulatory/Policy Setting

In accordance Chapter 6.11 of the Health and Safety Code (Section 25404, et seq.), the City of Oakland assumed authority and responsibility for the administration and enforcement within the city of the unified hazardous waste and hazardous materials management program. The purpose of this legislation was to simplify environmental reporting by streamlining the number of regulatory agency contacts a facility must maintain and requiring the use of more standardized forms and reports. The City of Oakland Fire Services Agency, Office of Emergency Services (OES) is the administering agency for the Certified Uniform Program Agency (CUPA) program in Oakland.

Oakland Urban Land Redevelopment Program

The Oakland Urban Land Redevelopment Program is a collaborative effort by the City of Oakland and other principal agencies charged with enforcing environmental regulations in Oakland[7] to streamline the clean up and redevelopment of moderately contaminated sites (City of Oakland Public Works Agency, 2000). The program provides a consistent set of guidelines for the application of risk-based corrective actions by clarifying environmental investigation requirements, standardizing the regulatory process, and establishing Oakland-specific, risk based corrective action cleanup standards for qualifying sites. Benefits of standardizing this process include reduced investigation, remediation, and overall project costs; more accurate cost estimating; expedited regulatory approval of the corrective action plans; expedited regulatory site closure; and earlier realization of development goals.

The Urban Land Redevelopment Program includes a three-tiered approach to the investigation of Oakland sites and identification of risk-based cleanup standards.

- Tier 1 Risk Based Screening Levels (RBSLs) and Tier 2 Site Specific Target Levels (SSTLs) are specified for the protection of human health at Oakland sites that meet specific eligibility requirements, where commonly found contaminants are present, and the contaminants are considered to present a relatively low risk. RBSLs and SSTLs are identified for residential and commercial/industrial land uses. These levels are typically lower (more stringent) for residential land uses than for commercial/industrial land uses.
- For more complicated sites that do not meet the eligibility requirements, a Tier 3 analysis using site-specific information would be required to identify SSTLs for the appropriate land use. RBSLs and SSTLs are based on an acceptable carcinogenic risk of 10-5 and non-carcinogenic hazard index of 1.0.

A risk management plan would be prepared to specify containment measures[8] where contaminants would be left at concentrations greater than the most stringent RBSL. These measures would be used to prevent exposure to any hazardous materials left in place and/or institutional controls that would be employed to ensure the future protection of human health.[9] The site would also be included in the City of Oakland Permit Tracking System, and future

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[7] Specifically, the program was developed by the Oakland Public Works Agency, Environmental Services Division with assistance from the Alameda County Department of Environmental Health, California Department of Toxic Substances Control, San Francisco Regional Water Quality Control Board, US Environmental Protection Agency, a community panel, Spence Environmental Engineering, and volunteer environmental consultants.

[8] Containment measures are engineering controls that can be used to reduce or eliminate exposure to hazardous materials at a site. Typical containment measures include vapor barriers, asphalt caps, moisture barriers, and slurry walls. Implementation of these measures can reduce human health risks at a site and are typically less expensive and easier to implement than techniques used to physically remove contaminants from a site.

[9] Institutional controls that are commonly used include deed restrictions, land use restrictions, access controls, recording notices, and contractual obligations.

permit applications for work that might alter the conditions of site closure would undergo special review by the City of Oakland Fire Department. Implementation of this program is intended to provide assurance that human health and environmental resources will be protected without needlessly delaying future construction and development projects.

Throughout most of Oakland, humans are the primary receptor that may be exposed to hazardous materials because most of the city is urbanized. Ecological receptors such as wildlife and endangered species are generally not of concern. Based on this, the Urban Land Redevelopment Program does not include provisions for development of cleanup levels for sites where there is an existing or potential exposure pathway to ecological receptors or sensitive habitats such as wildlife refuge areas, wetlands, surface water bodies, or other protected areas. For sites where ecological receptors or sensitive habitats may be exposed to hazardous materials, an ecological risk analysis would be required to identify cleanup levels that would be protective of these receptors.

Oakland Hazardous Materials Regulation

In accordance Chapter 6.11 of the California Health and Safety Code (Section 25404, et seq.), the City of Oakland assumed authority and responsibility for the administration and enforcement of the unified hazardous waste and hazardous materials management program within the city. The purpose of this legislation was to simplify environmental reporting by streamlining the number of regulatory agency contacts a facility must maintain and requiring the use of standardized forms and reports. The City of Oakland Fire Services Agency, Office of Emergency Services (OES) is the administering agency for the Certified Uniform Program Agency (CUPA) program in Oakland. The responsibilities of the CUPA are described in Appendix E.

Community Right To Know Laws

In accordance with Community Right to Know laws, businesses that handle specified quantities of hazardous materials prepare a Hazardous Materials Business Plan (HMBP) that details hazardous substance inventories, site layouts, training and monitoring procedures, and emergency response plans. Businesses that handle specified amounts of acutely hazardous materials must implement a Risk Management and Prevention Plan (RMPP). The RMPP must include information on the submitting facility, reference to the facility's business plan, process designation, identification of acutely hazardous materials handled and their quantity, and a general description of processes and principal equipment. Requirements for these programs are further discussed in Appendix E.

Spill Reporting at a Permitted Facility

In accordance with CUPA regulations, the City also requires facilities to report any actual or potential release of hazardous substances by calling 911 and is required to complete all actions necessary to remedy the effects of an unauthorized release. If the City suspects a release of hazardous materials from a facility they may also inspect the facility and abate a property where contamination is not being managed in compliance with CUPA regulations. Requirements for spill reporting and authorization for the City to abate a property are further discussed in Appendix E.

Closure of Facilities Under CUPA Program

As described in more detail in Appendix E, facilities that handle hazardous materials or wastes under the CUPA program are required to appropriately close, prepare, and implement a closure plan when hazardous materials handling activities are stopped. The closure plan must ensure that there is no residual threat to public health and safety or the environment from possible release of hazardous materials and/or waste from the unit or facility and require no future monitoring of the site.

Use of Hazardous Substances Within ¼ Mile of a Sensitive Receptor

To protect sensitive receptors from public health effects from a release of hazardous substances, the City of Oakland Municipal Code requires a handler of hazardous materials within 1,000 feet of a residence, school, hospital, or other sensitive receptor to make written disclosure of whether it will handle, store, or produce any hazardous substances. The City, at its discretion, may require such a facility to prepare a hazardous materials assessment report and remediation plan (HMARRP) and include public participation in the planning process.[10] The HMARRP must:

- Identify hazardous materials used and stored at the property and the suitability of the site;
- Analyze off-site consequences that could occur as a result of a release of hazardous substances (including fire);
- Include a health risk assessment; and
- Identify remedial measures to reduce or eliminate on-site and off-site hazards.

Citizens of Oakland Respond to Emergencies

Both the Loma Prieta earthquake of 1989 and the Firestorm of 1991 strained City emergency response resources, and the City recognized that it would be beneficial to have citizens trained in emergency response procedures also. To address this, the OES developed the Citizens of Oakland Respond to Emergencies (CORE) as a citizen emergency response program to help the Oakland community become more self sufficient in disaster situations. In 1997 the CORE program was expanded to include a hazardous materials and awareness educational program. CORE promotes community awareness and training in emergency response to chemical accidents, natural disasters, and severe weather incidents. The CORE program includes training for home and family preparedness and forming and linking neighborhood response teams as well as more advanced training in early response procedures and fire suppression and prevention.

Emergency Response Notification System

The OES has implemented an Emergency Alerting and Notification System which utilizes outdoor warning sirens to alert the public in the event of an impending emergency including a

[10] An industrial facility that changes ownership is also required to disclose whether it will handle, store, produce any substance presenting a threat to public health. If so, then the facility is also required to can also be required to prepare an HMARRP.

toxic release, threat of flooding or mudslides, major fire, secondary problems caused by earthquakes, or other natural or technological disasters. The public have been alerted to tune into local emergency alerting radio station for safety information and instructions if the sirens are activated. There are sirens installed at three locations in West Oakland including Goss and Pine Avenues, the Poplar Recreation Area, and Lafayette Square.

8.4 Impacts and Mitigation Measures

Significance Criteria

Under CEQA Guidelines, implementation of the West Oakland Redevelopment Plan would have a significant impact on the environment if it were to:

- Create a substantial hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a substantial hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, materials, or waste within ¼ mile of an existing or proposed school;
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, or be another known or suspected contaminated site that would (1) create a significant hazard to the public or the environment, (2) exceed the acceptable excess cancer risk range of 1 × 10-5 for commercial or industrial land uses as set forth in the City of Oakland Urban Land Redevelopment Program Guidance Document (City of Oakland, 2000), or (3) exceed the acceptable excess cancer risk range set in the National Contingency Plan (1 × 10-6 to 1 × 10-4) for other uses;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and would result in safety hazards for people residing or working in the project area.

Definition, identification and determination of threshold levels of hazardous materials and wastes are provided in Title 40 of the *Code of Federal Regulations* (40 CFR) and in Title 22 of the *California Code of Regulations*. Determination of "substantial" hazard or "insignificant" levels of hazardous materials is performed by the regulatory agencies on a case-by-case basis, depending on the proposed uses, potential exposure, and degree and type of hazard.

8.4.1: Potential Long-Term Impacts

Potential Impact 8.4.1: Currently, businesses within the Project Area handle hazardous materials as part of their operations. Implementation of the Redevelopment Plan's projects, programs and other activities could result in the introduction of new businesses that handle hazardous materials. These existing and potential new businesses could cause a substantial hazard to the public or the environment as a result of an accidental release of hazardous materials or wastes. This is *a potentially significant effect*.

Discussion

Implementation of the Redevelopment Plan would encourage introduction of additional businesses that could involve the handling of hazardous materials in those areas designated under the General Plan for "Business Mix" uses. While this land use classification requires a mix of light industrial, commercial business, and office uses along the periphery to attain the required buffering between residential areas and high impact uses, it is likely that some of the new businesses could include the use of hazardous materials, require construction and use of on-site aboveground or underground storage tanks for the storage of hazardous materials or fuel products, or result in the production of hazardous wastes. These businesses would be required to comply with applicable federal, state and local regulations. However, there would remain the potential for an accidental release of hazardous materials or petroleum products, such as a tank leak, spill or rupture, to occur.

City Municipal Code

To protect residences from exposure to hazardous materials during normal operations, the City Municipal Code includes the following measures addressing the compatibility of residential land uses with industrial or commercial land uses involving hazardous materials use:

- Chapter 17.101 of the City Municipal Code, the S-16 Industrial-Residential Transition Combining Zone regulations, includes requirements to provide a transition between residential and industrial land uses. Limited civic, commercial, and small manufacturing activities are allowed within this zone. The City, on a case-by-case basis, may conditionally approve additional uses, including live-work accommodations.
- Chapter 17.114 of the City Municipal Code allows the City to control, improve, or terminate uses that do not conform to the zoning regulations.

General Plan Policies

The Land Use and Transportation Element of the Oakland General Plan contains the following policies to reduce the potential of adverse effects from an accidental release of hazardous materials:

Policy I/C4.1: Protecting Existing Activities. Existing industrial, residential, and commercial activities and areas which are consistent with long-term land use plans for the City should be protected from the intrusion of potentially incompatible land uses.

Policy W1.3: Reducing Land Use Conflicts. Land uses and impacts generated from Port or neighborhood activities should be buffered, protecting adjacent residential areas from

the impacts of seaport, airport, or other industrial uses. Appropriate siting of industrial activities, buffering (e.g., landscaping, fencing, transitional uses, etc.), truck traffic management efforts, and other mitigations should be used to minimize the impact of incompatible uses.

Policy W2.2: Buffering of Heavy Industrial Uses. Appropriate buffering measures for heavy industrial uses and transportation uses on adjacent residential neighborhoods should be developed and implemented.

Policy N5.1: Environmental Justice. The City is committed to the identification of issues related to the consequences of development on racial, ethnic, and disadvantaged socio-economic groups. The City will encourage active participation of all its communities, and will make efforts to inform and involve groups concerned about environmental justice and representatives of communities most impacted by environmental hazards in the early stages of the planning and development process through notification and two-way communication.

Policy N5.2: Buffering Residential Areas. Residential areas should be buffered and reinforced from conflicting uses through the establishment of performance-based regulation, the removal of non-conforming uses, and other tools.

Mitigation Measures

Any businesses that handle or store hazardous materials or petroleum products are required to comply with, among other regulations, the City Municipal Code. Under Code requirements, the City of Oakland Office of Emergency Services (OES) is designated as the Certified Unified Program Agency (CUPA) responsible for permitting and overseeing activities that involve underground storage tanks and the handling of hazardous materials in the City of Oakland. The Oakland OES requires facilities that handle hazardous materials greater than threshold quantities to prepare a Hazardous Materials Business Plan (HMBP), and facilities that handle acutely hazardous materials are required to prepare a Risk Management and Prevention Plan (RMPP).

- **Mitigation Measure 8.4.1: Technical Assistance - Hazardous Materials Business Plans and Risk Management and Prevention Plans**. Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance for existing and potential new businesses within the Project Area that handle hazardous or acutely hazardous materials. Such assistance may be in the form of loans, grants and/or technical assistance from the OES toward the preparation of required Hazardous Materials Business Plans and/or Risk Management and Prevention Plans.

Resulting Level of Significance

Compliance with OES requirements, as well as with state and federal regulations, would minimize potential exposure of site personnel and the public to any accidental releases of hazardous materials or waste, and would also protect the area from potential environmental contamination. Redevelopment assistance pursuant to Mitigation Measure 8.4.1 would ensure maximum compliance with these regulations and thereby minimize the risk of accidental releases, ensure safe handling of hazardous materials at permitted facilities, and increase the protection of nearby residences from the potential of an accidental release. There remains the

potential that existing and new businesses could still have an accidental release of hazardous materials or wastes. However, required compliance with federal, state and local regulations would reduce this risk to generally acceptable thresholds. Each of these regulations contains identifiable quantitative, qualitative or performance-based thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

Potential Benefits of Redevelopment

It is uncertain whether introduction of new businesses would result in an increase or decrease of facilities that handle hazardous materials within the Project Area. However, even if there were a known increase in the use of hazardous materials, it would not necessarily correspond to an increase in risk associated with their use or handling, or in generation of hazardous waste. The risk associated with an increase in hazardous materials use associated with new businesses would be offset with compliance with current hazardous materials regulations, including structural requirements of handling, storing, secondary containment and disposing of hazardous materials. In addition, new businesses would likely implement the newer and improved technology for handling and storage of hazardous materials.

Adoption of the Redevelopment Plan and subsequent implementation of redevelopment projects, programs and other activities is anticipated to assist in implementation of the land use strategy envisioned under the General Plan LUTE for the Business Mix land use classification. This land use classification anticipates an eventual transition of land use over time that would result in a "buffer zone" consisting of a mix of light industrial, commercial business, and office uses to separate residential uses from heavier industrial uses. While this land use transition could introduce new businesses which handle hazardous materials, these businesses would be required to comply with federal, state and local hazardous materials regulations, including structural requirements for handling, storing, secondary containment and disposing of hazardous materials.

An indirect benefit of redevelopment would be the use of newer and improved technology for handling and storage practices that would likely be implemented by new businesses in the future, and replacement of older businesses that use older technology. This would provide an incremental increase in protection to public health and the environment against future accidental releases of hazardous materials.

8.4.2: Accidental Release of Hazardous Materials or Wastes during Normal Transport Operations

Potential Impact 8.4.2: Currently, businesses within the Project Area include those which involve transport of hazardous materials as part of their operations. Implementation of the Redevelopment Plan's projects, programs and other activities could result in the introduction of new businesses that involve transport of hazardous materials. These existing and potential new businesses could cause a substantial hazard to the public or the environment as a result of an accidental release of hazardous materials or wastes during normal transport operations. This is *a potentially significant effect*.

Discussion

As described in Impact 8.4.1 above, the Redevelopment Plan's implementation projects, programs and other activities could result in an increase of use of hazardous materials in the Project Area. This in turn could result in an increased potential for transportation-related accidents in the area. Even though transporters of hazardous materials and wastes are required to comply with applicable federal, state and local regulations, there would remain the potential for an accidental release of hazardous materials or wastes to occur.

The California Highway Patrol and the California Department of Transportation (Caltrans) are the primary state agencies with responsibility for enforcing federal and state regulations pertaining to transport of hazardous materials within California. The U.S. Department of Transportation regulates the transport of chemicals and hazardous materials by truck between states. These agencies regulate container types and packaging requirements as well as licensing and training for truck operations, chemical handling and hazardous waste haulers.

City General Plan Policies

The Land Use and Transportation Element of the Oakland General Plan contains the following policy related to transport of hazardous materials:

Policy T1.6: Designating Truck Routes. An adequate system of roads connecting port terminals, warehouses, freeways and regional arterials, and other important truck destinations should be designated. This system should rely upon arterial streets away from residential neighborhoods.

Mitigation Measures

The potential for an accidental release of hazardous materials to occur within a residential area is reduced by current truck route prohibitions. The prohibitions limit truck travel to designated truck routes including the on- and off- ramps at 7th Street, Adeline and Union Streets, and West Grand Avenue. These truck routes (refer to the Chapter 5: Traffic and Circulation, Section 5.4.3 of this EIR for a more complete description of this program) specify approved truck travel routes as well as designated truck prohibition routes, and serve to draw traffic away from residential areas.

- **Mitigation Measure 8.4.2A: Enforcement of Truck Prohibitions.** Implementation programs pursuant to the Redevelopment Plan should include projects, programs or other activities intended to increase or enhance the enforcement of prohibitions that limit truck travel to designated truck routes.

- **Mitigation Measure 8.4.2B: Preference for New Industrial Uses along Truck Routes**. Redevelopment assistance for new industrial development projects should be prioritized to give preference to those new or existing businesses located along approved truck travel routes, and whose primary access routes are well away from residential areas.

Resulting Level of Significance

Compliance with federal and state hazardous materials transportation regulations and existing General Plan policies would minimize the risk for accidental releases during normal transport operations along approved truck routes. Redevelopment programs pursuant to Mitigation Measures 8.4.2A and B would ensure maximum compliance with truck prohibitions and thereby minimize the risks associated with an accidental releases and increase protection of nearby residences.

There remains the potential that existing and new businesses could still have an accidental release of hazardous materials or wastes during transport. However, required compliance with federal, state and local regulations would reduce this risk to generally acceptable thresholds. Each of these regulations contains identifiable quantitative, qualitative or performance-based thresholds. Compliance with these thresholds would reduce this effect to a level of ***less than significant***.

8.4.3: Use of Hazardous Materials within ¼ Mile of a School

Potential Impact 8.4.3: Currently, all of the schools within the Project Area are located within ¼ mile of a permitted hazardous materials use or an identified environmental case. Most of these schools are also located within ¼ mile of an area designated for "Business Mix" or "Community Commercial" land uses. Implementation of the Redevelopment Plan's projects, programs and other activities could result in the introduction of new businesses that involve hazardous materials within the Business Mix or Community Commercial area near schools. This is *a potentially significant effect*.

Discussion

There are seven schools operated by the Oakland Unified School District within the Project Area, and an additional four schools located within ¼ mile of the Project Area boundaries. Of those schools located within the Project Area, all are currently located within ¼ mile of a permitted hazardous materials use or an identified environmental case. Most are also located within ¼ mile of an area designated for "Business Mix" or "Community Commercial" land uses under the 1998 General Plan LUTE. Two of the schools located within ¼ mile of the Project Area boundaries are also located within ¼ mile of a permitted hazardous materials use within the Project Area, and one is located within ¼ mile of an area designated for Business Mix uses.

The Redevelopment Plan's implementation programs, projects and other activities could facilitate the addition of new businesses that handle hazardous materials within those areas designated as Business Mix and Community Commercial uses. Without proper planning and handling, the use of hazardous materials within ¼ mile of these schools could result in unacceptable health risks to these sensitive receptors.

Mitigation Measures

The City of Oakland Municipal Code requires any facility that handles hazardous or acutely hazardous materials in excess of specified quantities to file a disclosure form, commonly referred to as a Hazardous Materials Business Plan (HMBP). This form must contain information needed for City emergency services to adequately prepare for response to an emergency at that facility. Facilities that handle acutely hazardous materials must also complete a Risk Management and Prevention Plan (RMPP) to assess potential off-site consequences of a release of hazardous materials.

In addition, facilities that handle hazardous materials within ¼ mile of a school, hospital, or residence can be required to complete a Hazardous Materials Assessment Report and Remediation Plan (HMARRP). The HMARRP must identify hazardous materials used at the facility and the suitability of the site, the potential on-site and off-site risks, and remedial measures to be implemented to reduce or eliminate on-site and off-site risks. The HMARRP is subject to review and approval by the City and public review and comment to ensure that potential threats to public health are adequately addressed.

- **Mitigation Measure 8.4.3A: Preference for Industrial Uses away from Sensitive Receptors.** Redevelopment assistance for new industrial development projects should be prioritized to give preference to those new or existing businesses located further than ¼ mile away from a school sites, hospital, health clinic or residence.

- **Mitigation Measure 8.4.3B: Hazardous Materials Assessment Report and Remediation Plan Required.** Any project in furtherance of the Redevelopment Plan that proposes a business that handles hazardous materials within ¼ mile of a school, hospital, or residence shall be required to submit a Hazardous Materials Assessment Report and Remediation Plan (HMARRP) for review and approval by the City.

- **Mitigation Measure 8.4.3C: Technical Assistance - Hazardous Materials Assessment Report and Remediation Plan.** Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance for existing businesses within the Project Area that handle hazardous materials within ¼ mile of a school, hospital or residence. Such assistance may be in the form of loans, grants and/or technical assistance from the OES toward the preparation of a required Hazardous Materials Assessment Report and Remediation Plan.

Resulting Level of Significance

Compliance with City regulations will require hazardous material handlers within 1,000 feet of a school or other sensitive receptor to disclose the use of hazardous materials, conduct assessments of potential off-site risks, and implement remedies to reduce identified risks. These requirements would reduce the potential for an unacceptable release of hazardous materials within ¼ mile of a school or other sensitive receptor. Redevelopment priorities, requirements and assistance pursuant to Mitigation Measure 8.4.3A, B and C would ensure maximum compliance with these regulations and thereby minimize the risk of accidental releases and increase the protection of nearby sensitive receptors from the potential of an accidental release. However, there remains

the potential that existing and new businesses could still have an accidental release of hazardous materials or wastes.

Required compliance with federal, state and local regulations would reduce this risk to generally acceptable thresholds. Each of these regulations contains identifiable quantitative, qualitative or performance-based thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

8.4.4: Exposure to Hazardous Materials as a Result of New Land Uses

Potential Impact 8.4.4: Implementation of the Redevelopment Plan's projects, programs and other activities could result in the redevelopment of older industrial areas with new land uses. Without measures to ensure adequate cleanup of closed facilities and cleanup of soil and groundwater to appropriate cleanup levels, future site occupants could be exposed to unacceptable levels of hazardous materials. This is *a potentially significant effect*.

Discussion

The 1998 General Plan Land Use and Transportation Element anticipates the gradual transition of properties currently used for industrial purposes, particularly those currently non-conforming industrial land uses, to other uses. This transition would involve closure and/or relocation of non-conforming industrial land uses and introduction of new businesses within a buffer zone along the periphery of the "Mixed Business" use area. Without measures to ensure adequate cleanup of closed facilities and cleanup of soil and groundwater to appropriate cleanup levels, future site occupants could be exposed to unacceptable levels of hazardous materials.

In addition, known sites where remediation has been completed or in the cases where closure has been granted, regulatory agencies would have approved health-based clean up efforts to levels that are based on current land uses. In some cases, closure may have accepted containment controls as adequate to prevent unacceptable exposure to hazardous materials for a given land use (i.e., industrial uses). Such controls may have allowed the site owner to leave hazardous materials in the soil and/or groundwater at concentrations higher than otherwise applicable cleanup levels, such as for residential or more sensitive uses. If land uses change to a more sensitive use as a result of implementation programs, projects or other activities of the Redevelopment Plan, such as changing from existing industrial or commercial use to a new residential use, then more strict clean up levels would apply. Without additional remediation, new site occupants could be exposed to unacceptable levels of hazardous materials in the soil and/or groundwater.

Mitigation Measures

- **Mitigation Measure 8.4.4A: Technical Assistance - Closure of Permitted Hazardous Materials Use Sites.** Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance for the proper closure of hazardous materials use sites in accordance with existing laws and regulations. Such assistance may be in the form of loans, grants or technical assistance, or the use of Polanco Act or other Redevelopment

Agency authority to ensure closure of permitted hazardous materials use sites in accordance with an approved CUPA program and City of Oakland regulations. Requirements for closure of the facility include preparation of a closure plan that:

- Eliminates the need for further monitoring of the closed unit or facility;
- Ensures that there is no residual threat to public health of safety or the environment from possible release of hazardous materials and/or waste from the unit or facility; and
- Ensures that the removal, disposal, and neutralization or reuse of the hazardous materials and/or waste handled by or released from the unit or facility, are accomplished in an appropriate manner.
- Closure of any facility is subject to inspection by the OES before and after closure to demonstrate that the closure will be or was implemented in accordance with the accepted closure plan.

- **Mitigation Measure 8.4.4B: Technical Assistance – Risk Management Plan.** Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance for the appropriate reporting of closures of hazardous materials use sites. Such assistance may be in the form of loans, grants and/or technical assistance toward the preparation of a required Risk Management Plan (RMP).
  - A Risk Management Plan is required in accordance with the Urban Land Redevelopment Program for sites where institutional controls or containment were used to prevent unacceptable contact with soil or groundwater containing hazardous materials.
  - The RMP shall specify how remaining contamination would be managed to ensure the continued protection of human health and the environment.
  - A copy of the RMP shall be placed on file with the lead regulatory agency for the cleanup of the site and with the City Fire Department, and the site shall be included in the City of Oakland Permit Tracking System.

- **Mitigation Measure 8.4.4C: Permit Tracking Review.** Any project, program or other implementation activity in furtherance of the Redevelopment Plan proposed on a site that has been closed under the requirements of CUPA shall be reviewed pursuant to the City Permit Tracking System. Under this system, any redevelopment-related activity that might alter conditions of prior site closure would undergo special review by the City of Oakland Fire Department to ensure that proper actions are taken to prevent unacceptable exposure to hazardous materials as a result of changed site conditions.

Resulting Level of Significance

Compliance with City policies and regulations requiring a Risk Management Plan and tracking of sites that have obtained conditional closure in the Oakland Permit Tracking System would reduce the risk of unacceptable exposure to hazardous materials. These requirements would ensure that facilities permitted under the CUPA program are cleaned up to levels appropriate for future land uses anticipated at the time of closure, or that the responsible party commits to an acceptable timeline for cleanup.

Required compliance with federal, state and local regulations would reduce this risk to generally acceptable thresholds. Each of these regulations contains identifiable quantitative, qualitative or performance-based thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

8.4.5: Exposure to Hazardous Materials in Soil or Groundwater during Construction

Potential Impact 8.4.5: Future construction activities pursuant to implementation of the Redevelopment Plan that involve excavation, grading, and/or de-watering could encounter hazardous materials in the soil and groundwater. This impact is considered to be *potentially significant*.

Discussion

As discussed in the Environmental Setting, there are numerous sites permitted for hazardous materials use and many identified environmental cases located within the Project Area. Construction activities associated with excavation, grading, and dewatering at or adjacent to these sites could encounter hazardous materials in the soil and groundwater. Without implementation of proper precautions, workers and/or the community may be exposed to hazardous materials.

Where remediation would require off-site transport of contaminated soil or groundwater, these materials could be classified as a restricted or hazardous waste under state or federal regulations depending on the specific characteristics of the materials. There would be the potential for accidents during transport, which could expose the public and the environment to the chemical compounds. Where construction would require de-watering of contaminated groundwater, a release of hazardous materials could occur, potentially resulting in exposure to the public and the environment. Redevelopment may also involve the improvement of underground utilities and could also include the installation of new utilities by the City. There is the potential to encounter hazardous materials in soil and/or groundwater from adjacent chemical release sites during work on underground utilities which could potentially expose workers, the public, or the environment to hazardous materials.

General Plan Policies

The Land Use and Transportation Element of the Oakland General Plan contains the following policy related to the cleanup of chemical release sites:

Policy I/C2.1: Pursuing Environmental Cleanup. The environmental clean up of contaminated industrial properties should be actively pursued to attract new users in targeted industrial and commercial areas.

The following OSCAR Element policy and action also apply to the cleanup of chemical release sites:

Policy CO-1.2: Soil Contamination Hazards. Minimize hazards associated with soil contamination through appropriate storage and disposal of toxic substances, monitoring of dredging activities, and cleanup of contaminated sites. In this regard, require soil testing for development of any site (or dedication of any parkland or community garden) where contamination is suspected due to prior activities on the site.

Action CO-1.2.1: Further Study of Soil Contamination. Conduct further study of soil contamination and toxics during update of the Oakland General Plan Safety Element.

Mitigation Measures

- **Mitigation Measure 8.4.5A: Identification and Remediation of Hazardous Materials**. Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance in the identification and remediation of hazardous materials in accordance with existing laws and regulations. Such assistance may be in the form of loans, grants or technical assistance, or the use of Polanco Act or other Redevelopment Agency/City authority (e.g., CLERRA). These City/Agency authorities enable the Agency/City to require a site owner to conduct further investigations and, pending the results of a Phase I environmental assessment, to conduct remediation if a release of hazardous materials is indicated. This mitigation measure would implement state and federal regulations and would require the following general process to address chemical releases and reduce the potential threat to human health and the environment:

    - The potential for hazardous materials at a site proposed for development shall be evaluated through completion of a site-specific Phase I environmental site assessment prior to development. The site assessment includes visual inspection of the property, review of historical documents, and review of environmental databases to assess the potential for contamination from sources such as underground storage tanks, current and historical site operations, and migration from off-site sources. Phase I environmental site assessments are commonly conducted to comply with the due diligence requirements of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

    - Where a Phase I site assessment indicates evidence of a chemical release, a lead regulatory agency would be assigned (the ACDEH, RWQCB, or DTSC) and additional data would be gathered during a Phase II investigation. This would include actual sampling and laboratory analysis of the soil and groundwater for the suspected chemicals to identify the nature and extent of chemicals in soil and/or groundwater. Appropriate cleanup levels for each chemical, based on current and planned land use, would be determined in accordance with procedures described in the Urban Land Redevelopment Program or accepted procedures adopted by the lead agency

providing oversight of the investigation and remediation. At sites where there are ecological receptors such as sensitive plant or animal species that could be exposed to hazardous materials, clean up levels would be determined according to the accepted ecological risk assessment methodology of the lead agency, and would be protective of ecological receptors known to be present at the site.

- If the agreed-upon clean-up levels were exceeded, a remedial action plan would be prepared to describe remedial alternatives considered for the site. This remedial action plan and the proposed remedial approach would be presented for review and approval by the lead regulatory agency. The plan would include proposed methods to remove or treat identified chemicals to the approved cleanup levels or containment measures to prevent exposure to chemicals left in place at concentrations greater than approved cleanup levels.

- Upon determination that a chemical release has not occurred or that a site remediation has been successfully completed to the most stringent cleanup levels, the lead agency would issue a "no further action" letter to the site owner.

- For sites that were cleaned to levels that do not allow unrestricted land use, or where containment measures were used to prevent exposure to hazardous materials, a letter of "conditional site closure" would be issued. Under this scenario, a Risk Management Plan would be prepared and the site would be tracked in the City's Permit Tracking System as described in Section 8.4.4.

- **Mitigation Measure 8.4.5B: Underground Storage Tank (UST) Closure**. Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance in the removal of permitted or previously unidentified, abandoned or no longer used underground storage tanks in accordance with City of Oakland requirements. Such assistance may be in the form of loans, grants or technical assistance, or the use of Polanco Act or other Redevelopment Agency/City authority. This mitigation measure would implement state and federal regulations and would require the following general process to address underground storage tanks:

  - Removing and properly disposing of any remaining hazardous materials in the tank, and having the tank removal supervised by the City.

  - Sampling of the soil within the tank excavation. Recycling or disposing of the discarded tank, and filing a tank removal closure report with the City.

  - If a chemical release were indicated on the basis of sampling within the tank excavation, assessment of soil and groundwater quality and remediation, if required, would be conducted as described above for hazardous materials.

  - Alternatively, the tank could be abandoned in place if removal were infeasible.

- **Mitigation Measure 8.4.5C: Disposal of Contaminated Soil or Groundwater.** Implementation programs pursuant to the Redevelopment Plan should include redevelopment assistance

in the removal of disposal of contaminated soil or groundwater in accordance with City of Oakland requirements. Such assistance may be in the form of loans, grants or technical assistance, or the use of Polanco Act or other Redevelopment Agency/City authority. This mitigation measure would implement state and federal regulations and would require the following general process:

- The generator of the hazardous wastes would be required to follow state and federal regulations for manifesting the wastes, using licensed waste haulers, and disposing of the materials at a permitted disposal or recycling facility.

- The BAAQMD may also impose specific requirements to protect ambient air quality from dust, lead, hydrocarbon vapors or other airborne contaminants during site remediation activities.

- **Mitigation Measure 8.4.5D: Dewatering of Contaminated Groundwater.** Implementation programs pursuant to the Redevelopment Plan should include potential redevelopment assistance in the removal or dewatering of contaminated groundwater in accordance with City of Oakland requirements. Such assistance may be in the form of loans, grants or technical assistance, or the use of Polanco Act or other Redevelopment Agency/City authority. This mitigation measure would implement state and federal regulations and would require the following general process:

  - The construction contractor would obtain necessary permits from the Regional Water Quality Control Board, San Francisco Bay Region; East Bay Municipal Utility District; and/or the City of Oakland Department of Public Works for the discharge of groundwater during dewatering to the storm or sanitary sewer.

  - During the dewatering, the contractor would comply with any requirements for sampling of the groundwater to identify the concentrations of any chemicals present. Depending on the concentrations, pretreatment of the groundwater may be necessary prior to discharge.

  - If the groundwater does not meet discharge requirements, on-site pretreatment may be required before discharge to the sewer system.

  - If standards could not be met with on-site treatment, off-site disposal by a certified waste hauler would be required.

- **Mitigation Measure 8.4.5E: Procedures for Protection of Workers.** Any project, program or other implementation activity in furtherance of the Redevelopment Plan that may be proposed on a site involving a site investigation, site remediation, underground storage tank removal, excavation, dewatering, and/or construction of improvements where a chemical release has occurred, shall be conducted according to legally required health and safety precautions.

  - For hazardous waste workers, federal and California Occupational Safety and Health Administration (Cal/OSHA) regulations mandate an initial training course and

subsequent annual training. Site-specific training may also be required for some workers.

- Preparation and implementation of the Site Health and Safety Plan and compliance with applicable federal, state, regional, and local regulations would minimize impacts to public health and the environment. The Plan would include identification of chemicals of concern, potential hazards, personal protection clothing and devices, and emergency response procedures as well as required fencing, dust control or other site control measures needed during excavation.

- **Mitigation Measure 8.4.5F: Underground utility Construction Process.** Any project, program or other implementation activity in furtherance of the Redevelopment Plan that may include construction of underground utilities shall require, through implementing contracts, the construction contractor to follow proper health and safety precautions and to dispose of contaminated soil and groundwater safely and legally.

Resulting Level of Significance

Compliance with City policies and regulations as specified above under Mitigation Measures 8.4.5A through 8.4.5F would reduce the risk of exposure of workers and the public to hazardous materials during redevelopment-related excavation, grading, and/or de-watering activities. In protecting the workers who would be closest to potential sources of hazardous materials, the health and safety measures would also serve to protect others who live, work, or visit the area during the temporary construction period. These measures, along with application of cleanup standards, would serve to protect human health and the environment during site activities, thus minimizing impacts associated with exposure to hazardous materials.

Required compliance with federal, state and local regulations would reduce this risk to generally acceptable thresholds. Each of these regulations contains identifiable quantitative, qualitative or performance-based thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

Potential Benefits of Redevelopment

Much of the Project Area is located in areas with known environmental cases or in areas where previous land uses may have resulted in chemical releases to the soil or groundwater. However, the Redevelopment Plan's implementation projects, programs and other activities would encourage and expedite clean up of sites where a chemical release has occurred, which may otherwise not be remediated. However, there are real and perceived liabilities associated with development of contaminated properties and the remediation of these properties could be further enhanced and encouraged with implementation of a well-coordinated development project utilizing brownfields (contaminated and underutilized properties) within the Project Area. Such an approach could be invoked through the Polanco Act or the CLERRA. Advantages of using this approach include:

- development of a coordinated and cost-effective approach to investigation and cleanup of the brownfields properties;

- coordinated regulatory oversight which simplifies the regulatory process;

- immunity from liability for the Redevelopment Agency as well as the developers and their successors; and
- providing the legal ability for the Redevelopment Agency to recuperate costs from the responsible party(ies).

The U.S. EPA Brownfields Program (described in Appendix E) can also facilitate this coordinated approach through providing pilot grants and partnering with state and local agencies to remove the obstacles to redevelopment.

8.4.6: Exposure to Hazardous Building Materials

Potential Impact 8.4.6: Demolition and renovation of existing structures could result in potential exposure of workers or the community to hazardous building materials during construction, without proper abatement procedures, and future building occupants could be exposed if hazardous building materials are left in place. This is a *potentially significant impact*.

Discussion

Implementation of the Redevelopment Plan's projects, programs and other activities would promote new construction within the Project Area, which would likely include demolition and/or renovation of existing structures. Hazardous building materials are likely to be present in older structures within the Project Area and could include asbestos-containing material, lead-based paint, PCBs, and fluorescent lights containing mercury vapors. Demolition and renovation of existing structures could result in potential exposure of workers or the community to hazardous building materials during construction, without proper abatement procedures, and future building occupants could be exposed if hazardous building materials are left in place. Hazardous building materials could also contaminate soils around structures if these materials were released to the environment.

Mitigation Measures

- **Mitigation Measure 8.4.6: Hazardous Building Material Abatement Process**. All projects, programs or other implementation activities pursuant to the redevelopment Plan that involve demolition or renovation to existing structures and facilities shall conduct a hazardous building material survey(s) or audit(s).
    - The survey shall be completed by a Registered Environmental Assessor or a registered engineer prior to construction or demolition activities.
    - If hazardous building materials were identified during the survey, compliance with state and federal regulations regarding abatement of hazardous building materials would be required.
    - The Project Sponsor shall be required to comply with BAAQMD requirements for the removal of friable and non-friable asbestos-containing materials as well as other requirements of Cal/OSHA, BAAQMD, and the Contractors Licensing Board for

abatement of asbestos prior to demolition. Any PCB-containing equipment or fluorescent lights containing mercury vapors would also be removed and disposed of properly.

- **Mitigation Measure 8.4.6B: Hazardous Building Materials Abatement Assistance.** Implementation programs pursuant to the Redevelopment Plan should include potential redevelopment assistance in the removal or abatement of hazardous building materials from existing buildings within the Project Area in accordance with City of Oakland requirements. Such assistance may be in the form of loans, grants or technical assistance to individual property owners.

Resulting Level of Significance

Compliance with City policies and regulations as specified above under Mitigation Measures 8.4.6A would reduce the risk of exposure of workers and the public to hazardous building materials during demolition or renovation. Additionally, the assistance program identified in Mitigation Measure 8.4.6B would serve to further protect human health under existing conditions.

Required compliance with federal, state and local regulations would reduce the risk of exposure to hazardous building materials during demolition and renovation to generally acceptable thresholds. Each of these regulations contains identifiable quantitative, qualitative or performance-based thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

Potential Benefits of Redevelopment

Implementation of the Redevelopment Plan's projects, programs and other activities would promote new construction within the Project Area, which would likely include demolition and/or renovation of existing structures. Compliance with required abatement procedures for hazardous building materials during demolition and renovation activities would result in reduced exposure to hazardous building materials and long-term improvement in public health protection within the Project Area.

8.4.7: Airport Hazards

The Project Area is not located within an airport land use planning area. Implementation of the Redevelopment Plan would not result in a safety hazard for people residing or working in the Project Area, even though portions of the Project Area are within two miles of the Oakland International Airport. The Project Area is not located within the vicinity of a private airstrip. Airport-related safety hazards are not a significant effect associated with implementation of the Redevelopment Plan.

8.4.8: Emergency Response Plan

Implementation of the Redevelopment Plan's projects, programs or other activities would not impair implementation of, nor physically interfere with, an adopted emergency response plan or emergency evacuation plan. The Redevelopment Plan is to be consistent with the existing General Plan, and the General Plan incorporates the City of Oakland's Emergency Response Plan. Therefore, implementation of the Redevelopment Plan would not impair or interfere with City emergency response or evacuation plans.

8.4.9: Wildland Fires

Implementation of the Redevelopment Plan's projects, programs or other activities would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. The Project Area is a fully urbanized area and generally surrounded by urban development or the Oakland Estuary. No wildlands are located in the vicinity of the Project Area. In addition, fire suppression systems would be required under applicable building code provisions for all new construction activity, including any construction that may be in furtherance of the Redevelopment Plan. Therefore, implementation of the proposed Redevelopment Plan would not expose people to significant risks associated with wildland fires.

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9

Public Infrastructure

9.1 Introduction

This chapter of the EIR describes existing public infrastructure within the West Oakland Redevelopment Project Area. It also identifies the increased demand on existing infrastructure based on projected growth and development within the Project Area, and recommends where necessary and feasible, mitigation measures to reduce and or avoid potentially significant infrastructure constraints. Public utility infrastructure discussed in this section of the EIR include:

- water supply and distribution,
- wastewater collection, treatment and disposal, and
- drainage and stormwater quality.

Significance thresholds for utility systems would generally be reached if future growth and development, as may be facilitated by or in furtherance of the Redevelopment Plan's projects, programs or other activities, would result in an increased demand for utility capacities that cannot be met by existing or planned utility infrastructure. The amount of growth and development that may be facilitated by implementation of the Redevelopment Plan is consistent with the growth projections of the City General Plan. Therefore, the impacts of Redevelopment Plan implementation are no greater than those impacts identified in the *Land Use and Transportation Element (LUTE) EIR* (City of Oakland, 1998) as incorporated herein by reference.

9.2 Environmental Setting

9.2.1 Water

Water Supply

The East Bay Municipal Utility District (EBMUD) serves all of Oakland including the Project Area with potable water, and serves portions of the City including the Project Area with recycled water. Water consumption by EBMUD customers has remained relatively constant in recent

years despite increased growth and development within its service area as a result of increased conservation and use of recycled water. Between 1987 and 2002, water consumption has ranged from a low of 170 million gallons per day (mgd) in 1989, to a high of 220 mgd in 1987. EBMUD's total service area customer demand in year 2000 was 230 mgd, but when adjusted for conservation and the use of recycled water, net customer demand in year 2000 was estimated at 216 mgd. EBMUD projects that by year 2020 the water demands within its service area will reach 277 mgd, but can be reduced to 229 mgd with successful water conservation and recycling programs (UWMP, EBMUD 2000, page 4-25).

EBMUD has water rights and facilities to divert up to a maximum of 325 mgd from the Mokelumne River, subject to availability of runoff and prior water rights of other users. Conditions that restrict EBMUD's ability to use its 325-mgd entitlement include:

- Upstream water use by prior rights holders,
- Downstream water use by riparian and senior water appropriators and other downstream obligations, including protection of public trust resources,
- Drought, or less than normal year rainfall for more than one year, and
- Emergency outages (UWMP, EBMUD 2000, page 2-7).

EBMUD has prepared an *Urban Water Management Plan* (UWMP, EBMUD 2000) that indicates that with aggressive conservation and use of recycled water, EBMUD can meet its obligation to serve its current and future customers in normal rainfall years through the year 2020. However, during prolonged drought periods the Mokelumne River cannot meet all of EBMUD's customer demands. EBMUD studies indicate that with current water supply and the water demands expected in 2020, deficiencies in supply of up to 67% could occur during multiple year droughts. Therefore, supplemental water supplies are needed. EBMUD has established the objective of obtaining sufficient water supplies necessary to limit customer deficiency to 25% in a multiple year drought while continuing to meet the requirements of senior downstream water rights holders and fishery release requirements.

EBMUD's *Water Supply Master Plan* (EBMUD 1993) identifies three main options to meet projected water needs and to increase water reliability. These options include; 1) development of conveyance facilities necessary to take delivery of the EBMUD-Central Valley Project contract for delivery of an American River supplemental supply; 2) groundwater conjunctive use; and 3) additional surface water storage. More recently, EBMUD and the County of Sacramento (in association with the City of Sacramento and with support from the U.S. Bureau of Reclamation) formed the Freeport Regional Water Authority to develop joint water supply on the Sacramento River near Freeport. Such a project would allow for a future groundwater conjunctive use component, and along with planned water recycling and conservation measures, would ensure a reliable water supply to meet projected water demands for current and future EMBUD customers. Without such a supplemental water supply source, deficiencies in supply during drought years are projected.

Water Distribution System

The Project Area is located within the EBMUD Central Pressure Zone, which provides water service to customers within an elevation range of 0 to 100 feet. Water for this pressure zone is treated at the Orinda Treatment Plant in Orinda and the Upper San Leandro Water Treatment Plant in Oakland. This water is stored in the Central Reservoir and Duinsmuir Reservoir, where it then flows via gravity throughout the EBMUD water distribution system. Within the Project Area, EBMUD owns and maintains the water distribution mains that provide water service to this area.

Recycled Water

Recycled water has been used by EBMUD since the 1960's. This water is drawn from wastewater treatment plants or untreated water reservoirs. The level of treatment varies depending on the intended use. EBMUD projects that in 2020, customers throughout its service area will use approximately 14 mgd of recycled water for landscape irrigation and for some industrial and commercial uses (LUTE EIR, City of Oakland 1998, page III.D-3). The potential supply of EBMUD recycled water from its Main Wastewater Treatment Plan in Oakland far exceeds this demand. Recycled water therefore provides a stable source of non-potable water not subject to rationing for landscape irrigation and other potential uses.

Currently, the Project Area is within the bounds of the East Bayshore Recycled Water Project. This project will provide up to 2.3 mgd of recycled water, from the Main Wastewater Treatment Plant, to customers in Alameda, Albany, Berkeley, Emeryville, and parts of Oakland. It is anticipated that recycled water will be available in the Project Area by the year 2005 (EBMUD 2002). The recycled water could be used as landscape irrigation water for existing and future developments within the Project Area, as well as for established and future industrial uses.

9.2.2 Wastewater Collection, Treatment and Disposal

Wastewater Collection

Generally, the City of Oakland maintains and operates a citywide sewage collection service. The Oakland Public Works Department provides sewage collection services for approximately 39 square miles within the city, including seven pump stations and approximately 4.5 million linear feet of pipeline ranging in size from 6 inches to 72 inches in diameter. Many of the lines pre-date 1938 (LUTE EIR, City of Oakland 1998, page III.D-8). Generally, the existing local sanitary sewer system adequately collects wastewater generated within the Project Area.

The City of Oakland sewage collection system discharges into EBMUD's sewer interceptor system. The Project Area's wastewater system is part of EBMUD's Special District No. 1 (SD-1), which treats domestic, commercial, and industrial wastewater for several East Bay cities. The EBMUD sewer interceptor system comprises approximately 29 miles of large-diameter pipeline, ranging in size from 9 to 12 feet in diameter. Wastewater from the Project Area is collected into the South Interceptor, an EBMUD 42-inch pipe, shown on **Figure 9-1**. An EBMUD Wastewater Pumping Station then pumps the wastewater to the Main Wastewater Treatment Plant via the South Interceptor. Wet weather flows are stored and treated in special reservoir tanks at the Main Wastewater Treatment Plant.

Figure 9-1

The Project Area is located within City sewer collection basins 50, 52, 64, which are all within the North Oakland Collection System. Each sewer basin is divided into various sub-basins as also shown on Figure 9.1. Each sub-basin is allocated a certain amount of sewer flow, and flows within a sub-basin normally may not exceed that allocation. Should a sub-basin require more flow than its allocation, allocations may be redirected between adjacent sub-basins. In total, however, flows for the larger sewer basin may not exceed that basin's allocation. Using sub-basin flow data from the Oakland Public Works Department, EBMUD ensures that the capacity of the wastewater transport and treatment system is adequate to serve development as planned and proposed.

The City of Oakland has instituted an Inflow and Infiltration Correction Program to reduce wet weather overflows into the sanitary sewer system. This program, when completed, will substantially decrease the amount of inflow and infiltration into the sewer pipes. This program will also increase the capacity of the collection system to allow an approximately 20% increase in wastewater flows for each sub-basin within the City. However, projected flow increases must stay below the base-flow increase allowance for each sub-basin of the system. Inflow and infiltration projects are planned for the Project Area, and are slated to begin within the next ten years.

Wastewater Treatment and Disposal

EBMUD provides all sewage treatment and discharge services within the City of Oakland. The EBMUD interceptor system transports sewage to the Main Wastewater Treatment Facility (WWTF), located in northwest Oakland immediately south of the I-80/I-880/I-580 interchange. The Main WWTF treats domestic, commercial, and industrial wastewater. It currently experiences an annual average flow of approximately 80 million gallons per day (mgd). The WWTF has a dry weather capacity of 120 mgd, can provide secondary treatment for a maximum flow of 168 mgd, and primary treatment for up to 320 mgd. Storage basins provide plant capacity for a short-term hydraulic peak of 415 mgd (UWMP, EBMUD 2000, page 5-30).

Treated effluent is discharged from the WWTF to San Francisco Bay south of the Bay Bridge approximately one mile from the east Bay shoreline via a 102-inch-diameter deep-water outfall pipeline (EBMUD 2001). EBMUD discharges in compliance with conditions of permits granted by the RWQCB under the National Pollutant Discharge Elimination System (NPDES) Program.

Wastewater to be recycled for landscape irrigation and other purposes is sent to the Process Water Plant, a tertiary treatment facility located at the Main Wastewater Treatment Plant (UWMP, EBMUD 2000, page 5-33).

9.2.3 Stormwater Drainage

The City of Oakland maintains and operates a storm drainage system that is separate from the existing sanitary sewer system. Citywide, the system contains approximately 302 miles of stormwater conduit, ranging from 12 inches to 9 feet in diameter constructed primarily of reinforced concrete. There are about 9,400 stormwater inlets and 5,850 manholes. The City's storm drains feed into larger facilities owned and maintained by the Alameda Flood Control and Water Conservation District (ACFCWCD). County facilities in Oakland include drainage

channels, pipelines and culverts, flood control dams, erosion control devices, pumping stations and other facilities such as tide gates.

In Oakland, ACFCWCD's were planned and constructed in anticipation of the ultimate development level in each drainage basin. Since the flood control facilities were designed in the 1960's, prior to the acquisition of large parts of the Oakland Hills as parkland, the levels of anticipated development were probably higher than what actually exists today.

Due to the lack of a regular, reliable funding source, drainage improvements and maintenance are performed on a case by case basis. The Office of Public Works completes six to twelve drainage projects in a typical year, usually in response to erosion control or localized flooding problems. Individual developments are required to mitigate the drainage impacts they create through a combination of on-site and off-site improvements. However, the improvements are usually localized and do not address pre-existing basin-wide problems.

9.3 Regulatory and Policy Setting

9.3.1 Federal Regulations

Water Quality

The Safe Drinking Water Act (SDWA, 42 USC §§ 300f *et seq.*) is the primary federal law regulating drinking water quality; it establishes standards intended to protect public health, safety, and welfare. The US Environmental Protection Agency (EPA) implements the SDWA, which delegates its authority to the state of California. The Clean Water Act (CWA, 33 United States Code [USC] §§ 1251 *et seq.*) is intended to restore and maintain the integrity of the nation's waters, including requirements for states to establish water quality standards to protect designated uses for all waters of the nation. Many aspects of the CWA have been delegated to the state, including the regulation of discharges from private industry and public facilities such as wastewater treatment plants.

9.3.2 State of California Regulatory/Policy Setting

Water Supply

The California Urban Water Management Planning Act[1] requires that an understanding of urban water demands and efficient use of water are to be actively pursued by water suppliers, including the requirement for every urban water supplier to prepare and adopt an Urban Water Management Plan (UWMP). Each UWMP must describe the suppliers' services area; identify and quantify existing and planned water sources; describe the reliability of water supplies; describe opportunities for exchanges or transfers of water; quantify past, current, and projected

[1] Division 6, Part 2.6 of the California Water Code

water use; and describe and evaluate the supplier's water demand management measures. These plans are updated every five years (see discussion above regarding EBMUD Urban Water Management Plan).

Water Quality

The Department of Health Services (DHS) regulates drinking water, implements the Safe Drinking Water Act and oversees public water systems in California. The state requires that public water systems meet two groups of water quality standards: primary and secondary drinking water standards. Primary drinking water standards, known as Maximum Contaminant Levels (MCLs), are legally enforceable standards that regulate contaminants which could threaten public health. Secondary drinking water standards are used to regulate contaminants that affect the taste, odor, and appearance of water, and are enforceable for new potable water sources.

The California RWQCB, San Francisco Bay Region, has established water quality objectives to define the level of water quality to be maintained for designated beneficial uses. Water designated for uses such as domestic or municipal supply shall not contain concentrations of constituents in excess of the limits specified in Title 22 of the California Code of Regulations.

Recycled Water

The Recycled Water in Landscaping Act requires municipalities to adopt ordinances requiring use of recycled water for landscaping uses where recycled water of appropriate quality is made available.

9.3.3 City of Oakland Regulatory / Policy Setting

The Land Use and Transportation Element (LUTE) of the Oakland General Plan describes Oakland services and utilities, identifies providers, and presents an outlook on the long-term provision of services. The General Plan does not include specific goals or policies regarding service systems or utilities.

The City of Oakland has adopted the Water Reuse Ordinance, which applies to development projects that are located within a Water Reuse Area and where new water hook-ups from the East Bay Municipal Utility District (EBMUD) are required. Oakland has also adopted a Water Efficient Landscape Requirement ordinance describing practices designed to achieve water use efficiency.[2]

[2] Article 10, Chapter 7 of the Oakland Municipal Code.

9.4 Impacts and Mitigation Measures

Significance Criteria

Under CEQA Guidelines, the Project would have a significant environmental impact if it were to:

Water Supply and Distribution

- Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects.
- Require or result in the construction of new water treatment or distribution facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Wastewater Collection, Treatment and Disposal

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.
- Require or result in the construction of new wastewater treatment facilities of expansion of existing facilities, the construction of which could cause significant environmental effects.
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Storm Drainage

- Require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects.

9.4.1 Water Supply

Implementation of the Redevelopment Plan's projects, programs and other activities is intended to stimulate increased investment and new development within the Project Area. Such new development would result in an increased demand for water supply. However, for the reasons discussed below, this increased water demand would be a *less than significant impact.*

Discussion

The increase in water demand associated with growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan's projects, programs and other activities can be estimated by applying multipliers to the amount of household and employment growth projected for the Project Area. These growth projections are consistent with the growth projections as contained in the City of Oakland's General Plan. Most growth and

development within the Project Area that may be facilitated by implementation of the Redevelopment Plan will be characterized as an increase in the intensity of existing uses, or the replacement of currently blighted properties with newer and more modern uses. Multipliers commonly applied to new development activity (i.e., multipliers applied to the square footage of new space or to acres of new development) are not applicable to such redevelopment activity. Therefore, multipliers have been derived based on a per capita water demand for residences and employment types within the Project Area. Based on this methodology, the increased water demand associated with projected growth and development within the Project Area is conservatively estimated to be approximately 0.74 mgd, as shown below in **Table 9-1**:

Table 9-1: Projected Increased Water Demands, 2025

Land Use Type	Increased Population/ Employment [1]	Multiplier [2]	Increased Water Demand
Residential Population	4,209	90 gpd/resident	378,800 gpd
Retail Employment	762	35 gpd/employee	26,700 gpd
Service Employment	1200	115 gpd/employee	138,000 gpd
Manufacturing Employment	125	50 gpd/employee	6,300 gpd
Other Employment	1097	175 gpd/employee	192,000 gpd
Total			**741,000 gpd, or 0.74 mgd**

Notes: 1. Table 3-1, Project Description
2. Source of multipliers: *Commercial and Industrial Water Use in California*, Dziegielewski et.al., 2000

By way of comparison, increased water demands associated with growth and development throughout the City of Oakland and throughout the regional area served by EBMUD are as follows:

- According to the LUTE EIR (City of Oakland, 1998), citywide growth and development is projected to result in a demand for approximately 6.2 mgd by the year 2015. Therefore, the increase in water demand projected from within the Project Area represents approximately twelve percent (12%) of the projected increase in citywide water demand.[3]

[3] It should be noted that citywide demand estimates are for the year 2015, whereas the Project Area water demands are forecasted to the year 2025. Therefore, citywide water demands by the year 2025 would actually include an additional 10 years of growth not accounted for in this estimate. The Project Area's proportional share of this citywide growth would therefore be substantially less than the 12% described in this comparison.

- EBMUD projections indicate that the EBMUD service area's gross customer demand (not adjusted for conservation or use of recycled water) will increase from a year 2000 demand level of approximately 230 mgd, to as much as 277 mgd by the year 2020 (EBMUD UWMP 2000). This represents an increase of approximately 47 mgd during the next twenty-year period. The increase in water demand projected from within the Project Area represents less than two percent (1.6%) of projected increases in water demand throughout the EBMUD service area.

The City of Oakland LUTE EIR concluded that the citywide increase in water demand of approximately 6.2 mgd was a less-than-significant environmental impact due to existing General Plan policies that require water conservation and encourage recycled water use. The increased water demand attributable to the Project Area is included in this citywide estimate and represents less than 12% of this increase in citywide demand. Therefore, the increased water demand associated with projected growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan is similarly a *less than significant impact*.

Cumulative Water Demand

On a cumulative, regional basis the addition of new urban infill housing and increased employment opportunities as projected for the Project Area represents less than 2% (or a *less than significant*) increase in EBMUD's total customer water demand. It also represents a more efficient land use pattern for the use of water than a comparable level of growth and development in outlying communities where per capita water consumption levels are traditionally much higher. Therefore, projected growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan has a *less than cumulatively considerable impact* on water demands.

Nevertheless, in order to meet all of its cumulative water demands EBMUD will need to achieve ambitious water conservation and reclamation programs throughout its service area as set out its Water Supply Management Program (WSMP).

City General Plan Policies

The City of Oakland General Plan Open Space, Conservation and Recreation Element (OSCAR) includes policies and actions intended to reduce impacts on potable water consumption within all parts of the City, primarily by embarking on aggressive water conservation and reclamation measures. These policies and actions include:

Policy CO-4.1: Emphasize water conservation and recycling strategies in efforts to meet future water demand.

Action CO-4.1: Implement the water conservation strategies and programs outlined in the 2000 EBMUD Urban Water management Plan at the local level. Develop a strategy to reduce the City's water consumption by 20% by year 2005.

Action CO-4.2: Maintain regular contact with EBMUD to promote public education and outreach efforts on water conservation.

Policy CO-4.2: Require use of drought-tolerant plants to the greatest extent possible, and encourage the use of irrigation systems which minimize water consumption.

Policy CO-4.3: Promote the use of recycled wastewater for irrigating landscape medians, cemeteries, parks, and other areas requiring large volumes of non-potable water.

All new redevelopment projects, programs and activities pursuant to the Redevelopment Plan shall be required to be consistent with the planning policy of the City of Oakland General Plan, including the conservation policies identified above. Additionally, such new development shall also be required to comply with all City regulations pertaining to water use efficiency including the Water Efficient Landscape Requirement ordinance. Therefore, the Redevelopment Plan's projects, programs and other activities would be required to include implementation of identified water conservation strategies and would result in a *less than significant impact* on water demand.

Potential Benefits of Redevelopment

Although not specifically needed to address project impacts on water supply, the Redevelopment Plan's projects, programs and other implementation activities could assist in furtherance of water conservation efforts within the Project Area. Such efforts could include:

- Redevelopment Plan funding sources could be used to supplement other funding sources for the extension of recycled water lines to serve the irrigation needs of landscaped areas within the Project Area.
- Redevelopment funding and/or other redevelopment assistance for new development projects could be conditioned upon requirements for water conservation measures for both internal and external use. Such measures may include equipment and methodology that furthers water conservation and provides for long-term efficient water use, and may include use of drought-resistant plants, use of inert material and minimal use of turf areas in landscaping.

Redevelopment funding and/or other redevelopment assistance for new development projects could be conditioned upon requirements for sub-metering of landscape irrigation, meters for individual businesses in multi-unit settings, and separate metering of significant cooling, process or water use in industrial and large commercial settings.

9.4.2 Water Distribution and Wastewater Collection Infrastructure

Potential Impact 9.2: Implementation of the Redevelopment Plan's projects, programs and other activities is expected to facilitate or assist in the construction of new residential, commercial and/or industrial development within the Project Area. Such new development may require localized improvements to the water delivery and wastewater collection systems to provide adequate pipeline capacity. For the reasons discussed below, these potential localized infrastructure capacity constraints represent a *potentially significant impact.*

Discussion

Water Distribution

Many of the water mains serving the Project Area are small in size (8 inches in diameter or less) and quite old. Most of the water delivery lines located within the right-of-way of major

transportation corridors within the Project Area were built in the 1920s and 1930s. There has not only been an increase in system-wide water demand since that time, but new fire flow requirements have also increased substantially, requiring greater amounts of water at higher pressures to be delivered throughout the system. In order to meet these requirements, localized pipeline extensions or replacements may be required on a site-specific, project-by-project basis. It should be noted that if pipeline extensions are necessary or replacement/upgrades of existing pipelines are required due to local fire flow, it is City policy that costs are absorbed by project applicants.

Wastewater Collection

Increased development in the Project Area as may be facilitated by or in furtherance of the Redevelopment Plan may require localized investment in new or upgraded local City-owned sanitary sewer infrastructure, or in the larger EBMUD-owned sanitary sewer transmission infrastructure. Some of the sub-basins that are within the City of Oakland's sanitary sewer system are already at capacity and may require substantial infrastructure upgrades. In addition, many of the City's sewer collection lines are small in size (6 inches) and very old. In response to some current deficiencies in the sewer system both the City and EBMUD are currently implementing a long-range plan to minimize sewer system inflow and infiltration problems system-wide. Inflow and infiltration projects are planned for the Project Area, and these repairs are slated to begin within ten years. Improvement projects included in these long-range plans may need to be re-prioritized depending on specific redevelopment objectives or activities within the Project Area.

City General Plan Policy

The City of Oakland General Plan Land Use and transportation Element (LUTE) includes policies intended to reduce impacts on water and wastewater infrastructure pipelines within all parts of the City. These policies focus primarily on requiring that the adequacy of infrastructure be considered prior to approval of new development projects and by prioritizing City capital improvements. These General Plan policies include:

Policy IC 1.9: Adequate public infrastructure should be ensured within existing and proposed industrial and commercial areas to retain viable uses, improve the marketability of existing, vacant or underutilized sites, and encourage future use and development of these areas with activities consistent with the goals of the General Plan.

Policy T5.1 Funding for infrastructure projects should be long-term and include operating and maintenance as well as capital development.

Policy N7.2: Infrastructure availability . . . is among the factors that should be taken into account when developing and mapping zoning designations or determining compatibility. These factors should be balanced with the citywide need for housing.

Agenda Item a.1: Establish procedures to link the General Plan to the City's investments and resource allocations including the adopted budget, the capital improvement program and bond measures.

Based on these policies and established procedures of the City and EBMUD, some of the costs for localized water and sewer improvements are offset by hook-up or connection fees collected

from developers as projects are constructed. However, these fees may not fully offset the full costs of required improvements.

Mitigation Measures

Implementation of City General Plan policies and payment of hook-up and connection fees may not fully mitigate site-specific impacts on the capacity of local water and sewer lines. This impact was also identified in the LUTE EIR (ESA for City of Oakland 1999, page IIID-7 and –12). The following mitigation measure, derived from the LUTE EIR is intended to fully address this infrastructure capacity impact:

- **Mitigation Measure 9.4.2**: Major new development projects pursuant to or in furtherance of the Redevelopment Plan shall be reviewed to determine projected water and wastewater loads as compared to available capacity. Where appropriate, determine capital improvement requirements, fiscal impacts and funding sources prior to project approval.

  - These new projects should address the replacement or rehabilitation of the existing sanitary sewer collection system to prevent an increase in I/I in the sanitary sewer system. The main concern is the increase in total wet weather flows, which could have an adverse impact if the flows are greater than the maximum allowable flows from this sub-basin, as defined by the City of Oakland Public Works Department.

  - When capital improvement requirements for this project are being assessed, the project sponsor should contact the Wastewater Planning Section to coordinate with EBMUD for this work.

  - At the Redevelopment Agency's sole discretion, redevelopment funds could potentially be used to subsidize the costs for such improvements.

Potential Benefits of Redevelopment

The Redevelopment Plan includes a number of programs intended to alleviate blight throughout the Project Area, including an infrastructure improvement program. Infrastructure improvements under this program may cover a wide variety of public works projects, potentially including correcting water and sewer infrastructure deficiencies. The City Redevelopment Agency may find, on a site-specific basis, that improvements to the local infrastructure system may attract development to the area, increase building activity and thereby improve property values. Under such a scenario, redevelopment funds may be used as a source of funding for these improvements, thereby eliminating costs that would otherwise be born entirely by the private sector.

Resulting Level of Significance

With implementation of City General Plan policies and the additional Mitigation Measure 9.2 above (including the potential use of redevelopment funds to offset infrastructure improvement costs), site-specific impacts on the capacity of local water and sewer lines can be mitigated to a level of *less than significant*.

9.4.3 Wastewater Treatment and Disposal

Implementation of the Redevelopment Plan's projects, programs and other activities is intended to stimulate increased investment and new development within the Project Area. Such new development would result in an increased demand for wastewater treatment and disposal. However, for the reasons discussed below, this increased wastewater demand would be a *less than significant* impact.

Discussion

The increase in wastewater generated as a result of future growth and development within the Project Area, as may be facilitated or in furtherance of the Redevelopment Plan, can be estimated by applying a general factor to the increased water demands estimated for the Project Area, as identified above. Based on typical wastewater generation figures, approximately eighty percent (80%) of the water used would enter the wastewater system. This represents approximately 0.59 mgd of average dry weather flow (ADWF)[4]. This projected wastewater flow is the amount anticipated from new growth and development within the entire Project Area. On a localized site-specific basis, these flows could potentially exceed the allowable sewer collection sub-basin allocations. However, the specific locations and characteristics of any subsequent redevelopment project, program or other implementation activity cannot be know whit any precision at this time. Therefore, it is not possible to accurately project, on a sewer sub-basin basis, whether redevelopment projects would individually exceed the sub-basin allocations.

EBMUD's projections for future flows and its corresponding design for WWTP capacity are based on assumptions about the amount of development that will take place within the service area. In areas considered fully developed, such as the Project Area, EBMUD has assumed a 20% increase in sanitary sewer flow to account for infill development and intensification. According to the City of Oakland LUTE EIR, wastewater demand within the City is expected to rise to approximately 5.0 mgd by the year 2015 (City of Oakland 1998). The increase in wastewater demand projected from within the Project Area represents approximately 12% of the projected increase in citywide demand.[5] The City of Oakland LUTE EIR concluded that an increase of 5.0 mgd of wastewater demand Citywide was a *less than significant impact* due to existing General Plan policies that mitigate potential impacts on wastewater treatment facilities as a result of increased residential and employment growth. Thus, the increased amount of wastewater generated by projected growth and development within the Project Area would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities. Nor would these wastewater flows result in a determination by EBMUD that it has

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[4] 741,000 gallons per day of water demand (from Table 9-1) times 80% equals approximately 593,000 gallons per day of wastewater generated (average annual dry weather flow).

[5] 0.59 million gallons per day of wastewater divided by 5.0 million gallons per day of citywide wastewater demand, times 100, equals approximately 12%. Also, it should be noted that citywide demand estimates are for the year 2015, whereas the Project Area water demands are forecasted to the year 2025. Therefore, citywide wastewater demands by the year 2025 would actually include an additional 10 years of growth not accounted for in this estimate. The Project Area's proportional share of this citywide growth would therefore be substantially less than the 12% described in this comparison.

inadequate capacity to serve this projected demand in addition to its existing commitments, or exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. Thus, this is not considered to be an impact of the Project.

City General Plan Policy

The City of Oakland General Plan (OSCAR) includes policies and actions intended to reduce cumulative impacts on wastewater impacts. These policies include:

Action4.1.1: Implement the water conservation strategies and programs outlined in the 2000 EBMUD Urban Water management Plan at the local level. Develop a strategy to reduce the City's water consumption by 20% by year 2005. Reductions in water consumption will reduce the amount of wastewater reaching the WWTP, thereby extending the capacity of the plant to accommodate additional development.

Action CO-5.3.11: Reduce water pollution from sanitary sewer collection and treatment systems, including wastewater collection lines and the regional treatment plant. Continue the system-wide improvement program to correct inflow and infiltration problems in the EBMUD and City sewer systems.

Conclusion

All projects, programs and other implementation activities pursuant to the Redevelopment Plan shall be required to be consistent with the planning policy of the City of Oakland General Plan, including the water conservation and wastewater system improvement policies identified above. Therefore, the Redevelopment Plan's projects, programs and other activities would be required to include implementation of these identified strategies and would result in a *less-than-significant impact* on wastewater treatment capacity.

9.4.4 Stormwater Runoff/Drainage

All future development pursuant to or in furtherance of implementation of the Redevelopment Plan will be required to comply with existing policies, ordinances and regulations regarding stormwater runoff. Compliance with these policies, ordinances and regulations would mitigate potentially significant stormwater discharge impacts to *less than significant* levels.

Discussion

A major source of contaminants to waters in Oakland is from non-point sources such as construction site runoff and polluted stormwater runoff. Implementation of the Redevelopment Plan's projects, programs and other activities could contribute to an increase in such non-point source pollution and associated surface water quality impacts. Urban land uses such as those throughout the Project Area could contribute various pollutants to stormwater runoff, including fuel leaks, oil and grease, sediments, detergents, cleaning fluids, pesticides, fertilizers and miscellaneous trash and debris, which could then be carried to the Estuary and eventually the Bay.

Previously Identified Mitigation Measures

The *LUTE EIR* includes mitigation measures requiring all projects to be in compliance with the National Pollutant Discharge Elimination System (NPDES) for the regulation of stormwater discharges. Compliance with this program would continue to mitigate potential water quality impacts resulting from stormwater runoff. In the San Francisco Bay Region, the San Francisco Bay Regional Water Quality Control Board regulates storm water discharges under the NPDES permit program. In the Project Area, the stormwater program is administered by the Alameda Countywide Clean Water Program, which consists of 17 participating agencies, including the City of Oakland. Any Redevelopment Plan implementation activity would be subject to all NPDES permit requirements for stormwater management and discharges under the County permit. The 2002 permit incorporates updated state and federal requirements related to the quantity and quality of stormwater discharges from new development and redevelopment projects.

In accordance with these updated requirements, any applicable Redevelopment Plan implementation project, program or other activity will be required to incorporate treatment measures and other appropriate source control and site design features to reduce the pollutant load in stormwater discharges and to manage runoff flows. Projects that involve the creation or replacement of one or more acre of impervious surfaces are required to comply with these requirements by April 15, 2004. Projects that involve the creation or replacement of 5,000 square feet or more of impervious surfaces are required to comply with these requirements by April 15, 2005.

Stormwater discharges regulated by the NPDES permit are managed in accordance with the Draft Stormwater Management Plan prepared by the Alameda Countywide Cleanwater Program (Alameda Countywide Cleanwater Program, 2001). In addition, the 2002 NPDES permit requires the agencies to complete the following:

- Implement an operations and maintenance verification program;
- Modify the development project approval process as needed to address stormwater management requirements;
- Prepare a description of how the proposed standards will be implemented (such as an ordinance requiring approval of stormwater management programs, a review and approval process, and adequate enforcement);
- Prepare a Hydrograph Modification Management Plan describing a process to limit changes in stormwater flows that could have a harmful affect on downstream beneficial uses by excessive erosion of the bed and bank of downstream water courses;
- Prepare a guidance document specifying design standards related to stormwater quality and flows;
- Prepare a guidance document for the implementation of source controls;
- Incorporate water quality and watershed protection principles and policies applicable to development projects into the General Plan; and

- Revise the environmental review processes (CEQA review) to evaluate water quality impacts of stormwater runoff from new development and significant redevelopment, as needed.

Construction projects of greater than 5 acres that are in furtherance of the Redevelopment Plan's implementation projects, programs or other activities would also be required to comply with the NPDES General Permit for Stormwater Discharges which requires preparation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would specify measures to be used to prevent runoff from entering the storm drain system. Construction projects affecting greater than one acre will also be required to prepare a SWPPP in accordance with NPDES regulations under anticipated future NPDES requirements.

The City of Oakland also implements the following ordinances that are intended to protect water quality and water resources:

- the Grading Ordinance (Ordinance No. 10312) requiring grading permits to have, among other requirements, an erosion and sedimentation control plan;
- the Sedimentation and Erosion Control Ordinance (Ordinance No. 10446) that requires appropriate preventative measures to control erosion from any grading or clearing operation; and
- the Stormwater Management and Discharge Control Ordinance (Ordinance No. 12204) that establishes comprehensive guidelines for the regulation of discharge into the City's storm drain system.

In addition to these federal, sate and local regulations, the following General Plan policies and mitigation measures (as derived from the OSCAR Element page 3-17) would apply to all Redevelopment Plan implementation activity within the Project Area:

Policy CO-5.3: Employ a broad range of strategies compatible with the Alameda Countywide Clean Water program to reduce water pollution associated with stormwater runoff; reduce water pollution associated with hazardous spills, runoff from hazardous material areas, improper disposal of household hazardous wastes, illicit dumping….

Action CO-5.3.1: In accordance with the Countywide Clean Water Program, study the feasibility of enacting stormwater retention and pre-treatment requirements for developments meeting certain criteria.

As determined in these previously prepared EIRs, compliance of future developments in the Redevelopment Area with these policies, ordinances and regulations would effectively mitigate potentially significant water quality impacts related to stormwater discharges to *less than significant* levels.

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10

Public Services

10.1 Introduction

This chapter of the EIR describes existing public services within the West Oakland Redevelopment Project Area. It also identifies the potential impacts of projected future growth and development from within the Project Area on these services and recommends, where necessary and feasible, mitigation measures to reduce and/or avoid potentially significant impacts. Public services discussed in this section of the EIR include:

- parks,
- schools,
- police services,
- fire protection, and
- solid waste.

Significance thresholds for impacts on public services would generally be reached if future growth and development, as may be facilitated by the Redevelopment Plan's projects, programs or other activities, would result in an increased demand for such services that cannot be met by existing or planned facilities. The amount of growth and development that may be facilitated by implementation of the Redevelopment Plan is consistent with the growth projections under the City General Plan. Therefore, the impacts of Redevelopment Plan implementation are no greater than those impacts identified in the *Land Use and Transportation Element EIR* (City of Oakland, 1998) and the *Open Space, Conservation and Recreation Element Mitigated Negative Declaration* (City of Oakland, 1995) as incorporated herein by reference.

10.2 Environmental Setting

10.2.1 Parks

Parks and recreation services within the City of Oakland are provided by two separate agencies, the City of Oakland's Office of Parks and Recreation (OPR) and the East Bay Regional Park District (EBRPD). The City's OPR is generally responsible for developing and maintaining

local and community parks and recreational facilities within the city boundaries. EBRPD is responsible for acquisition and development of regional parks, open space areas and regional trails.

Within the City of Oakland, there are approximately 2,943 acres of parkland and an additional 131 acres of school property playfields, amounting to approximately 8.26 acres of parks per every 1,000 residents. These parklands are divided among over 130 parks and athletic field complexes ranging from undeveloped open space lands to intensely developed urban spaces. The City of Oakland's Open Space, Conservation and Recreation Element of the General Plan (OSCAR) establishes a total park acreage standard of 10 acres per 1,000 resident. The City as a whole, including all parkland in the City regardless of ownership or function, is short of meeting this standard.

The OSCAR Element also establishes a local-serving parkland standard of 4 acres per 1,000 residents for all parks that meet the active recreational needs of the community. Oakland presently provides only 1.33 acres of local serving park acreage per 1,000 residents. In order to achieve the 4-acre per 1,000 population standard, the City would need to acquire nearly 1,000 acres of relatively flat land for new park and recreation facilities. As noted in the OSCAR Element, "while this would be impossible without massive redevelopment, major gains toward that standard can be made through expansion of existing parks, improvement of creeks and shoreline access, acquisition of vacant parcels, and incorporation of new parks in major redevelopment projects" (OSCAR, City of Oakland 1996, page 4-9).

Park Classification System and Neighborhood Planning Areas

The OSCAR Element identifies ten (10) neighborhood planning areas for park and recreation planning within different communities in Oakland. The Project Area is principally located within the West Oakland planning area for parks and recreation planning; the Prescott/South Prescott subarea extends into the Harbor planning area and the Hoover/West MacArthur subarea extends into the North Oakland planning area.

The OSCAR Element also identifies ten categories of parks, but emphasizes neighborhood, community and regional parks as the building blocks of the City's recreation system. The OSCAR Element states (OSCAR, page 4-4) that each of the City's neighborhood planning areas should have a major community park that provides opportunities for active and passive recreation, social interaction, education and cultural enrichment. A series of neighborhood parks should serve smaller areas within the City.

The OSCAR Element identifies deficiencies in park service by neighborhood planning area. The acreage of parkland per capita is one measure used to assess the deficiency. As shown in **Table 10-1,** the West Oakland neighborhood planning area has the highest acreage of parklands per capita in the City. However, several of the larger neighborhood parks that are within the West Oakland neighborhood planning area are outside the Project Area. For example, de Fremery Park with its pool and recreation center, Marston Campbell Park, Wade Johnson Park and Lowell Park are all located within the West Oakland neighborhood planning area but not within the West Oakland Redevelopment Project Area. The parkland acreage per capita within the Project Area is considerably lower than the 2.43 acres per 1,000 residents for the entire West Oakland

neighborhood planning area as a whole, and is well below the City's adopted local park standard of 4.00 acres per 1,000 residents.

Table 10-1: Local Serving Park Acreage per Capita

Neighborhood Planning Area	Acres per 1,000 residents
Neighborhoods included in Project Area	
West Oakland	2.43
North Oakland	1.18
Neighborhoods outside of Project Area	
Central/Chinatown	1.65
San Antonio	0.78
Fruitvale	0.68
Central East Oakland	0.86
Elmhurst	1.73
North Hills	2.35
South Hills	1.49
Lower Hills	1.20
City-wide Average	1.33
Adopted Standard	4.00

Source: OSCAR Element, page 4-12. City of Oakland 1996

Per capita standards alone are not the only criteria by which to evaluate the City's park services; social and economic factors also affect recreational needs. The OSCAR Element states that generally the need for City parks and recreational facilities is highest in the denser flatland neighborhoods as a result of:

- lower household incomes and more limited means to afford private recreation,
- limited mobility due to lower rates of automobile ownership,
- larger numbers of children,
- larger numbers of apartment dwellers living in housing without useable open space,
- denser development patterns without the aesthetic amenities afforded by open space,
- larger numbers of immigrants and persons requiring cultural and social services, and
- larger concentrations of at risk youth.

These social and economic factors are important considerations for assessing park services in the West Oakland neighborhood planning area. Demographic studies show that the recreational needs of the West Oakland residents are high. For example, this neighborhood planning area has the highest number of children as a percentage of the population in the City of Oakland (OSCAR, page 4-15).

Existing City/Local Parks within the Project Area

There are a total of 11 parks and recreation facilities within the Project Area. These parks and recreation facilities are shown on **Figure 10-1** and are described below by subarea.

Prescott/South Prescott Subarea

Existing parks and recreation facilities in this Redevelopment subarea include the following.

- Raimondi Park is the Project Area's only community park, and it contains athletic fields. Community concerns exist about the potential for hazardous materials in and adjacent to this park (see further discussion in Chapter 8: Hazards and Hazardous Materials).
- South Prescott Park is located at Chester and 3rd Streets near the I-880. This neighborhood park has benches, green space and a play structure for children.
- Willow Mini-park, Bertha Port Park and the Chester Totlot are small parks with facilities for young children.

Clawson/McClymonds/Bunche Subarea

There are three existing parks and recreation facilities in this Redevelopment subarea.

- Poplar Park includes a recreation center that provides youth and adult recreation services through a variety of programming including youth sports and exercise programs. It includes a kitchen, banquet facilities and gym.
- McClymonds Minipark is small park serving the surrounding neighborhood.
- Fitzgerald Park is a small neighborhood park that includes benches and trees.

Hoover/West MacArthur Subarea

There are three existing parks and recreation facilities in this Redevelopment subarea.

- Grove/Shafter Park, located at the intersection of I-580 and Highway 24,
- the 25th Street Minipark, and
- Durant Minipark.

(Figure 10-1)

East Bay Regional Park District Parks

EBRPD manages over 73,000 acres of parkland in 47 East Bay parks. These parks complement those provided by the City of Oakland by providing larger park areas, more isolated and wild settings, and an emphasis on naturalist activities as opposed to active recreation. Four of their regional parks are located entirely in Oakland and five are located immediately to the east, outside the City limits. There are no East Bay Regional Park District parks within the Project Area. However, within the adjacent Oakland Army Base Area Redevelopment Project, approximately 15-acres of land adjacent to the foot of the Bay Bridge are to eventually be conveyed from the City of Oakland to EBRPD for development of a new Gateway Park. This park would be primarily used for passive recreational needs such a picnics, fishing and open space. This Gateway Park would be connected to a segment of the Bay Trail that would link it with other regional and local parks in the vicinity.

Bay Trail

Portions of the Bay Trail alignment are located within the Project Area, including:

- a segment that follows along 7th Street from the West Oakland BART station to the Oakland waterfront,
- a segment that follows from 7th Street to 3rd Street from the West Oakland BART station to Jack London, and
- an additional segment that is contained within the Mandela Parkway median connecting the West Oakland BART station to Emeryville, the Shoreline Regional Park and the Gateway Park within the former Oakland Army Base.

10.2.2 Schools

Oakland Unified School District, Overview

The Oakland Unified School District (OUSD, or District) provides public schools and education services in Oakland. The District serves over 54,000 students in 80 kindergarten to 12th grade school facilities, and fourteen alternative and adult schools. It also provides early childhood education services for preschool children with 41 programs throughout Oakland, and houses administration and support services in 18 buildings at 4 sites. The general condition of the Districts' facilities is similar to most urban school districts in California; overcrowded, inadequate and in need of repair (OUSD 2000).

The District's overall enrollment is projected to be stable or perhaps growing slightly. OUSD projections indicate that elementary school enrollment peaked during 1998/99 and is expected to remain stable or decline in the near future. However, the peak in 1998/99 elementary school enrollment will begin affecting middle school and high school enrollment as these students move through grade levels. Middle school enrollment is projected to peak at about 13,500 students by about 2004, and high school enrollment is projected to peak at about 13,500 students by year 2007.

High School Attendance Areas

The OUSD divides its kindergarten through high school facilities into high school attendance areas (HSAAs). The Project Area is located within the McClymonds HSAA. There are 10 schools within the McClymonds HSAA, including seven elementary schools, two middle schools[1], and one high school. Six of the ten schools located in the McClymonds HSAA are located within the Project Area, as shown on **Figure 10-2** and described below:

Prescott/South Prescott Subarea

- Prescott Elementary

Clawson/McClymonds/Bunche Subarea

- Bunche Academy School
- McClymonds High School

Hoover/West MacArthur Subarea

- Hoover Elementary
- Foster Elementary
- Longfellow Elementary

This high school attendance area is the least crowded HSAA within the OUSD. Within this enrollment area current school capacity, enrollment and utilization rates as aggregated for all schools (not just those in the Project Area) are as shown in **Table 10-2**.

Table 10-2: McClymonds HSAA Capacity and Enrollment

Schools Type	Capacity	Year 2000 Enrollment	Space Available
Elementary	3,902	3,277	16%
Middle Schools	1,133	695	39%
High School	1,358	661	51%
Total	6,393	4,633	28%

Source: OUSD 2000

[1] Bunche Academy is an alternative school providing education for 8th graders only. Most middle school students in the McClymonds HSAA attend Lowell Middle School, which is outside the Project Area.

(Figure 10-2)

This area is projected to experience the most capacity pressure when the current elementary school students begin to attend middle and high school. The pressure on the schools from the current cohort of elementary students is expected to be temporary. The number of births to residents of the McClymonds HSAA fell by 40 percent between 1989 and 1997, the largest percentage drop of any HSAA. As a result, the number of students living in the area is expected to decline significantly over the next decade. In addition, the area is also expected to experience the smallest amount of housing growth with school age population in the OUSD.

Middle school enrollment from residents within the McClymonds HSAA is expected to peak by 2004, with approximately 1,200 to 1,400 students. By 2008, middle school enrollment is expected to decline to between 800 and 1,100 students, which is within the HSAA's current capacity of 1,133 students. High school enrollment is expected to peak in 2007, with approximately 1,000 to 1,400 students. By 2011, this number is forecast to drop to between 800 and 1,200 high school students, which is also within the HSAA's current capacity of 1,358 students (OUSD 2000).

In contrast to some of the more crowded HSAAs within the City, none of the schools within the McClymonds HSAA are on a multitrack calendar. Multitrack year-round education (MTYRE) can provide up to 20 percent increase in a school's capacity and may be an option, along with the addition of portable classrooms, to accommodate the temporary bulge in the area's middle and high school student populations. As identified by the OUSD, facility age, neighborhood conditions and utilization are issues to be addressed in the McClymonds HSAA (OUSD 2000).

School Budget

In April of 2003 the State of California Legislature authorized via legislation a loan to the Oakland Unified School District in the amount of $100 million. The loan is structured as a floating line of credit to overcome the District's projected negative general fund balance for the years 2001/2002 and 2002/2003 budgets. Along with this loan, the legislature authorized the appointment of a State Trustee to oversee the financial matters of the District.

10.2.3 Police Services

In 1997, the City of Oakland maintained a police staff of 697 authorized sworn personnel, or approximately 1.83 sworn staff per 1,000 residents. This is substantially lower than the corresponding state and national average rates of 2.0 and 2.8 sworn staff per 1,000 population respectively. To maintain service levels, OPD has increased the number of civilian staff it employs. In 1995, civilians compromised 35 percent of the force, compared to the national average of 22 percent.

Currently, OPD operates six patrol districts that are divided into 57 patrol beats. The geographic divisions are used to organize the staffing of the patrol functions. Assignments are organized to maximize flexibility and rapid response. The beats located within the Project Area are 02Y, 02X, 05Y, 05X, 07X, and 06X.

10.2.4 Fire Protection and Emergency Services

The Oakland Fire Department employs over 500 sworn and civilian employees. These employees are assigned to six divisions: Operations, Fire Prevention, Support Services, Administration, Education and Training, and Emergency Services. The Operations Division is responsible for emergency response and fire suppression. There are 29 fire stations, with about 480 authorized positions assigned to these stations. This equates to a ratio of about 1.26 sworn staff per 1,000 residents. Currently, within the Project Area there are two fire stations, numbers 3 and 5. Both maintain an engine company while Station 3 also maintains a truck company. In addition, Stations 1 and 15 are both located just outside the Project Area.

10.2.5 Solid Waste Disposal Services

The City of Oakland generates approximately 650,000 tons of solid waste a year. About two-thirds of this waste is disposed in landfills, while the other third is diverted (recycled, composted, etc.). The City estimates that residences account for 30 percent of this waste, commercial uses account for 40 percent, and industrial uses account for 30 percent. Most of the solid waste in the City is collected by Waste Management of Alameda County and is transported to the Davis Street Transfer Station in San Leandro via solid waste collection vehicles. Waste is then transported to the Altamont Landfill in eastern Alameda County for disposal. Construction and demolition debris are normally hauled by contractors or construction companies to asphalt and concrete recycling centers in Oakland or to the Vasco Road Landfill north of Livermore. Currently, the City is aggressively pursuing recycling programs, targeting a 50 percent diversion rate, to curb the amount of waste entering the landfills.

10.3 Regulatory and Policy Setting

10.3.1 State of California Regulatory/Policy Setting

Parks/Park Funding

A California law known as the Quimby Act[2] enables cities and counties to require the dedication of land, or payment of fees in-lieu of land dedications, for park and recreation purposes. Under this law the dedication of land or in-lieu fees is not to exceed the proportionate amount necessary to provide 3 acres of neighborhood and community parkland per 1,000 persons. Dedication requirements may be increased if the existing ratio of parkland per 1,000 population at the time of adoption of a City's local park land dedication ordinance exceeds that ratio, but may not exceed 5 acres per 1,000 population. Local jurisdictions (cities and counties) may require builders of residential subdivisions to dedicate land for parks and recreation areas, or to pay an in-lieu fee.

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[2] *California Subdivision Map Act, California Government Code, Section 66477*

The City of Oakland is one of the only cities in the Bay Area that does not currently have a park dedication requirement pursuant to the Quimby Act. Before the City could adopt such a fee, it would need to demonstrate a strong connection between new development, the need for parks and the way in which any fees are spent.

Schools/School Funding

School districts throughout California are regulated by a number of statewide regulations and policies affecting such issues as classroom size and operational and facilities funding. In regards to land use planning and environmental impact issues, Proposition 1A (implemented through Senate Bill 50 as enacted into law in February 1999) is one of he key state laws relating to school facility funding. First, this law prohibits local agencies such as the City of Oakland from denying land use approvals on the basis that school facilities are inadequate. Second, this regulation established a statewide cap on school funding via developer fees on residential, commercial and industrial development. Under this regulation developer fees may generally be imposed up to an amount equal to 50% of the state's contribution for the cost of school construction and site acquisition. If state funds for new school facility construction are not available, a school district may impose fees up to an amount equal to 100% of the state formula for determining school construction costs. Additionally, this regulation foreclosed alternative methods such as "Mira" agreements or Mello-Roos districts for collecting the funds necessary to fully mitigate the impacts of new development on schools, even if those amounts were in excess of the state fee cap.

To provide for the remaining school facilities funding needs, a statewide program for funding new school construction and school modernization projects was established, the School Facilities Program (SFP). The state SFP includes a new construction program that provides school districts with a 50% matching grant for the construction of new schools based on a state-established formula of need. It also includes a school modernization program that provides 80% matching grants to school districts for modernizing existing school campuses. Modernization is determined on a site-by-site basis, and the grants can be used to extend the useful life of, or to enhance the physical environment of a school.

10.3.2 Local Regulatory / Policy Setting

Parks

The City of Oakland's Open Space, Conservation and Recreation Element of its General Plan (OSCAR, City of Oakland 1996) sets the City policy framework for parks and recreation services in the City. The OSCAR Element provides an assessment of existing park and recreation services, identifies deficiencies in that system, and establishes policies and actions for closing the gap between needs and capacity. However, the OSCAR is not intended to be a Master Plan for the City parks and recreation system. In fact, the OSCAR itself calls for the City to establish a master plan to specifically address such issues as capital improvements, funding sources, park administration and program changes. The park and recreation portion of the OSCAR Element is guided by twelve overall principals (OSCAR, page 4-24), three of which are particularly relevant to land use, development/redevelopment and environmental issues:

- A park should be available within walking distance of every Oakland resident. No person should have to travel too far from home to gain access to recreational services.
- Oakland's existing parks should be regarded as a limited and precious resource. They should be carefully managed and conserved in the future. Zoning and master planning should be used to protect and manage park resources.
- The recreational needs created by new development should be offset by additional resources to be contributed by that development. In other words, new development should pay its fair share to meet the increased demand for park resulting from that development.

The major conclusions and recommendations derived from the OSCAR Element for the Central City East Redevelopment Project Area is that the area is highly underserved by park and recreation facilities, and that opportunities for expanding existing parks or finding new park sites are needed. Improved security at existing parks is also a high priority.

Schools

OUSD Master Plan

The Oakland Unified School District has prepared a *Long-Range Facilities Master Plan* (OUSD, January 2000). This Master Plan includes a description of existing classroom facilities, reviews enrollment trends and projections, considers demographic data that may impact school facility use, and identifies funding options for potential solutions to facility needs. The Master Plan is intended to assist the District in providing adequate facilities for its students over the next 20 years. Preparation of this Master Plan included seven public hearings throughout Oakland and a general town hall televised meeting. Public input received through the hearing process was a main factor in prioritizing issues to ultimately be addressed by the Master Plan.

School Impact Fees

As noted above, the state legislature allows the OUSD to collect school impact fees from developers of new residential and non-residential building space. The City imposes this fee through building permits, and the District collects the fees on all permits issued within the District's boundaries (which are co-terminus with the City boundaries). The developer fee revenue is used together with other District funds (i.e. state grants, general obligation bonds, etc.) to support efforts to complete eligible capital improvements. The amount of the fee is established through the District's Developer Fee Justification Study.

10.4 Impacts and Mitigation Measures

Significance Criteria

Under CEQA Guidelines,[3] a project would have a significant environmental impact if it were to:

- Result in the need for new or physically altered parks or recreation facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives.
- Result in the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives.
- Result in the need for new or physically altered police facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives.
- Result in the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives.
- Be served by a landfill with insufficient permitted capacity to accommodate the project's waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects.
- Violate any applicable federal, state and local statutes and regulations related to solid waste.

10.4.1: Park Demand

Implementation of the Redevelopment Plan's projects, programs and other activities is intended to stimulate increased investment and new development within the Project Area. Such new development would result in increased population growth consistent with the growth projections contained in the City General Plan. This projected growth in population would result in an increased demand for parks and recreation facilities. For the reasons discussed below, this increased parks demand would be a *less than significant impact* of the Project.

Cumulative Impact 10.4.1: On a cumulative basis, the growth and development that may be facilitated by, or be in furtherance of the Redevelopment Plan would *contribute to a cumulatively considerable deficit* in existing parkland as more fully discussed below.

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[3] CEQA required that an EIR focus on substantial adverse changes in the physical environment. While the EIR discusses the need for new physical facilities, such as schools and parks, it does not directly address the financial issues related to these improvements.

Discussion

Park Demands

Based on the household and population projections contained in the Project Description and derived from the growth projections of the City General Plan, the Project Area is projected to grow by approximately 1,280 new households and approximately 2,347 people. Using the City's adopted standard of 4 acres of active, local-serving parkland per 1,000 persons, this growth and development would generate an increased demand for approximately 9 acres of new parkland.[4] This parkland demand would occur incrementally over the 20-year planning horizon of this analysis. There is no site-specific location for any of this projected new growth, and therefore the distribution of park demand cannot be predicted with any certainty.

Park and Open Space Improvements Pursuant to the OSCAR

The Redevelopment Plan is intended to be consistent with and assist in implementation of the City of Oakland General Plan, including the OSCAR Element. According to the OSCAR, there are several improvements recommended for parks within the Project Area. These park recommendations from the OSCAR are shown on **Figure 10-3** (City of Oakland 1996, pages 5-7 – 5-8) and include the following:

- *Poplar Park: This neighborhood park has potential for expansion on the unused right-of-way "triangles" along Peralta Street and the lawn behind Clawson School. Any re-use plan for the school should consider opportunities to enlarge the park in that direction. The existing recreation center is small and would benefit from modernization, additional storage space and showers.*

- *Willow Street Park: This small neighborhood park is not large enough to meet the needs of the Prescott neighborhood. Opportunities for expansion should be pursued.*

- *Durant Mini-Park: Improved connections to Foster Middle School would be helpful, possibly integrating the park with a partially "greened" schoolyard and developing such amenities as a community garden or adventure play area. The park currently feels "lost" between the MLK Jr. Way commercial strip and the school.*

- *25th Street Mini-Park: Public safety and landscaping improvements would be helpful.*

- *McClymonds Mini-Park/ Athletic Field/ Pool: This open space area is located in a part of West Oakland with relatively poor access to open space. The ideal solution would be to relocate the mini-park to a site adjacent to the athletic field so that the entire complex could function as a new neighborhood park, similar to Franklin Park in the San Antonio area. Until this becomes feasible the existing facilities should be maintained, and their availability for public use should be made more clear.*

[4] 2,347 new residents times 4 acres per 1,000 residents

Figure 10-3

- *Raimondi Field: This park is an important resource for West Oakland and for the entire city. Raimondi Park is the largest and oldest park in the area and is one of the few Oakland parks located in a non-residential setting. The site is also one of the few in the city that consists of a large, flat, unobstructed lawn. Raimondi can potentially accommodate more evening/ weekend games and special events that it does currently. The field and adjacent properties, including the nearby former AMTRAK station, would benefit from a master plan which looks at the long-term relationship between uses and the potential for complementary development nearby.*

Additionally, the OSCAR includes several additional improvements recommended for open spaces within the Project Area. These open space recommendations from the OSCAR are also shown on Figure 10-3 (City of Oakland 1996, pages 5-6 – 5-7) and include the following:

- *Accommodate pedestrian and bicycle travel from West Oakland BART to Emeryville via the Mandela Parkway Median.*
- *Improve access to the shoreline. This should include construction of the Bay Trail, along with spur trails along Maritime and 7th Street/Middle Harbor Road.*
- *Where feasible, incorporate connections such as arcades and landscaped easements to link such parks in West Oakland as DeFremery, Lowell, and Raimondi. These connections should be made as old industrial sites along Mandela Parkway are redeveloped.*
- *Pursue a South Prescott Park near 3rd and Henry Streets adjacent to the new Cypress Freeway.*
- *Pursue schoolyard "greening," particularly in the northeast part of West Oakland (Hoover/Foster), where there are no neighborhood parks. McClymonds High School is located in an area with relatively little open space and its field could be a more accessible community resource.*
- *Include provisions for a public plaza in any redevelopment plan or urban design plan for the West Oakland BART station.*
- *Continue street tree planting efforts and other programs to "green" West Oakland.*
- *Explore opportunities to restore natural landscape features, including oak trees and drainage ways.*

To the extent that the Redevelopment Plan's projects, programs and other implementation activities assist in the implementation of the parks and open space recommendations contained in the OSCAR as identified above, this would be considered a beneficial effect and not a potential impact. Therefore, the demand for new park and recreation facilities is not a direct, significant impact of Redevelopment Plan implementation.

Cumulative Parks and Recreation Demand

On a cumulative basis the addition of new residents to the area will contribute to the current deficit in the availability of parks and recreation facilities. To address this cumulative park deficit, the LUTE and OSCAR Elements of the Oakland General Plan contain specific policies regarding development of new parklands that are to be implemented throughout all of the City's neighborhoods, including those neighborhoods within the Project Area. These General Plan policies include:

Policy REC-10.2: To the extent permitted by law, require recreational needs created by future growth to be offset by resources contributed by that growth. In other words, require mandatory land dedication for large-scale residential development and establish a park impact fee for smaller-scale residential development projects, including individual new dwelling units. Calculate the dedication or fee requirement based n a standard of 4 acres of local-serving parkland per 1,000 residents.

Policy OS-2.5: Increase the amount of urban parkland in the 7 flatland planning areas, placing a priority on land in areas with limited public open space, land adjacent to existing parks, land with the potential to provide creek or shoreline access, land with historical or visual significance, and that can be acquired at no cost or reduced cost, land in areas with dense concentrations of people or workers, and land that is highly visible from major streets or adjacent to public buildings.

Policy REC-10.1: Continue to provide General Fund support for park and recreational services, acknowledging the importance of these services to the quality of life in Oakland.

Policy REC-3.1: Use level of service standards of 10 acres of total parkland and 4 acres of local-serving parkland as a means of determining where unmet needs exist and prioritizing future capital investments.

Policy REC-3.2: Follow a systematic process in allocating park and recreation funds. In general allocate the greatest expenditures to those areas with the highest unmet needs, and place a priority on projects that maximize reductions in deficiency for the amount of money spent. However, maintain the flexibility to consider such factors as site opportunities, the availability of grants or matching funds, and linkages to other kings of projects.

However, the City of Oakland has not yet adopted a park dedication or in lieu fee, nor can there be any certainty that new parklands will be developed concurrent with incremental growth and development. Therefore, the amount of growth and development that may be facilitated by implementation of the Redevelopment Plan's projects, programs and other activities would have a cumulatively considerable effect on the current park and recreation deficit within the Project Area. Additionally, this cumulative effect is considered potentially significant in that mitigation for this impact would likely result in physical changes to the environment, such as construction of new parks and recreational facilities.

Mitigation Measures

The following additional mitigation measures are recommended to address the cumulative effect that growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan, would have on the current park and recreation facility deficits. These mitigation measures have been derived from the OSCAR Element, but re-stated to apply to the Redevelopment Agency and redevelopment-related activity.

- **Mitigation Measure 10.4.1A**: The City of Oakland Redevelopment Agency shall coordinate with the Office of Parks and Recreation to develop and initiate a land acquisition program for new parks in underserved areas. The biggest challenge will be to find available land in appropriate areas to serve new residents. The Redevelopment Agency may be able to

assist through the use of redevelopment tools in the identification and acquisition of appropriate new park sites.

- **Mitigation Measure 10.4.1B**: The City of Oakland Redevelopment Agency shall coordinate with the City Office of Parks and Recreation and the OUSD, local churches, private recreation providers and local non-profit agencies to promote joint use agreements and joint use partnerships that maximize the use of non-park recreational facilities.

- **Mitigation Measure 10.4.1C**: The City of Oakland and its Redevelopment Agency shall identify and pursue local funding opportunities to augment existing General Fund monies. At the Redevelopment Agency's sole discretion, redevelopment funds could potentially be used for parkland acquisitions and improvements.

Potential Benefits of Redevelopment

California Redevelopment Law enables redevelopment agencies to pay all or part of the value of land, and for the cost of construction of publicly owned facilities, including parks. However, the Agency must find that the park or park improvements would be of benefit to the Project Area, no other reasonable means of achieving financing for such land acquisition or improvement is available, and that the park or park improvement would assist in the elimination of blighting conditions.

Environmental Mitigation of Park Improvements

Environmental review for new park and recreation facility expansion, construction and development would be conducted on a project-specific basis. The City Office of Parks and Recreation (OPR) will conduct appropriate environmental review for new park facility construction including identifying appropriate site-specific mitigation measures, at such time as such improvements are proposed. However, the OSCAR Element includes policies that, if implemented, would reduce potential environmental consequences associated with new park facilities to less than significant levels. These policies include:

Policy REC-2.3: Protect sensitive natural areas within parks including creeks and woodlands, and integrate them into park design. Require new recreational facilities to respect existing park character, be compatible with the natural environment and achieve a high standard of quality design.

Policy REC-2.4: Manage park facilities and activities in a manner which minimizes negative impacts on adjacent residential, commercial or industrial areas.

Policy REC-2.5: Plan and design parks in a way that maximizes their visibility while minimizing conflicts between pedestrians, bicyclists and automobiles.

Policy REC-2-6: Respect historic park features when designing park improvements or programming new park activities.

Resulting Level of Significance

The growth and development within the Project Area as projected under the General Plan has the potential to occur with or without implementation of the Redevelopment Plan. However, the

Redevelopment Plan's implementation programs, projects and other activities are expected to facilitate this growth and development, thereby contributing to the cumulative deficit of parkland. Implementation of Mitigation Measures 10.4.1A through 10.4.1C above would mitigate the Redevelopment Plan's contribution to the existing parks and recreation facilities deficit in the Project Area to a level of *less than cumulatively considerable.*

Through implementation of the General Plan policies identified above, the potential impacts of new park construction or expansion can be mitigated to levels of *less than significant*.

10.4.2 School Facilities

Implementation of the Redevelopment Plan's projects, programs and other activities is intended to stimulate increased investment and new development within the Project Area. Such new development would result in increased population growth consistent with the growth projections contained in the City General Plan. This population growth would result in an increase in the number of school-age children projected to attend public schools. For the reasons discussed below, this increased school demand would be a *less than significant impact* of the Project.

Cumulative Impact 10.4.2: On a cumulative basis, the growth and development that may be facilitated by, or be in furtherance of the Redevelopment Plan would *contribute to a cumulatively considerable deficit* in existing school capacity as more fully discussed below.

Discussion

Student Generation

Based on the household and population projections contained in the Project Description, new growth and development within the Project Area is projected to result in the addition of approximately 1,280 new households and approximately 2,347 people into the Project Area. Using a statewide average student yield factor of 0.7 students per household, this growth and development is projected to generate an increase of approximately 896 new students by year 2020, as shown below in **Table 10-3**.

Table 10-3: Student Generation and Distribution

Redevelopment Subarea	New Households [1]	Student Yield [2]
Prescott/South Prescott	576	403
Clawson/McClymonds/Bunche	500	350
Hoover/West MacArthur	204	143
Total	**1,280**	**896**

Notes: 1. From Table 3-2 of this EIR, Project Description
2. Student yield based on statewide average of 0.7 students per household

The addition of these students would occur incrementally over the 20-year planning horizon of this analysis, and would not be fully realized within a short-term planning projection period. Additionally, the site-specific location of any of this projected new growth, the distribution of students throughout grade levels at any particular point in time, and changing demographic characteristics throughout the school district will all affect the availability of classroom capacity to serve these new students. If classroom capacity within the specific schools serving the Project Area were found to be unavailable at the time Project Area students enter into the school system, the District may make other options available to accommodate these students. Such options may include reassigning students among school districts, expanding year-round schooling, adding more portable classrooms, bussing students to less crowded schools, or finding opportunities to more efficiently utilize existing or abandoned school facilities.

However, in the long run the OUSD does not project the need for new school construction in order to accommodate the classroom demands for schools within the McClymonds HSAA. The OUSD Master Plan recommends reviewing the use of underutilized schools within this HSAA to determine if space may be temporarily used by students from other overcrowded and growing areas. The major school needs identified by the OUSD for the McClymonds HSAA is the modernization and renovation of existing schools (OUSD 2000, page 9-2). Under current City and School District policies, all new development within the Project Area would be required to pay school impact fees to offset the costs of new school facilities, and payment of these fees would effectively mitigate this increased school demand. Therefore, the addition of these new students is not considered a direct, significant impact of the Redevelopment Plan.

Cumulative School Capacity and Demand

The OUSD *Long-Range Facilities Master Plan* (OUSD 2000) has assessed the District's immediate and projected future facility needs and presents options and recommendations to address these needs. Current assumptions indicate that the District does not anticipate providing any new schools within the McClymonds HSAA, but instead will focus on modernization and renovation of existing school facilities.

The addition of students who would move into the Project Area as a result of new growth and development as may be facilitated by implementation of the Redevelopment Plan would increase enrollment in the McClymonds HSAA. Some of these students may be currently enrolled in other HSAAs within the District. Their move may re-distribute students from overcrowded HSAAs to the less crowded McClymonds HSAA. Other students who may move to the Project Area as a result of new growth and development may be new to the District. In the short-term, the addition of new students may exacerbate the temporary overcrowding in the middle and high schools that is expected to occur within this HSAA. In the long-term, an increase in the number of students to the McClymonds HSAA would reduce the District's options to reassign students among HSAAs, bus students to less crowded schools, or find opportunities to more efficiently utilize existing or abandoned school facilities. This would contribute to the District's cumulatively considerable classroom capacity deficit. Therefore, on a cumulative basis the addition of new students will contribute to a current District-wide deficit in the availability of classrooms to serve student populations.

The costs for new school facility needs throughout the entire District is estimated at approximately $881 million. The District estimated that it would have approximately $263.5 million potentially available if it were able to maximize its pursuit of state grant monies. This would have left an unfunded amount of approximately $617.6 million[5]. In 1986, with the adoption of AB 2926, the state legislature allowed school districts to collect school impact fees from developers of residential and nonresidential (commercial/industrial) building space. The District will collect these fees from all construction and building permits issued within the Project Area, as well as throughout the District Boundaries. These fees will be utilized in conjunction with other District funds to support efforts to complete eligible capital improvements (i.e., construction and reconstruction)[6]. However, because all necessary funds for projected capital improvements are unavailable, the OUSD predicts continued overcrowding and capacity constraints in much of the District.

Mitigation Measures

Classroom overcrowding is a cumulatively significant environmental impact because it is likely to result in physical changes to the environment, such as new school construction (CEQA 15064). Environmental review for new school construction is the responsibility of the OUSD. The OUSD will conduct appropriate environmental review for new school facility construction, including identifying appropriate site-specific mitigation measures, at such time as facility construction is proposed.

The following mitigation measures are recommended to address the contribution toward cumulative school capacity deficits that may be exacerbated by implementation of the Redevelopment Plan. These mitigation measures have been derived from the OUSD *Long-Range Facility Master Plan*, but re-stated in such a way as to apply to the Redevelopment Agency and redevelopment-related activity.

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[5] OUSD, Long Range Facilities Master Plan, page FMP-2

[6] OUSD LRFMP, page 8-19

- **Mitigation Measure 10.4.2A:** The City of Oakland, its Redevelopment Agency, and public and private land developers within the Project Area shall work with the OUSD to identify possible joint use opportunities. Joint use may take many different forms. Examples of joint use may include the lease or sale of air rights above or below existing school grounds or facilities to private developers, or joint venturing with private developers, public entities or other parties in the development of surplus school property. Other standard joint use opportunities include joint ventures with the City parks department in the development of shared school grounds/public park space. Joint use agreements can result in opportunities for sharing costs for such items as maintenance and repair, thereby saving funds for other District needs.

- **Mitigation Measure 10.4.2B**: The City of Oakland and its Redevelopment Agency shall coordinate with the OUSD to identify and pursue local funding opportunities to match potential state grants. At the Redevelopment Agency's sole discretion, local funds could potentially include the use of redevelopment funds.[7]

- **Mitigation Measure 10.4.2C**: The City of Oakland and its Redevelopment Agency should coordinate with the OUSD in the management of the District's real estate assets. On a cumulative, District-wide basis the School District will continue to be challenged in its ability to find available land in appropriate areas to serve new student populations. However, the District may now own or control real estate in locations outside of the Project Area where new schools may not be needed to serve projected student demands. Creative use and disposition of these real estate assets could help mitigate the costs associated with future facility needs. The City and Agency may be able to assist through the use of redevelopment tools in the identification, use and potential disposition of appropriate sites, even if these sites are not located within the West Oakland Project Area.

Potential Benefits of Redevelopment

California Redevelopment Law (CRL) enables redevelopment plans to include significant capital improvement projects to alleviate or eliminate school overcrowding. Additionally, CRL authorizes or enables redevelopment agencies, should they so choose to build and lease school buildings to a school district with title to vest in the school district upon termination of the lease.

Additionally, the Redevelopment Plan is anticipated to assist or facilitate the development of new land uses throughout the Project Area. The School District will collect these fees from all construction and building permits issued within the Project Area, as well as throughout the District Boundaries. These fees will be utilized in conjunction with other District funds to support efforts to complete eligible capital improvements.

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[7] It should be noted that California Redevelopment Law (Section 33607.5) establishes specific mechanisms and formulas for payments to be made by redevelopment agencies to school districts to alleviate any financial burden that the district may incur as a result of redevelopment. Section 33607.5 of the CRL also specifically provides that such payments are the exclusive payments required to be made by a redevelopment agency to a school district. A Redevelopment Agency shall not be required, as a mitigation measure or as part of any settlement agreement or judgement, to make any other payments to a school district.

Resulting Level of Significance

The growth and development within the Project Area as projected under the General Plan has the potential to occur with or without implementation of the Redevelopment Plan. However, the Redevelopment Plan's implementation programs, projects and other activities are expected to facilitate this growth and development. Implementation of Mitigation Measures 10.2.4A through 10.2.4C above would offset the Redevelopment Plan's contribution to the cumulative effects of school overcrowding in the Project Area to a level of *less than cumulatively considerable.*

10.4.3 Police Services

Implementation of the Redevelopment Plan's projects, programs and other activity would result in an increase in population and employment, thereby potentially increasing the demand for police service. However, for the reasons discussed below, increased police service demand would be a *less than significant* impact.

Discussion

Redevelopment Plan implementation activity is not expected to result in the need for new or physically altered police stations, the construction of which could cause significant environmental impacts. However, new growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan's projects, programs and other activities would increase the demand for police services. This demand can be estimated by applying the current police staff-to-resident ratio to the amount of residential growth projected for the Project Area for the year 2020. Currently, the Oakland Police Department has a ratio of 1.83 sworn staff per 1,000 residents. To keep this service ratio constant, the Oakland Police Department would have to add approximately 8 new sworn staff members over the next 20 years to match the projected residential growth within the Project Area[8]. Additional sworn staff may be needed because this calculation does not take into account the daytime population expansion due to increased employment within the Project Area.

By way of comparison, the Oakland General Plan Land Use and Transportation Element estimates that, to maintain the current ratio of sworn staff to residents, an additional 47 personnel would be required citywide. The increased police service demand from the Project Area accounts for approximately 17% of the citywide demand. The City of Oakland-certified LUTE EIR concluded that the citywide increase in police service demand was a less than significant environmental impact. This conclusion was based on General Plan policies that call for expanding police services commensurate with growth, and assessing the need for such services as individual projects are proposed. The increased police service demand attributable to the Project Area is included in this citywide estimate. The increased police service demand associated with projected growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan is similarly a *less than significant impact*.

[8] 4,209 new residents times 1.83 officers per 1,000 residents = approximately 8 new officers

City of Oakland General Plan

To address potential increased demand for police service, the following General Plan policies and mitigation measures (as derived from the LUTE EIR, page III.D-23) would apply to all Redevelopment Plan implementation activity within the Project Area.

LUTE Policy N13.1: The development of public facilities and staffing of safety-related services should be sequenced and timed to provide a balance between land use and population growth, and public services at all times.

LUTE Policy N13.5: In its capital improvement and public service programs, the City should give special priority to reducing deficiencies in, and disparities between, existing residential areas.

LUTE Mitigation Measure D.5-1a: In reviewing major land use or policy decisions, consider the availability of police and fire protection services, . . . in the affected areas, as well as the impact of the project on current service levels.

LUTE Mitigation Measure D.5-1b: Develop target ratios of police officers and firefighters to populations for annual budgeting purposes. These ratios should be used to assess the feasibility and merits of service fees on new development, which finance additional police officers and fire fighters.

LUTE Mitigation Measure D.5-1c: Increase police foot patrols and cruisers in high visibility downtown areas and locate funding sources to support them.

LUTE Mitigation Measure D.5-1e: Solicit comments from the Oakland Police Service Agency and Oakland Fire Department on major new development proposals to ensure that law enforcement and fire protection impacts are appropriately addressed and mitigated.

As determined in the LUTE EIR (City of Oakland, 1998, page III.D-22), implementation of these policies and mitigation measures would effectively mitigate potentially significant effects on police service to *less than significant* levels.

Potential Benefits of Redevelopment

Implementation of the Redevelopment Plan would create more economic vitality, provide more jobs, and make more efficient use of currently vacant or obsolete structures, all of which could potentially beneficially affect crime rates in the Project Area, and thereby curtail a portion of the projected police services demand.

10.4.4 Fire Protection

The Redevelopment Plan's projects, programs and other implementation activity would facilitate an increase in population and employment, thereby increasing the demand for fire protection and emergency services. However, for the reasons discussed below, increased fire protection demand would be a *less than significant* impact.

Discussion

Redevelopment Plan implementation activity is not expected to result in the need for new or physically altered fire stations, the construction of which could cause significant environmental impacts. Existing fire stations and emergency service facilities adequately serve all portions of the Project Area. While new growth and development would increase fire and emergency service demands, modern construction standards and life safety requirements will ensure that new buildings and renovations to existing buildings will be safer. The increase in fire and emergency service demand associated with growth and development within the Project Area can be estimated by applying the current ratio of fire services staff-to-residents to the amount of residential growth projected for the Project Area for the year 2020. Currently, the Oakland Fire Department has a ratio of 1.26 sworn staff per 1,000 residents. To maintain this service ratio, the Oakland Fire Department would have to add approximately 5 new sworn staff members over the next 20 years to keep pace with the projected growth within the Project Area[9]. Additional sworn staff may be needed because this calculation does not take into account the daytime population increase due to increased employment within the Project Area.

By way of comparison, the Oakland General Plan Land Use and Transportation Element estimates that to maintain the current ratio of sworn staff-to-residents, an additional 33 personnel would be required. The increased fire protection and emergency service demand from the Project Area would account for approximately 15% of the citywide demand. The City of Oakland-certified LUTE EIR concluded that the citywide increase in fire protection demand was a less than significant environmental impact due to implementation of General Plan policies. These policies call for expanding fire protection and emergency services commensurate with growth, and assessing the need for such services as individual projects are proposed. Similarly, the increased fire protection and emergency services demand associated with projected growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan is a *less than significant impact* due to implementation of General Plan policies.

City General Plan Policies

To address potential increased demand for fire protection and emergency service, the following General Plan policies and mitigation measures (as derived from the LUTE EIR, page III.D-28) would apply to all Redevelopment Plan implementation activity within the Project Area.

[9] 4,209 new residents times 1.26 sworn staff per 1,000 residents = approximately 5 sworn staff

LUTE EIR, Policy N13.1: The development of public facilities and staffing of safety-related services should be sequenced and timed to provide a balance between land use and population growth, and public services at all times.

LUTE EIR, Policy N13.5: In its capital improvement and public service programs, the City should give special priority to reducing deficiencies in, and disparities between, existing residential areas.

LUTE EIR, Mitigation Measure D.6-1a: In reviewing major land use or policy decisions, consider the availability of police and fire protection services, . . . in the affected areas, as well as the impact of the project on current service levels.

LUTE EIR, Mitigation Measure D.6-1b: Develop target ratios of police officers and firefighters to populations for annual budgeting purposes. These ratios should be used to assess the feasibility and merits of service fees on new development, which finance additional police officers and fire fighters.

LUTE Mitigation Measure D.6-1d: Solicit comments from the Oakland Police Service Agency and Oakland Fire Department on major new development proposals to ensure that law enforcement and fire protection impacts are appropriately addressed and mitigated.

As determined in the LUTE EIR (City of Oakland, 1998, page III.D-28), implementation of these policies and mitigation measures would effectively mitigate potentially significant effects on fire protection and emergency services to *less than significant* levels.

Potential Benefits of Redevelopment

Redevelopment Plan implementation activity could reduce certain fire hazards by renovating, reusing or removing existing derelict structures, and replacing older structures with new buildings that incorporate sprinkler systems, other fire prevention measures and better life safety systems. These potential benefits would likely reduce a portion of the fire protection and emergency service demand.

10.4.5 Solid Waste

The Redevelopment Plan's projects, programs and other implementation activity would facilitate an increase in population and employment, thereby increasing the demand for solid waste services. However, for the reasons listed below, the increase in solid waste demand for projects pursuant to the Redevelopment Plan would be a *less than significant* impact.

Discussion

Each new employee and resident within the Project Area would generate approximately 5 pounds of solid waste each day.[10] The amount of solid waste generated by the incremental increase in population projected for the Project Area would be approximately 11 tons of solid

[10] Waste generation factor derived from the *Coliseum Redevelopment Plan EIR*, (City of Oakland 1995)

waste per day for residential uses and 8 tons per day for non-residential uses[11]. This represents an additional increase of approximately 6,700 tons of solid waste per year.

By comparison, the City of Oakland-certified LUTE EIR predicts an annual citywide increase in solid waste of 62,000 additional tons. The projected waste generated by the Project Area would account for approximately 11% of the citywide solid waste generation. This estimate does not take into account any Redevelopment Plan implementation activity that might result in the removal of existing structures. Such removal would generate additional construction/demolition waste including concrete, asphalt and wood products, as well as certain wastes requiring special handling, such as asbestos and lead paint.

The LUTE EIR concluded that landfill capacity at the Altamont and Vasco Road landfills was sufficient to hold the projected citywide estimate of 62,000 annual tons of additional solid waste, which would include the solid waste generated from within the Project Area. This solid waste demand would be a *less than significant impact*, provided that the City of Oakland continued to implement its Source Reduction and Recycling Element and ensured that solid waste collection disposal rates were adequate to cover the cost of service delivery. Therefore, the increased solid waste demand associated with projected growth and development within the Project Area, as may be facilitated by implementation of the Redevelopment Plan is similarly a *less than significant impact*.

Previously Identified Mitigation Measures

Although landfill capacity is anticipated to be available to meet the needs of projected new development as may be facilitated by the Redevelopment Plan's implementation projects, programs and other activities, the following mitigation measures (as derived from the LUTE EIR, page III.D-20) would apply to all Redevelopment Plan implementation activity within the Project Area.

LUTE EIR, Mitigation Measure D.4-1a: Continue to implement programs that reduce the amount of solid waste generated by the City by encouraging recycling, composting and other activities consistent with the City's Source Reduction and Recycling Element.

LUTE EIR, Mitigation Measure D.4-1b: Support solid waste collection, recycling and disposal rates that are sufficient to cover the costs of adequate and efficient service delivery.

LUTE EIR, Mitigation Measure D.4-1c: Establish guidelines and incentives for the recycling of construction and demolition debris and the use of recycled concrete and other recycled products in the construction of new buildings, roads and infrastructure.

As determined in the LUTE EIR (City of Oakland, 1998, page III.D-20), implementation of these mitigation measures would effectively mitigate potentially significant effects on solid waste services to a *less than significant* level.

[11] 4209 residents times 5 lbs. solid waste per day = approximately 11 tons of solid waste per day. 3184 jobs times 5 lbs. solid waste per day = approximately 8 tons of solid waste per day

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11

Cultural and Historic Resources

11.1 Introduction

This chapter of the EIR briefly describes existing cultural and historic resources within the West Oakland Redevelopment Project Area and existing regulations regarding those resources. It also identifies potential impacts that implementation of the Redevelopment Plan may have on existing historic and cultural resources, and recommends, where necessary and feasible, mitigation measures to reduce and or avoid potentially significant impacts. Historic and cultural resources discussed in this section of the EIR include:

- Properties of cultural or historic significance,
- Prehistoric or historic archaeological sites, and
- Paleontological sites.

Significance thresholds for impacts on cultural and historical resources would generally be reached if redevelopment activity would disrupt or adversely affect the resources, including both physical and aesthetic effects. Adverse effects include destruction of a resource as well as alteration that impairs its integrity or significance.

11.2 Environmental Setting

11.2.1 Overview of Oakland's History and Development

An overview of the history and development of the City of Oakland is contained in the *Historic Preservation Element of the Oakland General Plan* (1994, as amended in 1998, pages 1-2 through 1-9), and is hereby incorporated by reference. A brief history and description of the Project Area and its resources is provided below. The Oakland City Planning Department's Cultural Heritage Survey project has prepared extensive neighborhood histories, thematic context statements, and individual property and district documentation that can be consulted for further information. Existing inventory forms for the Oakland Point, South Prescott, and Clawson districts, covering over 1,100 properties, are available for review at the City Planning Department.

Archaeology/Paleontological Resources

Paleontological resources are the fossilized remains of the area's early plants and animals. Fossilized beds of oysters, scallops, and clams from the Miocene epoch (10 to 30 million years ago) have been found in the hills above Oakland and Berkeley. They were deposited when the East Bay Hills were submerged by the ocean. Fossilized plants from the Pliocene and Pleisteocene epochs also occur throughout the Bay Area. While several paleontological finds, including the remains of mammoths, bisons, bears, and others have been discovered in within the City of Oakland, these finds are clustered in areas where specific excavations have taken place. In fact, fossils may occur in many areas in Oakland and may be encountered wherever there are broad, deep cuts into bedrock (LUTE DEIR, 1997). Deposits that were caused when uplifting created the Oakland/Berkeley Hills between 1.5 and 5 million years ago overlie the bedrock in the Project Area. Merritt Sand overlies most of the bedrock in the Project Area. In the portion of the Hoover/MacArthur subarea that occurs north of the I-580, the bedrock is overlain by older alluvial fans. Marine and marsh deposits overlay small areas near the southern and western boundaries of the Project Area (OSCAR Technical Report Volume 1, 1993).

Native American Period

There is a considerable body of ethnographic literature on the Native American inhabitants of the Project region. This section provides a brief overview of the ethnography of the area and is intended to provide a general background only. The Project area lies within the region occupied at the time of historic contact by the Ohlone or Costanoan group of Native Americans (Kroeber 1970). Although the term Costanoan is derived from the Spanish word Costaños, or "coast people", its application as a means of identifying this population is based in linguistics. The Costanoans spoke a language now considered one of the major subdivisions of the Miwok-Costanoan, which belonged to the Utian family within the Penutian language stock (Shipley 1978: 82-84). Costanoan actually designates a family of eight languages spoken by tribal groups occupying the area from the Pacific Coast to the Diablo Range, and from San Francisco to Point Sur. Modern descendants of the Costanoan prefer to be known as Ohlone. The name Ohlone is derived from the Oljón tribal group that occupied the San Gregorio watershed in San Mateo County (Bocek 1986:8). The two terms (Costanoan and Ohlone) are used interchangeably in much of the ethnographic literature.

On the basis of linguistic evidence, it has been suggested that the ancestors of the Ohlone arrived in the San Francisco Bay area about 500 A.D., having moved south and west from the Sacramento-San Joaquin Delta region. The ancestral Ohlone displaced speakers of a Hokan language, and were probably the producers of the artifact assemblages that constitute the Augustine Pattern described above (Levy 1978). Although linguistically linked as a "family," the eight Costanoan languages actually comprised a continuum in which neighboring groups could probably understand each other. However, beyond neighborhood boundaries, each group's language was unrecognizable to the other. Each of the eight language groups was subdivided into smaller village complexes or tribal groups. The tribal groups were independent political entities, each occupying specific territories defined by physiographic features. Each tribal group controlled access to the natural resources of the territories. Although each tribal group had one or more permanent villages, their territory contained numerous smaller campsites used as needed during a seasonal round of resource exploitation.

The arrival of the Spanish in the San Francisco Bay Area in 1775 led to a rapid and significant reduction in native California populations. Diseases, declining birth rates, and the effects of the mission system served to eradicate aboriginal lifeways. Brought into the missions, the surviving Ohlone, along with former neighboring groups of Esselen, Yokuts, and Miwok were transformed from hunters and gatherers into agricultural laborers (Levy 1978; Shoup and Milliken with Brown 1994). With abandonment of the mission system and the Mexican takeover in the 1840s, numerous ranchos were established. Generally, the few Indians who remained were then forced, by necessity, to work on the ranchos. Today, descendants of the Ohlone live throughout the Bay Area. Several of these Ohlone groups (e.g., Muwekma and Amah) have banded together as modern tribelets to seek Federal recognition. Many Ohlone (both individuals and groups) are active in reviving and preserving elements of their traditional culture such as dance, basketry, and song.

Early Euro-American Settlements

The lands that eventually became Oakland were part of a Spanish land grant given to Luis Maria Peralta in 1820, divided among his four sons in 1842. Most of what is now East Oakland was given to Antonio Peralta, and most of what is now North and West Oakland was given to Vicente Peralta. In 1850 a group of Yankee squatters, from the gold fields via San Francisco, landed on the Estuary west of what became Lake Merritt, hired a surveyor, laid out a town plat with their landing at the foot of Broadway, and proceeded to sell lots. The original street grid only ran west as far as Market Street and north to 14th Street, though the town that was incorporated in 1852 as Oakland extended west from the future Lake Merritt to the Bay and north to about 22nd Street.

Geographical Setting

The present West Oakland Project area encompasses approximately the west third of the original town (from the Estuary to West Grand Avenue), most of the area north from there to the annexation line of 1872 (roughly the MacArthur Freeway), and several blocks north to 40th Street that were part of the Annex of 1897 and are generally considered part of the North Oakland neighborhood of Temescal. The buildings in the area still reflect its early history, especially in the residential neighborhoods which retain remarkably intact period character. In the Prescott-South Prescott subarea over half the buildings were constructed in the 1880s or earlier, while in the Clawson-McClymonds-Bunche and Hoover-Foster-MacArthur subareas well over half the buildings are pre-1910.

Early Oakland's development was shaped by its topography and travel patterns. The Original Town occupied a de facto peninsula, surrounded by the Lake Merritt tidal slough, the San Antonio Estuary and its marshy shores, the Bay west of Pine and Cedar Streets, and a wedge-shaped northern marsh that extended from about 16th Street north to 28th Street and beyond, and at its widest came inland as far as Adeline Street. The west part of town was isolated from the Broadway area by a slough that came north as far as 7th Street in the area around Union and Cypress Streets.

The original 1850 settlement at the foot of Broadway was sited at the one point where solid ground met the estuary. The estuary in its natural state provided only a shallow, marshy, muddy channel for water transportation to San Francisco ("the Creek Route"). The search for a better route soon led Oakland entrepreneurs west to Oakland Point, the future outer end of 7th Street, which was the other place where land met water after a fashion. After at least one false start, in

1862-63 a half-mile railroad pier was built out over the shallow bay floor to water navigable enough for passenger transportation and small-scale local shipping. The local railroad connected West Oakland to the Broadway area and the early settlement of San Antonio in East Oakland. When the transcontinental railroad arrived in 1869, making West Oakland its land terminus, the wharf was extended out 2 miles to accommodate large ferries continuing on to San Francisco. Beginning in 1874, dredging of the Oakland estuary became a continuing project of the Army Corps of Engineers. With dredging of the harbor came use of the dredged material to fill its shores, progressively changing West Oakland's topography.

From this geographic background follows most of what exists on the land in West Oakland today. On a modern land use map industrial areas mark almost exactly the outline of the old West Oakland marsh, while residential areas spread west and north from downtown and from the West Oakland rail yards on the historic dry land. Industrial development in the area is more or less the inverse of residential: a few pre-1906 plants directly along the water or the tracks, more numerous and more dispersed plants built in the 1910s and 20s, and the remaining historic marsh area built out in and after the 1940s. It is notable that most of West Oakland, both residential and industrial, is first-generation development.

The Railroad Era: Prescott & South Prescott

Oakland fought hard and successfully to become the western terminus of the transcontinental railroad. The local railroad in 1863 made West Oakland a viable commuter residence district; the transcontinental railroad in 1869 gave it a powerful economic base. By the early 1870s enormous Central Pacific yards were located at Oakland Point, west of Peralta and south of the 1st Street tracks (the 1874 Car Paint Shop still survives from this complex). Gradually expanding over the marsh, the yards were headquarters for most of the railroad's Northern California maintenance, construction, and shipbuilding operations. In the Prescott neighborhoods the railroad employed as many as half the working residents, in a wide range of jobs from car cleaner to engineer to paymaster. Residential development to accommodate these workers in the neighborhoods near the yards was so rapid and dense that the area was solidly built up by the end of the 1870s. Memoirs of West Oakland, such as one in the October 1950 *West of Market Boys' Journal*, regularly claim that "Everyone at the Point, be he laborer, mechanic, business or professional man were all neighbors. No class lines were drawn. No poverty, no bread lines, and few wealthy people. Wages were not large, hours of work rather long, but everyone was satisfied and happy."

The houses at Oakland Point (today's Prescott and South Prescott) are consistent with this characterization of economic diversity, smaller and larger versions of fairly standard Italianate, Stick, and Queen Anne designs, on uniform sized lots, no shacks and no mansions. The Point's biggest developer, John Ziegenbein, active from the early 1870s to 1889 building almost 300 houses, was hailed as a benefactor of working people because he sold his houses on the installment plan and built in a variety of sizes and prices. Oakland Point was an economically mixed neighborhood; owners of local industries such as Henry Dalton of the foundry at 10th and Cedar, Ira Martin Wentworth of the boot and shoe factory near the 16th Street station, and John Ziegenbein himself lived in the neighborhood side by side with railroad workers and local artisans and entrepreneurs and employees of all levels. South Prescott, "below" the 7th Street tracks, was economically somewhat less mixed, a neighborhood of very modest but nevertheless largely owner-occupied or neighbor-owned cottages. Both these neighborhoods survive remarkably intact and are considered potential historic districts.

West Oakland was also an ethnically mixed neighborhood from the beginning. The railroad yards and local parish church at the Point began with a reputation as an Irish enclave, but there were strong Scandinavian, German, and African-American presences from the beginning. From around the turn of the century large numbers of Italian, Portuguese, and Eastern European residents appeared in the neighborhood, many of them recent immigrants or San Francisco earthquake refugees, at first living together in groups of lodgers while working as laborers. By the late 1910s and 1920s many of these new immigrants had become property owners in the district, and increasingly had occupations like factory worker, driver, and a whole range of food-related jobs, reflecting the increasing amount and diversity of industry in West Oakland and in Oakland as a whole.

Oakland Point was connected with central Oakland by the local rail line along 7th Street, with stations at Wood, Center, Adeline, and Market Streets. The entire length of west 7th Street became a major commercial, lodging, and entertainment center which survives today only in fragments (the Arcadia Hotel, the Lincoln Theater, the Brotherhood of Sleeping Car Headquarters, Esther's Orbit Room). Peralta, 8th, and 14th Streets also became significant transit streets with commercial nodes. The area around 14th, Peralta, and Center exhibits this history with a former carbarn, the former Peralta Theater, and the flatiron Center Junction Cash Grocery. Corner stores, some still operating, are also scattered through the Prescott neighborhoods.

Along the Northern Railway tracks on the western shore (now the east edge of the Army Base), a narrow industrial strip developed from the earliest years: salt water baths at the end of 7th Street, the 1880s Dalton Foundry and Standard Oil's 1889 warehouse at 9th and Cedar, Lew Hing's Pacific Coast Cannery north of 11th and Pine from 1905, the 1884 Wentworth Boot and Shoe Co. and California Door Co. on the blocks immediately south of the railroad station at 16th and Wood Streets. Opposite the station a small commercial district of saloons and restaurants probably served local factory workers as much as railroad people or travelers; when the elaborate new station was built in 1910-13, a few new hotels and stores were added and still exist to convey the area's history.

Garden Suburb: De Fremery/Ralph Bunche/Oak Center

Another very early settler in West Oakland, by 1860 or soon after, was Dutch banker and farmer James DeFremery, whose house still stands at 16th and Adeline Streets (a city landmark in the Oak Center district), backed up against the innermost extension of the marsh. The residential neighborhood surrounding the DeFremery property developed somewhat later and at a more leisurely rate than Oakland Point, and generally belonged more to the economic sphere of downtown and San Francisco. Houses and lots were generally larger, and were more often developed individually as suburban custom homes. This neighborhood is divided between the present Project Area (Ralph Bunche – historically the Barstow Tract and Curtis & Williams Tract) and the Oak Center Redevelopment Area to the south.

The DeFremery family sold the house and its immediate surroundings to the city as a park in 1906, but much of the marshland to the west remained in their hands until the 1940s when it was sold for industrial development. Southwest of the DeFremerys, on the blocks around 14th and Cypress, Contra Costa Laundry was another early purchaser of open land. It became a major employer of West Oakland residents in the 19th century, an industry somewhat anomalously

bordering what developed as a residential neighborhood. In the 20th century the laundry and its vicinity became the site of the Shredded Wheat, Carnation, and Coca Cola plants.

Northwest Oakland: Watts Tract/Clawson

For many years an undeveloped, mostly marshy area separated the 16th Street station and its neighboring businesses from the next stop north, Watts Station. William Watts settled in the 1850s on 158 acres between 28th and 38th Streets, from Chestnut Street to the bay, where he farmed and operated a tannery. When he arrived he was far outside Oakland on the long-distance country road of San Pablo Avenue. Almost a generation later the railroad came, and in the 1870s he subdivided the land for sale. The area from the Charter Line of 1854 (22nd Street) to the Corporation Line (36th Street and extension) was annexed in 1872, the north end having by that time partly adopted the Emeryville street grid (Harlan, Haven, the streets west of Peralta to today's Ettie Street). Today this northern section west of San Pablo Avenue is known as the Clawson neighborhood, historically the Watts Tract and Peralta Homestead Tract.

The northern Watts Tract area developed fairly early, in a semi-rural way, with many houses from the 1870s and 1880s. It lay at the junction of radiating long distance roads and within easy reach of Emeryville's early ironworks, stockyards, and racetrack which employed many of the residents. Judson Manufacturing, later Judson Steel, founded in 1882, was a major employer. There was also, from the 1880s, a community of Scandinavian seafarers in the west part of the neighborhood around Ettie Street. The Watts Tract neighborhoods grew through residential infill in the 1900s and 1910s and early industrial incursions in the 1920s. To at least the 1890s, this area was somewhat isolated from central Oakland and the rest of West Oakland by the marsh and minimal transit connections, which reinforced its rural character, its development of self-sufficient neighborhood institutions (e.g., the North Oakland Free Reading Room at 3401 Adeline Street), and its relation to the Emeryville economy.

Streetcar Suburbs: Hoover/MacArthur/McClymonds

In the early 1890s, part of a nationwide technological revolution, electric street railways spread rapidly all over Oakland and its suburbs, joining outlying towns into one large city (there were major annexations in 1891, 1897, and 1909) and promoting residential development all along the lines. The 1906 earthquake accelerated development, as many San Francisco refugees decided to stay in Oakland. This history is evident in the concentrations of Queen Anne and Colonial cottages in the Clawson and McClymonds neighborhoods and in the substantial Colonial Revival and Craftsman houses and flats that line Martin Luther King Way (formerly Grove Street), West Street, and their cross streets all the way across North Oakland and into Berkeley, filling in around the scattered Victorian horsecar-era homes. Occasional commercial nodes and apartment buildings mark the transit stops. The Grove Street electric car line in 1889 was the first in Oakland, only a year after the world's first. Clusters of matching houses in these northern neighborhoods reflect the activity of local developers including F.T. Malley, Joseph Simpson, C.M. MacGregor, and the Realty Syndicate. The neighborhood has a distinguished cultural history with early residents including labor leader C.L. Dellums, historian Delilah Beasley, and photographer Anne Brigman.

Later Industrial Development

The northwest marsh began to be developed in the 1920s in part because of advances in building technology, in part because truck transportation made it feasible to locate industry and warehousing away from railroad lines, and in part because of fill resulting from Outer Harbor development. By the mid-1930s some of the prominent industrial landmarks north of 16th and west of Cypress were already in existence - the brick warehouses at 18th and Campbell, Pacific Coast Aggregates and Merco Nordstrom Valve Co. at 24th and Peralta, and the Gantz warehouse at 32nd and Wood - though much of the area was still vacant, grass and mudflats. In 1941 the Army took over the entire Outer Harbor, and filled the area between Maritime Street and the tracks, finally landlocking the West Oakland marsh. The vacant blocks quickly filled with war-related industry (mostly metals and heavy machinery) and temporary housing for defense workers. A postwar building boom completed this northern industrial area's development with another dozen plants, still centered on heavy industrial uses (metals, construction materials, motor freight).

Later Evolution of Residential West Oakland

As early as 1915 Werner Hegemann's city plan for Oakland captioned a map of "dwellings built in Oakland in 1914" with the remark that "West Oakland has become to a considerable degree industrial and few homes of any kind are being erected." The lack of new construction also simply meant that as a residential neighborhood West Oakland was fully built up: a look at Oakland Point or any of the other West Oakland residential neighborhoods shows that there was virtually no room for new construction of houses. But the reputation of the neighborhood was changing. The construction of the Shredded Wheat plant at 14th and Union in 1915 was said to mark the end of today's Oak Center-Ralph Bunche as a desirable residence district, and those who could afford it and found the changes in the old neighborhoods objectionable were beginning to move to the new tracts of bungalows and larger houses which developed in the lower hills in the building boom that followed the 1906 earthquake. West Oakland went on to another notable role as "the Ellis Island of the East Bay" and "a place to start from" that is only now beginning to be appreciated by historians.

When the city was zoned for the first time in the early 1930s, West Oakland - everything west of Market except a small residential core south and east of DeFremery Park that is today's Oak Center -looked like a suitable site for industry to the city's planners. Not much industry ever actually replaced houses except on the fringes, but maintenance, morale, and property values suffered. In 1936-38, city and WPA studies were undertaken toward siting a federal low-rent housing project in Oakland. Two West Oakland sites - Peralta Villa just east of Cypress, and Campbell Village in the heart of Oakland Point - were selected for redevelopment, over the protests of citizens who insisted that they had a healthy neighborhood of sound, owner-occupied houses, strong neighborhood spirit, and a large African-American community whom the authorities were suspected of targeting for removal. By the time the projects were completed the U.S. was in World War II and both sites were converted to defense worker housing. The Moore and Bethlehem shipyards along the estuary, which had kept alive since World War I by manufacturing structural steel, mobilized to far beyond their 1914-18 size. To staff these industries, labor recruiters brought large numbers of both white and black workers from the South. Oakland's African-American population more than quintupled during the war years, and many of the newcomers settled in the established community in West Oakland.

In the mid-1950s industrially zoned, largely minority West Oakland was cut in half by a major public works project, the Cypress Freeway. In the following decades, several more housing projects were built in West Oakland – the Acorn and neighboring projects south of Oak Center, Westwood Gardens in Prescott, Chestnut Court in McClymonds. Between 1969 and 1972 the new main Post Office and West Oakland BART station destroyed the 7th Street commercial strip and the entire Gibbons Tract west of South Prescott. In 1989 the Loma Prieta earthquake damaged many of the area's historic buildings, brought down the Cypress Freeway, and prompted a new look at West Oakland. Current issues confronting the neighborhoods include inflated housing prices, clashes between residential and industrial uses, fear of displacement, unsympathetic building alterations, deferred maintenance, and the perceived difficulty and expense of rehabilitating old buildings. Redevelopment's financial and organizational powers have potential to address these problems, affecting historic resources either adversely or beneficially.

11.2.2 Archaeological Resources

A record search of the Project Area (File No.02-367) was conducted on November 25, 2002 by the staff at the Northwest Information Center in Rohnert Park, California. Records on all known archaeological sites and previous cultural resource surveys within a ¼-mile radius of the Project Area boundary were gathered. Based on this research, two archaeological resource sites were identified within the vicinity of the Project Area. The Emeryville Shell Mound (California State Historical Landmark No. 335) is within ½ mile north of the Project Area. Pre-historic site CA-ALA-17 is reported in the vicinity of the 7th Street/Adeline area, but its exact location is unknown (Oakland Army Base Redevelopment Plan DEIR, 2002).

No paleontological resources have been recorded in the Project Area (OSCAR Technical Report Volume 1, 1993).

11.2.3 Historic Resources

West Oakland includes Oakland's oldest and most historic neighborhoods, and as such was intensively studied by the Planning Department's Cultural Heritage Survey for five years, from 1987 to 1992, with partial funding from the State Office of Historic Preservation. Two other project-related surveys were also undertaken in West Oakland by the Cultural Heritage Survey, for the Cypress Freeway replacement and for the City's Unreinforced Masonry program. The discussion in this chapter is based on these surveys.

Each of the 4,000-plus buildings within the Project Area was researched, evaluated, and documented in research files that include photographs, construction date, survey rating, and background information on early builders, owners, and occupants. Several volumes of State Historic Resources Inventory forms were prepared and filed with the State Office of Historic Preservation for the most significant buildings and districts. About 1,500 properties were documented on State Historic Resources Inventory forms, either individually or in districts. A small section of the Project Area north of the MacArthur Freeway to 40th Street had been surveyed only at the reconnaissance level and was researched and documented for this study.

Area	*Date surveyed*	*# bldgs*
Clawson & South Prescott	1987-88	310
Prescott (Oakland Point, 7th Street, etc.)	1988-89	1083
Northwest Oakland (West Clawson, McClymonds)	1989-90	842
Northwest Oakland II (Hoover, Bunche)	1990-91	1,506
Oak Center Redevelopment Area	1991-92	700
I-880 Historic Property Survey Report	1990-91	573
Unreinforced Masonry Buildings (W. Oak. section)	1991-94	312
MacArthur/40th Street	2002-03	566

Despite the area's significance and thorough documentation, however, relatively little formal designation of properties in the West Oakland Project Area has yet taken place. By contrast, in the adjoining Oak Center neighborhood, an earlier redevelopment area, a number of residents have landmarked their homes over the years, and a neighborhood-initiated local historic district nomination for the whole area has recently been completed. The formally designated properties represent many of the significant themes and property types in the area – residential, commercial, industrial, institutional, ethnic, and railroad.

Three buildings in the Project Area are now City Landmarks, 8 are on the Oakland Preservation Study List, two are on the National Register, and 8 individual properties and a district of 800-plus houses have been formally determined eligible for the National Register (a few other Landmarks and National Register-eligible properties no longer exist). Designations and determinations of eligibility have occurred largely through project review and owner interest. Many more properties are clearly eligible for the highest levels of designation (as indicated by National Register category 3 and Survey ratings A and B), and still more meet the broad definition of "historic" under the Historic Preservation Element of the Oakland General Plan (comparable to National Register categories 4 and 5). These various categories are discussed below and shown on **Figure 1.1.**

Formally Listed Properties (Local Listings; National Register Listings and Determinations of Eligibility)

Local designation programs are described under Section 11.3: Regulatory and Policy Setting, below. A National Register status "2" indicates a formal determination of eligibility, usually in the course of project review. "NR 2S" indicates that a property was found individually eligible; "NR 2D" indicates eligibility as a district contributor. Unless otherwise indicated, determinations of eligibility resulted from environmental review for the I-880 (Cypress) freeway replacement in 1990. Those properties within the Project Area formally listed include the following.

- 1611-17 5th Street, Davidson Flats, 1887-89, Stick flats (Preservation Study List)
- 1619 5th Street, Davidson Building, 1887-89, Stick store and flat (Preservation Study List)

- 1712 7th Street, Brotherhood of Sleeping Car Porters Headquarters, 1889, Stick commercial, (pending City Landmark nomination)
- 1485-87 8th Street, Liberty Hall/Western Market/Peace Mission, 1877, Italianate commercial (National Register and City Landmark)
- 1522 8th Street, Wedgewood-Michel House, 1878-79, Italianate house in Oakland Point District (Preservation Study List; NR 2D)
- 1561 8th Street, Lincoln-Williams House, 1878-79, Italianate house in Oakland Point District (Preservation Study List; NR 2D)
- 1782 8th Street, Shorey House, 1878-79, Italianate house in Oakland Point District (Preservation Study List; NR 2D)
- 1267 14th Street, Nabisco Shredded Wheat Plant, 1915, Gothic revival industrial (Preservation Study List)
- 830 18th Street, Mahoney-Bassett House, 1867-68, 19th century vernacular cottage (NR 2S from 980 freeway review, 1977)
- 918 18th Street, Willcutt House, 1889, Queen Anne house (City Landmark)
- 848 19th Street, Kelley-Cianciarulo House, 1888-89 (NR 2S from 980 freeway review, 1977)
- 661 27th Street, Union French Bakery, 1911-12, Beaux Arts commercial (Preservation Study List)
- foot of 26th Street, Interurban Y Bridge, 1937-38, railroad utilitarian (NR 2S; part demolished)
- 730 29th Street, Oakland Laundry Co.-Calou Laundry, 1931, Chateau revival (City Landmark)
- 1811-13 Brush Street, Sturrock-Califro Flats, 1887-88 (NR 2S from 980 freeway review, 1977)
- 1600-14 Campbell Street, Oakland Mazda Lamp Works, 1916, Arts & Crafts factory (Preservation Study List)
- 1909 Market Street, St. Andrew's Catholic/St. John's Baptist Church, 1908-08, Mission Revival church (Preservation Study List)
- 2401 Peralta Street, Merco Nordstrom Valve Co., 1926-26, decorative brick factory (NR 2S)
- 714 Pine Street (moved to temporary site), Jackson-Netherland House, 1867-68, 19th century vernacular cottage (Preservation Study List)
- 3501 San Pablo Avenue, California Hotel, 1929-30, Beaux Arts hotel (National Register)

Figure 11-1

Figure 11-1 Back

- 1815 Shorey Street (moved to 1666 11th St), 1889 Queen Anne cottage (Preservation Study List)
- 935 Union Street, Peralta Villa Housing Project, 1938-42, Moderne apartment complex (NR 2S; totally remodeled since)
- 251 Wood Street, Central Pacific Car Paint Shop, 1874ff, 19th century railroad industrial (Preservation Study List, NR 2D)
- Oakland Point Historic District, the Prescott residential neighborhood, 835 buildings/964 parcels, bounded approximately by 7th, 14th, and Pine Streets and Mandela Parkway (NR 2S; individual contributors NR 2D)

Other Properties Appearing Eligible for the National Register of Historic Places

The following additional properties appear eligible for the National Register of Historic Places, as evaluated by the Oakland Cultural Heritage Survey and recorded with the State Office of Historic Preservation.

- 1109 32nd Street, Summers (James) House, 1899
- 703-05 34th Street, Rouse (Warren)-Beasley (Delilah) House, 1893
- 1804-06 Adeline Street, Miller (John Winthrop) House, 1872
- 3401-07 Adeline Street, Boman Building-North Oakland Free Reading Room, 1891
- 3320 Magnolia Street, Oakland Fire Dept. Engine Co. No. 22, 1922
- 2515-21 San Pablo Avenue, Willowbrook Creamery, 1930
- 2624 West Street, St. Augustine's Mission-St. Andrew's Baptist Church, 1920
- Oak Center API (part): 19 properties on the 900 block of 18th Street and 1800-1900 blocks of Filbert and Myrtle, part of an Area of Primary Importance that is mostly in the Oak Center Redevelopment Area
- South Prescott District, historically Bay View Homestead Tract: This district was not found eligible for the National Register in the determinations resulting from the Cypress freeway review in 1990 because of perceived lack of integrity, and was recorded as National Register category 4 ("might become eligible if restored or reevaluated"). The Survey staff believes that in light of increasing awareness of the significance of workers' housing, ethnic history, and the evolution of vernacular buildings, South Prescott might well be reevaluated as eligible.

Local Register of Historical Resources

Oakland's Historic Preservation Element defines a "Local Register of Historical Resources" for environmental review purposes that is meant to capture the most significant properties regardless of preliminary or current designation. It was created by amendment of the Historic Preservation

Element in 1998 to address the problem highlighted by the Montgomery Ward case, that properties identified as significant by the Survey might nevertheless be without protection in environmental review unless they happened to have been designated. The Local Register includes all the previously discussed lists of locally designated historic properties, properties listed on or determined eligible for the National or California Register, as well as properties rated A or B by the Survey or in Areas of Primary Importance. (The properties recorded as appearing eligible for the National Register all have A or B Survey ratings.) About 2.6% of properties citywide and about 5% in West Oakland are on the Local Register.

The Local Register is designed to be somewhat more inclusive than the National Register, acknowledging the greater importance the Preservation Element and the Survey criteria give to neighborhood context. Thus certain properties in addition to those above are on the Local Register by virtue of "B" ratings from the Survey, set slightly above their neighbors by an unusual design or material, a prominent architect, an interesting historical association, or prominence within the neighborhood setting. They might in fact qualify for the National Register, but additional information or interpretation might be needed. It is important to note that many of the Survey's "C" rated properties also approach this level of significance and could probably be successfully nominated for Landmark or National Register status by a committed applicant, and that the Survey ratings are fairly conservative and are open to further information. Special attention is also appropriate for altered properties with "A" or "B" contingency ratings, although they are not within the definition of the Local Register. (See "Potential Designated Historic Properties," below.) Local Register properties with "B" ratings, not listed in the categories above, are:

- 1453 5th Street, O'Brien House and Stable, 1875-76
- 950 30th Street, Electrical Products Corp. Neon Factory, 1924-25
- 1136 34th Street, United Brethren Church, 1907
- 2938 Adeline Street, Flack-Liane House, 1905-06
- 1734 Campbell Street, Herrick Iron Works Office, 1936-37
- 3241 Chestnut Street, Joseph House, 1904-05
- 1936 Market Street, Worthington-Velez-Bercovich House, 1900
- 2110 Market Street, Bayles Cottage, 1907
- 2438 Myrtle Street, Lundberg-Dahl House, 1888-89
- 2632 Myrtle Street, Cruz-Wells House, 1896-97
- 1905 West Street, Selby Flats, 1905

Potential Designated Historic Properties

The Historic Preservation Element of the Oakland General Plan defines a broad category of "Potential Designated Historic Properties" – "PDHPs" for short – that are deemed to have enough historical or architectural interest to deserve some degree of recognition and protection.

PDHPs include any property that has at least a contingency Survey rating of "C" ("secondary importance or superior example") or contributes or potentially contributes to a primary or secondary district. They are meant to be "numerous enough to significantly influence the city's character." Properties with contingency ratings are classified as PDHPs to highlight their value as restoration opportunities. District contributors and potential contributors are classified as PDHPs to promote preservation of Oakland's distinctive neighborhoods.

In the West Oakland Project Area, about 2,890 out of a total of about 4,313 rated buildings qualify as PDHPs, including about 800 that are in the categories above that make up the Local Register. The proportion of PDHPs is much higher in West Oakland (67%) than in the city as a whole (an average of 20% to 25%). However, most West Oakland PDHPs are single family houses on small lots, so the percentage of land area occupied by PDHPs is far less than their percentage of individual buildings. West Oakland's Local Register properties and PDHPs are shown on **Figure 11.2.**

Areas of Secondary Importance

In addition to the three districts discussed above – Oakland Point, Oak Center, South Prescott – about 24 potential districts totalling almost 2,000 buildings in the Project Area have been identified as Areas of Secondary Importance by the Oakland Cultural Heritage Survey, as shown on **Figure 11.3**. These are areas and building groups with a coherent and intact period character that distinguishes them as districts. They do not appear obviously eligible for the National Register because they are not clearly "first, last, best, or only" but they would be eligible for local designation such as the new S-20 zone, and might in some cases qualify for National Register listing with a persuasive application. Many Potential Designated Historic Properties (PDHPs) in West Oakland and elsewhere have that status because of their role as contributors or potential contributors to districts, reflecting the importance of distinctive neighborhoods in Oakland's overall character.

Name	*# prop.s*	*Type*	*Subarea*
1700 Block 14th Street	9	Residential	Prescott
19th & Adeline house group	3	Residential	Ralph Bunche
22nd Street house group	5	Residential	Ralph Bunche
36th Street Victorian house group	6	Residential	Hoover/MacArthur
37th & West Brick group	7	Resid/Comm	Hoover/MacArthur
40th & West Streets	29	Residential	Hoover/MacArthur
Apgar Street flats group	4	Residential	Hoover/MacArthur
Barstow Tract Area	162	Residential	Ralph Bunche
Clawson Neighborhood	162	Residential	Clawson

Curtis & Williams Tract	212	Residential	Ralph Bunche
Haven-Harlan-34th Street	26	Residential	Clawson
Herbert Hoover Neighborhood	657	Residential	Hoover
McClymonds Neighborhood	186	Residential	McClymonds
Mead, Market, Milton Streets	137	Residential	McClymonds
Minerva Todd Sweeny Resubdivision	66	Residential	Clawson
Peralta & 17th Streets	6	Residential	Prescott
West Clawson	154	Residential	Clawson
West Oakland Marsh (16th/Campbell)	28	Residential	Prescott
7th Street Commercial	13	Commercial	Prescott
16th Street SP Station Commercial	3	Commercial	Prescott
San Pablo Avenue Commercial	40	Commercial	Hoover/McC.
18th & Campbell Brick Warehouse	6	Industrial	Prescott
Pacific Coast Cannery (12th/Pine)	3	Industrial	Prescott
Peralta & 26th Street Industrial	7	Industrial	Clawson/McC.

Most residential districts, whether significant for history or architecture or both, are fairly unified in age and type and style. In West Oakland they are characterized by 1 and 2-story wooden houses dating mostly from the 1860s to the 1910s, with consistent massing, siting, rooflines, materials, ornamentation, etc. Often there is one predominant or character defining type and a mixture of others - the simple boxy one-story 1870s cottages that distinguish South Prescott, the two-story hip-roofed bay-windowed Italianates built by John Ziegenbein in the east part of Oakland Point, the few but distinctive 1-1/2 story minimally Gothic 1860s houses at the Pine Street end of Oakland Point. In the Prescott districts half the houses date from the 1870s; in Clawson 1870s settlement and 1900s infill are in a sort of balance; in McClymonds and Bunche homes of the 1890s and 1900s predominate; and in the streetcar suburbs of Hoover-Foster-MacArthur Colonial houses and flats of the 1900s-1910s establish the neighborhood character. These early tracts were not embellished with the gates, parks, and street improvements created by later suburban developers; the houses themselves establish the character of each district.

Figure 11-2

Figure 11-2 Back

Figure 11-3

Figure 11-3 Back

District boundaries are established partly by historic tract boundaries and historic natural or manmade features that shaped the district's development (the shoreline and marsh, railroad tracks and yards, streetcar lines) and partly by later intrusion or erosion - freeways, housing projects, a certain amount of demolition by neglect and industrial expansion, and recent multi-unit residential construction especially in the northern Watts Tract area and along West Grand Avenue and other major thoroughfares. In or bordering a residential district there is typically a neighborhood school, often on the site of a historic school. The school often gives the neighborhood its popular name - McClymonds, Prescott, Clawson, Hoover, and Bunche.

11.3 Regulatory and Policy Setting

11.3.1 Federal Regulations

National Register of Historic Places and the National Historic Preservation Act

The National Historic Preservation Act of 1966 as amended (NHPA, 16 USC 470 et seq.) establishes a wide range of federal historic preservation programs and standards, including procedures for addressing the effect of federal actions on cultural resources. The NHPA creates the National Register of Historic Places and sets forth the federal government's policy on historic preservation. The National Register is the federal government's official list of historic properties formally recognized as significant. Under the NHPA, historic properties include " . . . any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places." A district, site, building, structure, or object is eligible for listing in the National Register when it meets the following criteria:

> "*The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity, including location, design, setting, materials, workmanship, feeling, and association; and*
>
> *A. that are associated with events that have made a significant contribution to the broad patterns of our history; or*
>
> *B. that are associated with the lives of persons significant in our past; or*
>
> *C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or have yielded, or*
>
> *D. that may be likely to yield, information important in prehistory or history*."

The National Register criteria and National Register eligibility are used as a standard in other programs such as the California Register and many local evaluation and designation systems including Oakland's. Guidance for determining the eligibility of historic resources and nominating them to the National Register is found in publications of the National Park Service, including *National Register Bulletins 15, 16A, 16B*, and the *Secretary of the Interior's Standards*

and Guidelines for Evaluation. Standards for eligibility are in practice fairly restrictive in terms of "significance" and "integrity." Properties may be listed at the national, state, or local level of significance. Listing is normally initiated by application to the State Historical Resources Commission. Determinations of eligibility usually take place as part of federally related project reviews. Properties officially determined eligible have the same protections and the same standing in environmental review as those that are listed. Properties listed on the National Register may qualify for a 20% federal investment tax credit.

Section 106 of the NHPA requires federal agencies to provide for review of any federal actions (including federally-assisted grants or loans and federally licensed projects, as well as actual physical work) that may adversely affect properties listed or eligible for listing on the National Register. Identification of eligible properties is part of the review process. The federal Advisory Council on Historic Preservation and/or the State Historic Preservation Officer typically conducts this review.

Approximately 50 individual properties and three districts in the City of Oakland are listed on the National Register as of 2002, and several hundred properties have been officially determined eligible. As many as several thousand may be eligible, individually or – more commonly – as contributors to districts. In the West Oakland Project Area to date, two individual buildings – Liberty Hall and the California Hotel – are listed on the National Register and half a dozen individual buildings plus the 964-parcel Oakland Point District have been officially determined eligible.

11.3.2 State of California Regulatory/Policy Setting

California Environmental Quality Act (CEQA) & California Register of Historical Resources

CEQA requires lead agencies in California to consider the effects of discretionary actions on historic resources, to examine alternatives, and to adopt feasible alternatives or mitigations that minimize adverse effects. The California Register of Historical Resources was created in 1992 as "an authoritative guide" for identifying the state's historical resources. Historical resources for CEQA are defined as those historical or archaeological resources that are significant under any of the following criteria for listing on the California Register (CEQA Section 15064.5):

> *"(a) is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;*
>
> *(b) Is associated with lives of persons important in our past;*
>
> *(c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or*
>
> *(d) Has yielded, or may be likely to yield, information important in prehistory or history*."

The California Register automatically includes properties on or determined eligible for the National Register and State Historic Landmarks #770 and up. Resources can be added to the California Register by nomination to the State Historical Resources Commission.

In addition, the definition of "historical resource" for CEQA includes resources formally determined eligible for the California Register, resources on local registers, and any other resources determined by the lead agency to be significant. Surveys can be nominated as a whole, placing all the resources found to be "significant" on the California Register.

11.3.3 City of Oakland Regulatory/Policy Setting

Local Designations

Oakland has had a Landmarks Board and designation programs for landmarks and districts since 1973. The Oakland Planning Code provides for three types of historic designation – Landmarks, S-7 Preservation Combining Zone (historic district), and Preservation Study List – and establishes a Landmarks Preservation Advisory Board to oversee these properties. A new historic district designation, the S-20 Historic Preservation District Combining Zone, designed for large residential districts, is in process of adoption, with final action by the City Council expected in 2003.

Oakland Landmarks

Properties designated as Oakland landmarks are those having "special character or special historical, cultural, educational, architectural, aesthetic or environmental interest or value" (Oakland Planning Code Section 17.07.030P). This definition is interpreted in the Landmark Preservation Advisory Board's "Guidelines for Determination of Landmark Eligibility," a point system based on that used by the Cultural Heritage Survey. Designation is by a three-stage application process requiring public hearings and approval by the Landmarks Board, Planning Commission, and City Council. There are now about 130 designated landmarks, three of them in the West Oakland Redevelopment Project Area. Landmarks are protected by Landmarks Board review of exterior alterations and up to 240 days' delay of demolition. Design review fees are waived. The Preservation Element proposes dividing Landmarks into three classes, each with a different level of regulations and incentives proportionate to its significance, but currently all Oakland Landmarks are subject to a single set of regulations.

S-7 Preservation Combining Zone

The S-7 Preservation Combining zone is the City's existing historic preservation zoning district. Areas eligible for S-7 designation are those having "special importance due to historical association, basic architectural merit, or the embodiment of a style or special type of construction, or other special character, interest or value" (Oakland Planning Code Chapter 17.84). Demolition and design review regulations are similar to those for landmarks. There are now six small S-7 districts, in the Central District, Adams Point, and San Antonio.

A new preservation district zone, the S-20 Historic Preservation District Combining Zone, is in process of adoption for large residential districts. The S-20 will offer a more streamlined design review process, which should make neighborhood designations more feasible than they have been to date. The Preservation Element proposes creation of Class 1 and Class 2 Preservation Districts, corresponding to the Survey's Areas of Primary Importance (National Register quality) and Areas of Secondary Importance (of local interest), with regulations proportioned to their significance.

Preservation Study List and Heritage Properties

The Preservation Study List is defined as "a list of facilities under serious study for possible landmark designation or for other appropriate preservation action" (Oakland Planning Code Section 17.102.060). The Landmarks Board, the Planning Commission, or the Planning Director can add properties to the list. There are about 550 properties on the Study List as of 2002. Most listings date from the Board's early years, up to 1986. The Local Register of Historic Resources, created in 1998, now fulfills much of the function of the Study List by flagging significant properties whether or not they have been designated, although it does not provide the same explicit protection. For new designations, the Study List is being superseded by Heritage Property status. Heritage Property is a lesser designation created in Policy 2.5 of the Preservation Element, available to properties with an actual or contingency Survey rating of "A", "B" or "C" from an intensive survey, or "A" or "B" from a reconnaissance survey, or which contribute to any area meeting the Preservation District eligibility guidelines. The Planning Director can postpone demolition of Study List or Heritage Properties for up to 60 days, during which time landmark or other preservation district designations may occur or other means to preserve the property may be investigated.

Historic Preservation Element of the Oakland General Plan

The City of Oakland General Plan includes a Historic Preservation Element (adopted 1994, amended 1998), which sets forth an extensive framework of goals, objectives, policies, and actions for using "historic preservation to foster economic vitality and quality of life in Oakland." The chapters of the Element address identification, designation, preservation in ongoing city activities, and education and information. An important feature of the Element is that it recognizes a wide range of historic values – not only the National Register and landmark quality gems but also the secondary-level buildings that establish neighborhood character and the altered buildings that present restoration opportunities.

Local Register of Historical Resources

The Preservation Element was amended in 1998 to define a Local Register of Historical Resources (Local Register) for purposes of environmental review under CEQA. The following properties constitute the City of Oakland's Local Register of Historical Resources (Policy 3.8):

- all *Designated Historic Properties:* currently Oakland Landmarks, S-7 Preservation Combining Zone properties, Preservation Study List properties; future designation categories would include Heritage Properties and the S-20 Zone; and
- those *Potential Designated Historic Properties* (PDHPs; see below) that have an existing rating of "A" or "B" under the Oakland Cultural Heritage Survey (OCHS) system (see below) or contribute or potentially contribute to an Area of Primary Importance.

Local Register properties are generally those that would clearly be eligible for Landmark, National Register, and California Register status, with the possibility for other properties to be elevated to Local Register status by Heritage Property or other designation. This is the minimum set of historic properties that must be considered during environmental review. HPE Policy 3.8 also defines significant adverse effect and gives examples of mitigations.

Potential Designated Historic Properties (PDHPs)

The Preservation Element establishes a category of Potential Designated Historic Properties ("PDHPs") that is central to many of its policies and actions. The Element establishes that any property that has at least a contingency Survey rating of "C" (see below) or contributes or potentially contributes to a primary or secondary district "warrants consideration for possible preservation." If they are not already designated, all properties meeting these minimum significance thresholds are called Potential Designated Historic Properties (PDHPs). PDHPs with at least a contingency "C" from the Intensive Survey or an "A" or "B" from the Reconnaissance (preliminary) Survey are automatically eligible for Heritage Property designation. Since all of West Oakland has been documented by the Intensive Survey, all PDHPs in West Oakland could potentially be designated as Heritage Properties.

PDHPs are a large group - a fifth to a quarter of the buildings in Oakland and two-thirds in West Oakland. They are meant to be "numerous enough to significantly influence the city's character." Properties with contingency ratings are classified as PDHPs to highlight their value as restoration opportunities. District contributors and potential contributors are classified as PDHPs to promote preservation of Oakland's distinctive neighborhoods. While most PDHPs do not appear obviously eligible for the National or California Register and therefore (in the absence of Heritage Property designation or some other formal action) do not meet the CEQA definition of "historic resources," they are recognized and protected under the Historic Preservation Element of the General Plan for their contribution to the Oakland environment. Policies protecting PDHPs in design review, code compliance, and similar City processes are set out in the Element chapter on "Preservation and Ongoing City Activities."

Oakland Cultural Heritage Survey

The Oakland City Planning Department has maintained the Oakland Cultural Heritage Survey (Survey) since 1979. The Survey provides an inventory of historic resources throughout the city, which serves as a basis for many of the policies in the Preservation Element. Every property in Oakland has at least a preliminary ("windshield") rating and estimated date from the Survey. All properties in the Central District, West Oakland, Adams Point, parts of San Antonio and Fruitvale, and on the 1990 Unreinforced Masonry list have been comprehensively researched, evaluated, and documented by the Survey. Survey ratings describe both the individual building and its neighborhood context.

For *individual properties* the Survey uses a letter rating system based on criteria including exterior design quality, construction, style or type, architect or builder, association with persons or organizations, the age of the building, and the building's condition and integrity.

A Highest Importance: of exceptional historical or architectural value, outstanding example, clearly eligible for the National Register: about 159 citywide, 4 in the West Oakland Project Area.

B. Major Importance: major historical or architectural value, fine example, probably eligible for the National Register: about 624 citywide, 69 in West Oakland Project Area.

C. Secondary Importance: superior or visually important example, very early, or otherwise noteworthy; these properties "warrant limited recognition" but do not appear individually eligible for the National Register: about 10,050 citywide, 1221 in the Project Area.

D. Minor Importance: typical or representative example of a type, style, convention, or historical pattern: 25,000-plus citywide, 1506 in the Project area. Many D and lower rated properties are PDHPs, either because they have higher contingency ratings or because they contribute or potentially contribute to districts.

E. Of No Particular Interest: not representative of any important pattern and visually undistinguished.

* or F. Not Rated: recent or totally modernized. Some of these also have higher contingency ratings.

Contingency ratings: Dual ratings indicate potential higher ratings under some potential circumstance – if restored, when older, or with additional information. The most common contingency rating in older neighborhoods is "Dc," superior buildings with integrity somewhat diminished by reversible alterations. There are about 950 "Dc"s and 370 "Ec"s in the Project Area, indicating extensive restoration opportunities.

Each property is also given a *Multiple Property Rating* (1, 2, or 3) based on the nature of the area in which the property is located. Properties in Areas of Primary Importance (API; areas that appear eligible for the National Register) are indicated by "1"; those in Areas of Secondary Importance (ASI) are indicated by "2"; and those not in an identified district have "3" in their ratings. A plus (+), minus (-), or asterisk (*) indicates respectively whether the property contributes, does not contribute, or potentially contributes to the API or ASI.

API: Areas of Primary Importance are historically or visually cohesive areas or property groups that appear eligible for the National Register of Historic Places, either as a district or as a historically-related complex. They typically contain a high proportion of individual properties with ratings of "C" or higher. At least two-thirds of the properties must be contributors to the API, reflecting the API's principal historical or architectural themes, and must not have undergone major alterations.

ASI: Areas of Secondary Importance are similar to APIs but ASIs do not appear eligible for the National Register, e.g. because they are less intact or less unique. Remodeled buildings that are potential contributors to the ASI are counted for purposes of the two-thirds threshold along with contributors.

The Survey provides information for National Register and local landmark and district nominations and for Section 106, CEQA, and local project reviews, as well as to interested citizens. Detailed intensive survey documentation has been completed for large portions of the City, and a preliminary reconnaissance or "windshield" survey covering the entire City was completed in two phases in 1985-86 and 1996-97. Inclusion of a property in the Survey has no direct regulatory effect but the ratings provide guidance to city staff and property owners in design review, code compliance, and similar ongoing city activities.

11.4 Impacts and Mitigation Measures

Significance Criteria

Under CEQA Guidelines Section 15064.5, a project has a significant environmental impact if it will:

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of formal cemeteries; or
- Cause a substantial adverse change in the significance of a historical resource including unique archaeological resources as defined by CEQA Guidelines Section 15064.5. A substantial adverse change includes physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired.
- Section 15064.5 of the CEQA Guidelines further defines that the significance of an historical resource is materially impaired when a project demolishes or materially alters, in a adverse manner, those physical characteristics of the resource that:
    - convey its historical significance and that justify its inclusion on, or eligibility for inclusion on, the California Register of Historical Resources as determined by the State Historical Resources Commission;
    - account for its inclusion on a Local Register of historical resources or its identification in an historical resources survey form (DPR Form 523); or
    - convey its historical significance and that justify its inclusion on, or eligibility for inclusion on, the California Register of Historical Resources, as determined by the lead agency.

11.4.1: Impacts to Cultural Resources

Potential Impact 11.4.1: During construction that could occur as a result of implementing the Redevelopment Plan, cultural resources may be uncovered and damaged if not properly recovered or preserved. This is a *potentially significant impact*.

Discussion

Although no specific archaeological resources have been identified within the proposed Project Area, implementation of the Redevelopment Plan could result in the discovery of potential historic or cultural resources during construction-related excavation required to construct public and private projects.

No unique paleontological resources have been identified within the proposed Project Area. In addition, the bedrock in the Project Area is overlain with alluvial, sand, and marine and marsh deposits. Redevelopment may disturb these deposits but is unlikely to disturb the bedrock. However, if any broad, deep cuts in the bedrock are anticipated with a specific development project that occurs as a result of the Redevelopment Plan, fossils may be encountered.

General Plan Policies

Existing Historic Preservation Element policies and the following mitigation apply in this situation.

Historic Preservation Policy 4.1: To protect significant archaeological resources, the City will take special measures for discretionary projects involving ground disturbances located in archaeologically sensitive areas.

Policy 4.1 seeks to protect both known and undiscovered archaeological sites by requiring archaeological protection for discretionary ground disturbance activities in archaeologically sensitive areas. These procedures include: mapping, archival studies, determination of the likelihood of disturbing archaeological resources, surface and sub-surface reconnaissance by an archaeologist, and other actions, including further study.

Mitigation Measures

- **Mitigation Measure 11.4.1: Halt Construction/Evaluate Find**. In accordance with CEQA Section 15064.5, should previously unidentified cultural resources be discovered during construction, the Project sponsor is required to cease work in the immediate area and an immediate evaluation of the find should be conducted by a qualified archaeologist or qualified paleontologist. If the find is determined to be an historic or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation to protect, preserve, remove or restore the artifacts uncovered should be available. Work may continue on part of the building site while historic or unique archaeological resource mitigation takes place.

Resulting Level of Significance

This measure is commonly required in public construction contracts and should be required as a condition of approval for private development projects. Historic Preservation Policy 4.1 and Mitigation Measure 11.1.1 would reduce the potential impact to a *less than significant* level.

11.4.2 Possible Discovery of Human Remains

Potential Impact 11.4.2: During construction that could occur during the implementation of the Redevelopment Plan, it is possible that archaeological human remains may be uncovered. Disturbance of such human remains would be a *potentially significant impact*.

Discussion

Implementation of the Redevelopment Plan is not likely to result in the disturbance of any known human remains. However, it is possible that during construction-related excavation activity associated with the implementation of the Redevelopment Plan, human remains, most likely from the pre-American settlement era, could be uncovered.

Mitigation Measures

- **Mitigation Measure 11.4.2: Halt Construction/Evaluate Remains**. In the event that any human remains are uncovered within the Project Area during future construction activity associated with the implementation of the Project, there should be no further excavation or disturbance of the site or any nearby area until after the Alameda County Coroner has been informed and has determined that no investigation of the cause of death is required or such investigation has occurred and appropriate actions have been taken, and (if the remains are determined to be of Native American origin) the descendants from the deceased Native American(s) have made a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.

Resulting Level of Significance

This measure would reduce the potential impact to a *less than significant* level.

11.4.3: Potential Removal or Alteration of Historic Resources

Potential Impact 11.4.3: The Redevelopment Plan, as an implementation tool of the General Plan, does not at this programmatic level of assessment propose any specific removal or alteration of historic structures. However, future redevelopment activities may accelerate pressures to alter or replace existing buildings within the Project Area, including historic properties. Removal and/or substantial adverse alteration of historic properties is deemed a *potentially significant environmental effect*.

Discussion

Potential redevelopment programs are set forth in Chapter 3: Project Description, and summarized as Project Objectives. The redevelopment plan's projects, programs and other implementation activities are anticipated to assist or facilitate the addition of up to an additional

1,838 households, 4,209 residents, and 3,184 jobs. This new growth and development, as may be assisted by redevelopment Plan implementation, could result in potential effects on historic properties as described below.

Affordable Housing and Housing Improvements. The Project proposes to increase housing supply through construction on vacant sites or replacement of condemned, unsafe properties or properties beyond cost-effective repair. Much damage to PDHPs has previously occurred by not considering the importance of the architectural and historic heritage of many buildings and neighborhoods within the Project Area. The HPE calls for development of guidelines for construction in potential historic districts, for defining economic hardship, and criteria for evaluating potential historic resources. The Project proposes affordable housing programs that may include assisted subsidies and financing. It is important to implement Preservation Element policies that call for rigorous design and demolition review and high standards for City-assisted projects. The Project also proposes to implement housing improvement programs that may include repairs to existing buildings, support for energy efficiency improvements, and property acquisition and relocation to resolve land use conflicts. Previous repairs and improvements to historic properties have seriously impaired the integrity of historic buildings. Consideration of a building's significant features and use of compatible building materials and repair methods is an important component of future projects within the Project Area.

Public Infrastructure. The Project includes a proposed program of public infrastructure improvements, including street, roadway, and freeway ramp improvements; community/civic facilities, community centers and parks; and neighborhood improvements such as streetscape, under-grounding of utilities, etc. Future public infrastructure and civic work must be carefully designed and reviewed to avoid impacts and assure compatibility with historic resources.

Commercial Programs. Commercial improvement programs proposed as part of the Project include business recruitment and retention involving underutilized and vacant buildings, and facade improvements that provide for the redevelopment of vacant and/or blighted properties. These programs must include special consideration and funding in order to preserve, restore and protect historic buildings. Current City design guidelines for the NCR program, Downtown District, and Small Project Design Review all promote historic preservation in storefront improvements. The Project also proposes employer incentives for rehabilitation, potentially including site preparation and/or land write-down. Traditional cleared-site redevelopment may be appropriate in certain cases where existing buildings are clearly not candidates for reuse. However, reuse options need to be given serious consideration early in the planning process on a project-by-project basis.

General Plan Policies

Policies in the General Plan provide the basis for the preservation, restoration and protection of historic properties and cultural resources.

Each of the potential projects, programs and implementation activities pursuant to the Redevelopment Plan has potential for adverse or beneficial effects on historic properties. Policies and actions in the Historic Preservation Element (HPE) provide guidance toward minimizing adverse effects. Relevant HPE policies and actions are summarized below.

Adherence to these policies can be expected to substantially lessen the potential for adverse effects. Redevelopment also has the potential to assist in implementation of beneficial HPE actions.

As an implementation tool of the Oakland General Plan and all its Elements, the Redevelopment Plan is intended to be fully consistent with General Plan policies. The HPE includes policies intended to reduce the potential risk of redevelopment and other public or private activities on historic structures. These policies are spelled out in 66 action steps, which focus on key strategies including:

- using historic preservation as a means to foster economic vitality and quality of life,
- identifying historic properties,
- providing regulations and incentives for the protection and enhancement of historic properties,
- increasing the number of properties that are protected by regulations and incentives,
- incorporating preservation into ongoing City activities such as permit review and code enforcement, and
- promoting preservation information and education.

Policies and actions in the HPE likely to deserve particular attention in implementation of the Redevelopment Plan include the following:

Objective 1, Identifying Historic Properties

Action 1.1.3, Inventory database, lists, and maps, particularly dissemination of this information through the City's web site

Action 1.1.4, Updating the inventory for changes since the main survey activity in 1987-92

Action 1.2.1, List of PDHPs made more widely available to the public (ideally along with publication of the Survey information that underlies the ratings – neighborhood histories, context statements, individual building histories, etc.)

Policy 1.3, Using Survey information to support designation of Landmarks, Preservation Districts, and Heritage Properties

Objective 2, Preservation Incentives and Regulations for Designated Historic Properties

Action 2.1.1, Amending zoning regulations to implement new regulations and incentives set forth in the Element

Action 2.2.1, Developing guidelines for Preservation District eligibility

Action 2.4.1, Design guidelines for Landmarks and Preservation Districts

Policy 2.6, Preservation Incentives for Designated Historic Properties

Objective 3, Historic Preservation and Ongoing City Activities, "to promote preservation ... as a routine part of City-sponsored or assisted projects, programs, and regulatory activities"

Policy 3.1, The City will make all reasonable efforts to avoid or minimize adverse effects on the Character-Defining Elements of existing or Potential Designated Historic Properties which could result from private or public projects requiring discretionary City actions. Policy 3.1 is a general policy which is expressed more specifically in this Chapter's other policies and their related actions.

Policy 3.2, "To the extent consistent with other Oakland General Plan objectives, the City will ensure that all City-owned or controlled properties warranting preservation will, in fact, be preserved. All City-owned or controlled properties which may be eligible ... will be considered for designation." Related actions set out the steps for designation (3.2.1) and recommend a formal "historic preservation management procedure for City-owned properties" (3.2.2).

Policy 3.3 requires Designated Historic Property status to be obtained for certain eligible properties as a condition of City assistance. This provision is intended "to ensure that historic character is considered at the earliest stage of the planning and development process" and to spread awareness of preservation by increasing the number of designated historic properties. The policy states that "Landmark or Preservation District applications will not be required for projects which are small-scale or do not change exterior appearance."

Policy 3.4, Acquisition for historic preservation where necessary, proposes limited acquisition powers, for extremely important properties in dire situations. Action 3.4.2 directs the City to develop criteria for preservation acquisitions.

Policy 3.5, Historic preservation and discretionary permit approvals, establishes design review findings for alterations and demolitions of PDHPs, and directs that design guidelines be developed.

Policy 3.6 recommends that City-sponsored or assisted projects "be selected and designed to avoid adverse effects ... and to promote preservation and enhancement" of DHPs and PDHPs, and recommends development of project selection criteria, use of the Secretary of the Interior's Standards as one criterion for avoiding adverse effect, and provision of design assistance to help applicants meet preservation and project objectives. This policy extends the protections applied to federally related projects under Section 106 "to non-Federally funded City projects and to City projects that involve existing or Potential Designated Historic Properties that are not on or eligible for the National Register."

Policy 3.7 promotes relocation rather than demolition. When PDHPs are proposed for replacement or removal, this policy directs that "reasonable efforts be made to relocate the properties to an acceptable site" and directs the City to take steps to facilitate relocation.

Policy 3.8 defines the City's Local Register of Historical Resources, impacts, and mitigations for purposes of environmental review under CEQA, as discussed above ("Local Register of Historical Resources"). This defines the minimum universe of historic resources that require consideration in environmental review and declares that complete demolition of a historic resource cannot normally be mitigated to a level of insignificance.

Policy 3.9 promotes consistency of zoning with existing or potential historic districts and recommends including a historic preservation component in areawide and specific plans.

Policy 3.10 addresses disaster response and Policy 3.11 addresses disaster preparation through seismic retrofit and other building safety programs, directing that retrofit and repair be carried out in a manner that minimizes adverse effects on character-defining elements.

Policy 3.12 recommends an extensive program for dealing with substandard and public nuisance properties, including repair rather than demolition, earlier intervention, repair with liens, property acquisition and transfer, financial assistance, and (Policy 3.13) improved security of vacant properties.

Policy 3.14 promotes commercial revitalization programs and Main Street projects with a specific focus on preserving and enhancing designated and potential designated historic commercial properties and districts.

Objective 5, Information and Education, addresses the need to increase awareness and technical knowledge of preservation among City staff and the public, through a menu of actions including plaques and certificates for designated historic properties, dissemination of Survey information, tours and guidebooks, school curricula, and archive management. Actions particularly relevant to the increased construction and rehabilitation anticipated under redevelopment are design assistance and referral, preservation trade fairs, rehabilitation training and apprenticeship programs, and updating, translating, and reprinting Rehab Right and Retrofit Right. Possible adverse effects to historic properties through hasty or low-cost rehab work – or decisions not to rehabilitate – could be prevented by accelerated implementation of the educational programs.

With adherence to the policies and implementation actions included in the HPE, potential impacts to historic resources in the Project Area may be avoided or substantially lessened to a level of *less than significant*.

Recommended Action Items

In order to provide more specific actions within the context of the West Oakland Redevelopment Plan, the following action items are recommended to be added to the Redevelopment Plan's subsequent Implementation Plan(s) to implement HPE provisions within the West Oakland Redevelopment Project Area:

Implementation Programs and Actions in Furtherance of Historic Preservation

1. For any project receiving assistance from the Redevelopment Agency within the West Oakland Redevelopment Project Area, a standard requirement shall be instituted to complete an intensive historic survey of the project site and the surrounding area.

2. As part of the first Implementation Plan for the West Oakland Redevelopment Plan, the Agency shall identify potential sites to relocate historic resources that may be displaced by redevelopment projects or activities.

3. If redevelopment projects within the West Oakland Redevelopment Project Area involve the demolition of multiple historic resources, the Agency will consider acquiring a site for relocation of such structures.

4. As part of the first implementation Plan for the West Oakland Redevelopment Plan, the Agency shall fund a Mills Act study for the Redevelopment Project Area.

5. As part of the first Implementation Plan for the West Oakland Redevelopment Plan, a set of design guidelines shall be developed for the two districts (Oak Center and Oak Point) eligible for the National Register.

6. Revise, update and republish "Rehab Right". As part of this effort, incorporate residential design specifications and details that can be used as a template for cost-effective solutions for common repairs, additions and alterations to existing housing in the West Oakland Redevelopment Project Area.

7. As part of the first two 5-year Implementation Plans for the West Oakland Redevelopment Plan, design and implement a set of historic markers and other interpretive information demarcating the Oak Center District and oak Point District, including monument signs on landmark buildings.

Resulting Level of Significance

With implementation of existing General Plan policies, adverse effects on historic resources throughout the Project Area could be avoided or substantially lessened to levels of *less than significant*. The additional action items described above are not currently required to reduce or avoid an identified significant environmental effect, but could serve to reduce future impacts or provide beneficial environmental consequences for historic resources.

12

CEQA Impact Overview

12.1 Introduction

Sections 15126 through 15130 of the California Environmental Quality Act (CEQA) Guidelines identify the following subjects that must be addressed in an EIR, in addition to an evaluation of project alternatives. These subjects include:

- effects determined to be less than significant;
- significant environmental effects and mitigation measures to avoid or reduce significant impacts;
- significant environmental effects that cannot be avoided;
- cumulative environmental effects;
- significant irreversible environmental changes; and
- the potential to induce growth and associated secondary impacts.

Each of the previous Chapters 4 through 11 of this document have identified certain environmental effects that have been found to be less than significant, significant but mitigable, significant environmental effects that cannot be avoided, and cumulatively significant effects. The remainder of this chapter (Chapter 12) summarizes information from these previous chapters, and from the Initial Study Checklist (see Appendix A), into the categories described above.

12.2 Effects Determined to be Less than Significant

12.2.1 Initial Study Conclusions

In July of 2002 the City of Oakland prepared and submitted for public review a Notice of Preparation (NOP) and Initial Study Checklist (see Appendix A). That Initial Study Checklist identified environmental topics under which implementation of the Redevelopment Plan's projects, programs and other activities could result in environmental impacts. The Initial Study also identified certain types of environmental effects for which implementation of the

Redevelopment Plan would either have no impact, or less than significant impacts due to required compliance with existing policies of the City of Oakland General Plan or through other existing laws, regulations and policies. The Initial Study concluded that implementation of the Redevelopment Plan would either have no impact, or would have a less than significant impact on the following major environmental topics and/or subsets of major topics:

- Aesthetics;
- Agricultural Resources;
- Air Quality issues pertaining to the subset topics of:
  - creating objectionable odors affecting a substantial number of people;
- Biological Resources;
- Geology and Soils;
- Hazards and Hazardous Materials issues pertaining to the subset topics of:
  - safety hazards due air traffic,
  - interference with an adopted emergency response plan, and
  - exposure to wildland fires;
- Hydrology issues pertaining to the subset topics of:
  - flooding, seiche, tsunami or mudflows;
- Land Use and Planning;
- Mineral Resources;
- Noise issues pertaining to the subset topic of:
  - exposure to aircraft noise;
- Population and Housing;
- Public Services;
- Recreation; and
- Utilities and Services.

No information was presented to the City from public agencies or the public in response to the NOP/Initial Study that would contradict these conclusions from the Initial Study. Therefore, the EIR has been focused to analyze only those effects that remain as potentially significant.

12.2.2 DEIR Conclusions

Previous chapters of this Draft EIR have focused on those environmental issues for which the Initial Study concluded that implementation of the Redevelopment Plan may have potentially significant impacts. Further analysis has been conducted in this Draft EIR to more fully address some of the issues that the Initial Study had determined that the Project would have no impact or less than significant impacts. Environmental issues for which the analyses contained in this Draft EIR conclude that Project-specific impacts would be *less than significant* include:

Land Use

Land use issues pertaining to the following subset of topics would be less-than significant:

- potential division of an established community (Section 4.4.1),
- conflicts between adjacent or nearby land uses (Section 4.4.2)
- consistency with land use policy (Section 4.4.3), and
- consistency with habitat or community conservation plans (Section 4.4.4).

Transportation

Traffic and circulation issues pertaining to the following subset of topics would be less-than significant:

- the addition of Project-generated traffic to regional roadways (Section 5.4.1),
- the effects of Project-generated traffic on the Study Area's signalized intersections (Section 5.4.2),
- the effects of Project-generated traffic on the Study Area's unsignalized intersections (Section 5.4.3),
- increased ridership on AC Transit (Section 5.4.4),
- increased ridership on BART (Section 5.4.5),
- Project-specific traffic and circulation safety issues (Section 5.4.6), and
- potential parking shortages (Section 5.4.7).

Air Quality

Air quality issues pertaining to the following subset of topics would be less-than significant:

- consistency with the Clean Air Plan (Section 6.4.1),
- consistency with the Clean Air Plan's transportation control measures (Section 6.4.2),
- effect of Project emissions on regional air quality (Section 6.4.3),
- effect of Project emissions on local air quality (Section 6.4.4), and
- compatibility of planned land uses at the West Oakland Transit Village (Section 6.4.7).

Noise

Noise issues pertaining to the following subset of topics would be less-than significant:

- Project-related increase in traffic noise (Section 7.4.2),
- compatibility of noise environments in mixed-use developments (Section 7.4.4),

Public Infrastructure

Public infrastructure issues pertaining to the following subset of topics would be less-than significant:

- increased demand for water supply (Section 9.4.1),
- increased demand for wastewater treatment and disposal (Section 9.4.3), and
- water quality and increased stormwater discharges - this conclusion is based on compliance with existing laws, regulations and policies (Section 9.4.4).

Public Services

Public services issues pertaining to the following subset of topics would be less-than significant:

- increased demand for parks and recreation (Section 10.4.1),
- increased demand for school facilities (Section 10.4.2),
- increased demand for police service (Section 10.4.3),
- increased demand for fire protection and prevention services (Section 10.4.4), and
- increased demand for solid waste disposal services and facilities (Section 10.4.5).

12.3 Potential Impacts Capable of Being Mitigated to Less than Significant Levels

The following summary indicates those potentially significant Project-specific environmental impacts associated with implementation of the Redevelopment Plan's projects, programs and other activities that are capable of being reduced to levels of less than significant through implementation of recommended mitigation measures.

12.3.1 Air Quality

Emissions Generated by Construction Activities

Construction associated with the Redevelopment Plan's implementation projects, programs and other activities within the Project Area would generate dust (including the respirable fraction known as PM_{10}) and combustion emissions. These emissions would be a *potentially significant effect* of the Project (**Potential Impact 6.4.5**). Implementation of General Plan policy would help

reduce short-term emissions associated with future construction activity pursuant to implementation of the Redevelopment Plan within the Project Area. Additional mitigation measures are recommended to address construction-related air quality impacts that may be associated with implementation of the Redevelopment Plan's projects, programs and other activities within the Project Area. These additional measures would ensure that construction-related dust impacts are minimized to a *less than significant level.*

12.3.2 Noise

Construction Noise Increases

Implementation of the Redevelopment Plan's projects, programs and other activities could generate short-term increases in noise and vibration due to construction. This would be a short-term adverse impact, and would be *potentially significant* (**Potential Impact 7.4.1**). Mitigation measures are recommended for all construction projects that may be proposed pursuant to, or in furtherance of implementation of the Redevelopment Plan's projects, programs and other activities. Implementation of recommended mitigation measures could mitigate noise impacts related to construction activities pursuant to, or in furtherance of implementation of the Redevelopment Plan to a *less than significant* level.

Noise Compatibility of Future Development

Depending on the precise location of new residential uses that may be constructed pursuant to or in furtherance of the Redevelopment Plan, future noise levels within some portions of the Project Area could be incompatible with such residential use. This impact is considered to be *potentially significant* (**Potential Impact 7.4.3**). Compliance with existing General Plan policies would address the issues of noise and land use compatibility, but may not be capable of effectively reducing noise impacts to levels of *less than significant*. Therefore, mitigation measures are recommended. The impacts of noise on future development projects pursuant to the Redevelopment Plan can be mitigated to a *less than significant* level by implementation of these recommended mitigation measures.

12.3.3 Hazardous Materials

Long Term Exposure

Currently, businesses within the Project Area handle hazardous materials as part of their operations. Implementation of the Redevelopment Plan's projects, programs and other activities could result in the introduction of new businesses that handle hazardous materials. These existing and potential new businesses could cause a substantial hazard to the public or the environment as a result of an accidental release of hazardous materials or wastes (**Potential Impact 8.4.1**). Mitigation measures are recommended to be included as part of implementation programs pursuant to the Redevelopment Plan. These measures would potentially provide redevelopment assistance in complying with all local, regional, state and federal regulations to existing and potential new businesses within the Project Area that handle hazardous or acutely hazardous materials. Compliance with these regulations would minimize potential exposure of site personnel and the public to accidental releases of hazardous materials or waste, and would

also protect the area from potential further environmental contamination. The potential would remain that businesses could still have an accidental release of hazardous materials or wastes. However, required compliance with federal, state and local regulations would reduce this risk to generally acceptable thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

Accidental Release of Hazardous Materials or Wastes during Normal Transport Operations

Currently, businesses within the Project Area include those that involve transport of hazardous materials as part of their operations. Implementation of the Redevelopment Plan's projects, programs and other activities could result in the introduction of new businesses that involve transport of hazardous materials. These existing and potential new businesses could cause a substantial hazard to the public or the environment as a result of an accidental release of hazardous materials or wastes during normal transport operations (**Potential Impact 8.4.2**). Mitigation measures are recommended to be included as part of implementation programs pursuant to the Redevelopment Plan. These measures would ensure maximum compliance with truck prohibitions, and potentially provide redevelopment assistance in complying with all local, regional, state and federal regulations to businesses within the Project Area that involve the transport of hazardous materials or waste. Compliance with these regulations would minimize the risk of accidental releases during normal transport operations along approved truck routes. There remains the potential businesses could still have an accidental release of hazardous materials or wastes during transport. However, required compliance with federal, state and local regulations would reduce this risk to generally acceptable thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

Use of Hazardous Materials within ¼ Mile of a School

Currently, all of the schools within the Project Area are located within ¼ mile of a permitted hazardous materials use or an identified environmental case. Most of these schools are also located within ¼ mile of an area designated for "Business Mix" or "Community Commercial" land uses. Implementation of the Redevelopment Plan's projects, programs and other activities could result in the introduction of new businesses that involve hazardous materials within the Business Mix or Community Commercial area near schools (**Potential Impact 8.4.3**). Mitigation measures are recommended to be included as part of implementation programs pursuant to the Redevelopment Plan. These measures would include the establishment of redevelopment priorities, and would potentially provide technical assistance to ensure maximum compliance with regulations, thereby minimize the risk of accidental releases and increase the protection of nearby sensitive receptors from the potential of an accidental release. However, there remains the potential that existing and new businesses could still have an accidental release of hazardous materials or wastes. Required compliance with regulations would reduce this risk to generally acceptable thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

Exposure to Hazardous Materials as a Result of New Land Uses

Implementation of the Redevelopment Plan's projects, programs and other activities could result in the redevelopment of older industrial areas with new land uses. Without measures to ensure adequate cleanup of closed facilities and cleanup of soil and groundwater to appropriate cleanup

levels, future site occupants could be exposed to unacceptable levels of hazardous materials (**Potential Impact 8.4.4**). Mitigation measures are recommended to be included as part of implementation programs pursuant to the Redevelopment Plan. These measures would potentially provide redevelopment assistance in complying with all local, regional, state and federal regulations pertaining to the clean-up of prior permitted facilities to levels appropriate for future land uses, or would ensure that the responsible party commits to an acceptable timeline for cleanup. Required compliance with these regulations would reduce this risk to generally acceptable thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

Exposure to Hazardous Materials in Soil or Groundwater during Construction

Future construction activities pursuant to implementation of the Redevelopment Plan that involve excavation, grading, and/or de-watering could encounter hazardous materials in the soil and groundwater (**Potential Impact 8.4.5).** Mitigation measures are recommended to be included as part of implementation programs pursuant to the Redevelopment Plan. These measures would potentially provide redevelopment assistance in complying with all local, regional, state and federal regulations pertaining to the risk of exposure of workers and the public to hazardous materials during redevelopment-related excavation, grading, and/or de-watering activities. These measures, along with application of cleanup standards, would serve to protect human health and the environment during site activities, thus minimizing impacts associated with exposure to hazardous materials. Required compliance with these regulations would reduce this risk to generally acceptable thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

Exposure to Hazardous Building Materials

Demolition and renovation of existing structures could result in potential exposure of workers or the community to hazardous building materials during construction, without proper abatement procedures, and future building occupants could be exposed if hazardous building materials are left in place (**Potential Impact 8.4.6**). Mitigation measures are recommended to be included as part of implementation programs pursuant to the Redevelopment Plan. These measures would potentially provide redevelopment assistance in complying with all local, regional, state and federal regulations pertaining to reducing the risk of exposure of workers and the public to hazardous building materials during demolition or renovation. Additionally, assistance programs are recommended to further protect human health under existing conditions. Required compliance with federal, state and local regulations would reduce the risk of exposure to hazardous building materials during demolition and renovation to generally acceptable thresholds. Compliance with these thresholds would reduce this effect to a level of *less than significant*.

12.3.4 Public Infrastructure

Water Distribution and Wastewater Collection Infrastructure

Implementation of the Redevelopment Plan's projects, programs and other activities is expected to facilitate or assist in the construction of new residential, commercial and/or industrial

development that may require localized improvements to the water delivery and wastewater collection systems to provide adequate pipeline capacity. These potential localized infrastructure capacity constraints represent a *potentially significant impact (***Potential Impact 9.4.2**). Based on policies and established procedures of the City and EBMUD, some of the costs for localized water and sewer improvements are offset by hook-up or connection fees collected from developers as projects are constructed. However, these fees may not fully offset the full costs of required improvements, and may not fully mitigate site-specific impacts on the capacity of local water and sewer lines. Mitigation measures derived from the LUTE EIR are recommended to address this infrastructure capacity impact. With implementation of City General Plan policies and recommended mitigation measures, site-specific impacts on the capacity of local water and sewer lines can be mitigated to a level of *less than significant*.

12.3.5 Cultural and Historic Resources

Impacts to Cultural Resources

During construction that could occur as a result of implementing the Redevelopment Plan, cultural resources may be uncovered and damaged if not properly recovered or preserved (**Potential Impact 11.4.1**). Mitigation measures that are consistent with state law are recommended to be included in public construction contracts and as a condition of approval for private development projects that would reduce this potential impact to a *less than significant* level.

Possible Discovery of Human Remains

During construction that could occur during the implementation of the Redevelopment Plan, it is possible that archaeological human remains may be uncovered (**Potential Impact 11.4.2**). Mitigation measures that are consistent with state law are recommended that are capable of reducing this potential impact to a *less than significant* level.

Potential Removal or Alteration of Historic Resources

The Redevelopment Plan, as an implementation tool of the General Plan, does not at this programmatic level of assessment propose any specific removal or alteration of historic structures. However, future redevelopment activities may accelerate pressures to alter or replace existing buildings within the Project Area, including historic properties. Removal and/or substantial adverse alteration of historic properties is deemed a potentially significant environmental effect (**Potential Impact 11.4.3**). With adherence to the policies and implementation actions included in the HPE, potential impacts to historic resources in the Project Area may be avoided or substantially lessened to a level of *less than significant*. In order to provide more specific actions within the context of the West Oakland Redevelopment Plan, additional action items are recommended to be added to the Redevelopment Plan's subsequent Implementation Plan(s) to implement HPE provisions within the West Oakland Redevelopment Project Area. These recommended action items would serve to further reduce potential future impacts or provide beneficial environmental consequences for historic resources.

12.4 Significant Unavoidable Impacts

As indicated in Chapter 6: Air Quality of this EIR, one Project-specific significant environmental impact associated with implementation of the Redevelopment Plan cannot be mitigated to a level of *less than significant*. This impact is more fully discussed below.

12.4.1 Air Quality

Compatibility of Project-Related Population Increases

The projected population growth rate within the Project Area is greater than the projected population growth rate citywide. This increase in population could result in a disproportionate increase in the number of residential receptors in proximity to existing toxic air contaminants, pollutants and odor emission sources, and would increase the potential for future land use conflicts. Such land use conflicts would be a *significant unavoidable impact* of the Project (**Potential Impact 6.4.6**). Several current programs are in place to address this impact, including:

- City of Oakland policies and ordinances pertaining to prohibitions on through truck traffic on certain residential streets within the Project Area, and limitations on the expansion of trucks and truck-related activity;
- The Port of Oakland's *Vision 2000 Air Quality Mitigation Program* (AQMP), a program to mitigate the potential air quality impacts of the Port's Vision 2000 Program. This program is designed to reduce emissions from a variety of maritime and other local sources including construction activities, tugboats, cargo-handling equipment, trucks, public buses, other vehicles, and local stationary sources;
- The Port of Oakland's commitment to implement dust control measures, construction-related equipment engine emissions controls, and encourage carpooling among construction workers, and
- The Port of Oakland's *Criteria Pollutant Reduction Program,* to be implemented as part of the OARB Reuse Plan. The Criteria Pollutant Reduction Program is aimed at reducing or offsetting Port-related emissions in West Oakland from its maritime and rail operations.

These programs are intended to address significant land use conflicts that currently exist within the West Oakland neighborhood. Implementation of the Redevelopment Plan's projects, programs and other activities within the Project Area is projected to result in new development within the Project Area that would further add to land use conflicts. This EIR identifies mitigation measures to be applied to the Redevelopment Plan's projects, programs and other activities intended to reduce vehicle emissions, to implement transportation control measures and to ensure the provision of upgraded ventilation systems in new residential development projects. Implementation of currently adopted programs and mitigation measure recommended in this EIR would reduce the potential for land use conflicts arising from odor and air pollutant emission sources.

However, existing emissions of toxic air contaminants and pollutants can not be mitigated to a *less than significant* level, and the exposure of new Project Area residents to regional air emissions would be a *significant and unavoidable impact* of the Project.

12.5 Cumulative Environmental Effects

Cumulative effects of the Project have been addressed by topic area in previous chapters of this document. These cumulative effects are summarized and presented together in the following section of this chapter.

CEQA defines cumulative impacts as "two or more individual effects which, when taken together, are considerable, or which can compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). A cumulative analysis is required in EIRs to provide decision-makers and the public with a broader context of the potential environmental effects of a proposed project or program. An individual project, in and of itself, may generate insignificant impacts; however, in combination with other related projects, these cumulative effects may be significant (CEQA Guidelines, Section 15130). Evaluation of cumulative effects should reflect the severity of impacts as well as the likelihood of their occurrence, but the level of detail need not be as great as for evaluation of project-specific impacts. Section 15130 of the *CEQA Guidelines* provides direction regarding cumulative impact analysis as follows:

- An EIR should not discuss cumulative impacts that do not result in part from the proposed action.
- A lead agency may determine that an identified cumulative impact is *less than significant*, and shall briefly identify facts and analysis in the EIR supporting its determination.
- A lead agency may determine that an action's incremental effect is not cumulatively considerable, and therefore is not significant, and shall briefly describe in the EIR the basis of its determination.
- A lead agency may determine that an action's cumulatively considerable contribution to a significant cumulative impact may be rendered less than cumulatively considerable and therefore residually not significant, if the action implements or funds its fair share of a mitigation measure or measures designed to alleviate the cumulative impact, and shall identify facts and provide analysis supporting its determination.

Cumulative Impact Analysis Methodology

To analyze cumulative impacts for each environmental factor, a lead agency may elect to use a list of other past, current, and probable future projects, including those outside the control of the agency. A lead agency may also elect to use a summary of projections from adopted planning documents (CEQA Guidelines, Section 15130). This EIR relies on projections from adopted planning documents for conducting the cumulative impact analysis. The planning documents used in this analysis are identified below. The time horizon for the cumulative analysis is the

year 2025. The physical scope of the analysis generally encompasses the City of Oakland and adjacent jurisdictions.

- *City of Oakland General Plan* last updated to include Estuary Policy Plan Element in 1999. Used for cumulative impact analysis related to land use, traffic, air quality, noise and public services.
- West Oakland Cumulative Growth Scenario Update, including an update of existing and future economic and land use projections (included in Appendix B). Update completed October 2002. Used for cumulative impact analysis related to land use, traffic and air quality.
- *Projections 2002* prepared by the Association of Bay Area Governments (2001). This demographic projection for the nine Bay Area counties through 2025 was used for cumulative analyses related to traffic, air quality, noise, population/employment/housing, and public services.
- General Plans for the cities of Emeryville and Alameda.
- Recently prepared EIRs for projects within the vicinity, including the *OARB Reuse Plan EIR* (City of Oakland 2002) and the Port of Oakland's *Vision 2000 EIR* (Port of Oakland 1999).

12.5.1 Insignificant Contributions to Potentially Significant Cumulative Impacts

According to CEQA Guidelines, a lead agency may determine that a project's incremental contribution to a cumulative impact is not considerable, and therefore is not significant. As indicated in previous chapters of this EIR, implementation of the Redevelopment Plan's projects, programs and other activities would not generate considerable contributions to the following cumulative impacts, and these impacts are therefore *less than significant*.

Addition of Traffic to Regional Roadways

Cumulative development is projected to cause significant impacts on freeway sections at; I-80 at the Bay Bridge; I-80 east of I-80/I-580 split; I-580 east of I-980/State Highway 24; and SR 24 east of I-580. However, traffic from the Project Area alone would not cause any of these freeway segments to operate at LOS F, nor would it increase the V/C ratio on those freeway segments that would operate at LOS F under the cumulative base case condition by more than three (3) percent (**Section 5.4.1**). Although this is considered to be a significant cumulative effect, the Project's contribution to this effect is less than cumulatively considerable or *less than significant*.

Local Air Quality Emissions

Traffic generated by projected growth and development within the Project Area would not significantly increase local CO emissions along roadways and at intersections within the Project Area or its vicinity. Furthermore, new growth and development within the Project Area, in combination with past projects, other current projects, and probable future projects, would not violate that the state and federal one-hour ambient standards for CO (**Section 6.4.4**). Since

cumulative CO levels would not exceed CO ambient air quality standards, cumulative impacts at local intersections would be *less than significant*, and the Project's contribution to this effect is similarly *less than significant.*

12.5.2 Considerable but Mitigated Contributions to Cumulative Impacts

As indicated in previous chapters of this EIR, implementation of the Redevelopment Plan's projects, programs and other activities in and of itself may generate insignificant impacts related to the following topics but, in combination with other related projects, may have a considerable contribution to significant cumulative impacts. The following section of this EIR identifies those cumulative impacts to which the Project may have a considerable contribution. It also identifies, where available, the actions that subsequent Redevelopment Plan projects and programs should implement or fund as their share of a mitigation measure or measures designed to alleviate the cumulative impact.

Addition of Traffic to Unsignalized Intersections

New growth and development within the Project Area would add more than ten vehicles to the 3rd Street & Market Street intersection, where the Caltrans' peak hour volume traffic signal warrants would be satisfied. The contribution of traffic from the Project Area to impacts at this intersection would be cumulatively considerable, and the incremental effect of the Project is considered significant (**Cumulative Impact 5.4.3**). This EIR recommends a mitigation measure to provide fair-share funding from redevelopment-sponsored projects to convert the two-way-stop-control to an all-way-stop-control at the 3rd Street & Market Street intersection. This measure would provide fair-share funding toward an improvement designed to mitigate the cumulative impact to a level of *less than cumulatively considerable*.

Increase in AC Transit Ridership

New growth and development within the Project Area, in combination with past projects, other current projects, and probable future projects, would be likely to increase average ridership on AC Transit by more than 3 percent. Although this increase in ridership would have beneficial effects in terms of decreasing single-occupant vehicle use and accommodating alternative modes of travel, the impacts on transit operation would be a significant cumulative effect. It is possible that the contribution of AC Transit riders from within the Project Area to cumulative ridership on AC Transit would be cumulatively considerable (**Cumulative Impact 5.4.4**). This EIR recommends as a mitigation measure that the City of Oakland shall coordination with AC Transit to offset the contribution of AC Transit riders due to implementation of the Redevelopment Plan. This measure would mitigate the Project's contribution to this cumulative impact to a level of *less than cumulatively considerable.*

Increase in BART Ridership

New growth and development within the Project Area, in combination with past projects, other current projects, and probable future projects, would result in a likely cumulative significant impact on BART service at fare gates. An increase in BART usage would have beneficial effects in terms of decreasing single-occupant vehicle use and accommodating alternative modes of travel. However, the impacts on transit operation, particularly the contribution of peak hour

riders on BART trains due to new growth and development within the Project Area, would b*e* cumulatively considerable (**Cumulative Impact 5.4.5**). This EIR recommends as a mitigation measure that the City of Oakland shall coordination with BART to ensure that adequate fare gate capacity is available at the West Oakland and MacArthur BART stations to accommodate anticipated increases in ridership associated with projected growth and development within the Project Area. This measure would mitigate the Project's contribution to this cumulative impact to a level of *less than cumulatively considerable.*

Park Demand

On a cumulative basis, the growth and development that may be facilitated by, or be in furtherance of the Redevelopment Plan would contribute to a cumulatively considerable deficit in existing parkland (**Cumulative Impact 10.4.1**). This EIR recommends, as a mitigation measure, that the City of Oakland Redevelopment Agency should coordinate and assist the City Office of Parks and Recreation with implementation of park and open space improvements as identified in the OSCAR Element of the General Plan. Implementation of these measures would mitigate the Redevelopment Plan's contribution to the existing parks and recreation facilities deficit in the Project Area to a level of *less than cumulatively considerable.*

School Facilities

On a cumulative basis, the growth and development that may be facilitated by, or be in furtherance of the Redevelopment Plan would contribute to a cumulatively considerable deficit in existing school capacity (**Cumulative Impact 10.4.2**). This EIR recommends that, as a mitigation measure, the City of Oakland Redevelopment Agency coordinate and assist the Oakland Unified School District with implementation of school improvements as identified in the *OUSD Facility Master Plan*. Implementation of these measures would mitigate the Redevelopment Plan's contribution to the potential cumulative deficit in school facilities to a level of *less than cumulatively considerable.*

12.5.3 Considerable Contributions to Unavoidable Cumulative Impacts

Effects on Study Area Intersections

Traffic generated by new growth and development within the Project Area, in combination with traffic from past projects, other current projects, and probable future projects, would cause some signalized intersections to operate at unacceptable levels of service. Traffic generated from within the Project Area would contribute to a significant cumulative impact at the intersection of San Pablo Avenue/40th Street, and the contribution of Project Area traffic would be considered a cumulatively considerable contribution (**Cumulative Impact 5.4.2**). Although mitigation measures were investigated that could reduce cumulative impacts to a level that is *less than significant*, no feasible mitigation measures could be identified. Required improvements would involve widening of San Pablo Avenue and 40th Street, necessitating acquisition of substantial property along both streets, potentially resulting in the need to acquire existing businesses. The secondary impacts of major street widening are considered to render that option infeasible. Therefore, residual cumulative impacts at that intersection would be *significant and unavoidable*, and the

Project's contribution of traffic to this intersection would be *cumulative considerable and unavoidable*.

Potential Parking Shortages

Redevelopment, in combination with past, other current, and probable future projects (including the Port of Oakland's Vision 2000 Program and the Oakland Army Base Area Redevelopment Project) could result in a cumulatively inadequate supply of parking for trucks serving the Port of Oakland (**Cumulative Impact 5.4.7**). The Project is anticipated to assist in implementation of limits on the operation and/or expansion of trucks and truck-related activities within the Project Area consistent with current regulations and ordinances. Such restrictions will further reduce the supply of land available for such uses, and contribute to this cumulative effect. Any mitigation measures that might be recommended for the Project Area that would result in expansion of trucking operations and truck-related activities would be in conflict with the land use compatibility strategies embodied in General Plan policy and supporting land use ordinances. These policies and ordinances include limitations on such uses that serve to improve land use compatibility impacts within the Project Area, particularly where such uses are adjacent to or intermixed within residential neighborhoods. Therefore, no additional mitigation measures are recommended, and this impact of a shortfall in truck parking and truck-related land use remains *cumulatively significant unavoidable,* and the Project's contribution to this impact would be *cumulative considerable and unavoidable*.

Regional Air Quality Emissions

Implementation of the Redevelopment Plan, in conjunction with past, other current, and probable future projects (including the Port of Oakland's Vision 2000 Program and the Oakland Army Base Area Redevelopment Project) would cumulatively exceed BAAQMD significance criteria for NO_x and PM_{10}. These cumulative emissions would be a significant and unavoidable cumulative impact (**Cumulative Impact 6.4.8**). Although Project-related traffic increases alone would not significantly degrade regional air quality, when Project-related increases are considered with other cumulative emissions, these cumulative emissions would exceed BAAQMD significance thresholds for NO_x and PM_{10}. The Project's contribution to this cumulative impact would be cumulatively considerable. This EIR identifies existing programs that are intended to address this cumulative impact. It also recommends mitigation measures to be applied to the Redevelopment Plan's projects, programs and other activities intended to reduce vehicle emissions, implement transportation control measures and ensure the provision of upgraded ventilation systems in new residential development projects. Although implementation of currently adopted programs and mitigation measure recommended in this EIR would reduce cumulative regional emissions, these emissions cannot be mitigated to a *less than significant* level. Therefore, cumulative regional air emissions would be *significant and unavoidable*, and the Project's contribution to these emissions would be *cumulative considerable and unavoidable*.

Cumulative Traffic Noise Increases

New growth and development within the Project Area, combined with other past projects, other current projects and probable future projects would generate cumulative noise increases along local streets. This increase in noise levels is projected to be cumulatively significant, and the Project's contribution to this cumulative condition is cumulatively considerable (**Cumulative**

Impact 7.4.5). The cumulatively significant increases in noise levels are not individually attributable to increased noise due to the Project. However, a considerable portion of these noise increases would be attributable to the Project. Thus, noise levels due to cumulative traffic conditions are projected to be *significant and unavoidable* (i.e., greater than a 5dBA increase), and the Project's contribution to these cumulative conditions would be *cumulatively considerable and unavoidable.*

12.6 Significant and Irreversible Environmental Changes

According to CEQA Guidelines, Section 15126.2(c), irreversible environmental changes may include the following:

- The use of non-renewable resources may be considered irreversible since a large commitment of such resources makes their removal or non-use thereafter unlikely. Irretrievable commitments of resources should be evaluated to ensure consumption is justified.
- Primary impacts and, in particular, secondary impacts (such as a new roadway that provides access to a previously inaccessible area) that generally commit future generations to similar uses.
- Irreversible damage resulting from environmental accidents associated with the project.

Commitment of non-renewable energy resources including fossil-based fuels products would be permanently committed during implementation of certain Redevelopment Plan implementation projects, programs and other activities. The amount of energy consumed to implement the Redevelopment Plan is not expected to be unusually large or wasteful, and its irreversible commitment is not considered significant. Although implementation of the Redevelopment Plan would result in the re-commitment of approximately 1,546 acres of land to a variety of urban uses, the majority of this land is currently urbanized and/or already developed with urban uses. This irreversible commitment of land to urban uses is a *less than significant* effect of the Redevelopment Plan's implementation. Neither the Redevelopment Plan nor any of its anticipated projects, programs and other implementation activities includes specific actions that may result in environmental accidents with irreversible damage.

12.7 Growth-Inducing Effects

According to CEQA Guidelines, Section 15126.2(d), an EIR must discuss ways in which the project may foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. This discussion should include aspects of the project that would remove obstacles to population growth, or which may encourage and facilitate other activities that may significantly affect the environment.

Growth inducement is an inherent impact of redevelopment. One of the basic premises of the Redevelopment Plan is to foster economic growth by improving business, employment and housing opportunities.

Job Growth

Job generation is a key benefit of implementation of the Redevelopment Plan. Job growth anticipated under the Redevelopment Plan, as may be facilitated by its projects, programs and other implementation activities, would result in increased employment opportunities (approximately 3,184 net new jobs, or an approximate 20% increase over current jobs). This amount of job growth falls within the estimates of employment growth projected for Oakland through 2025 by the Association of Bay Area Governments. Persons who already reside in the region would most likely fill these new employment opportunities. The types of new jobs projected for the Project Area are not anticipated to induce growth by attracting new employees from outside the area.

Housing Growth

Another key benefit associated with implementation of the Redevelopment Plan is increased housing opportunities. The 1,838 net new housing opportunities projected for the Project Area, as may be facilitated by implementation of the Redevelopment Plan, fall within the range of estimates of housing and population growth projected for Oakland through 2025 by the Association of Bay Area Governments. Implementation of the Redevelopment Plan would generate funds through a 25% tax increment set-aside, to be used in a manner that would foster increased opportunities for affordable housing. The amount of new housing units projected for the Project Area, including any additional units of affordable housing that may be created through implementation of the Redevelopment Plan's projects, programs or other activities, would serve an unmet demand for housing, and in particular an affordable housing demand, within Oakland. Implementation of the Redevelopment Plan would therefore not induce significant new growth in housing or population.

Growth Inducement in Excess of Planned Growth Impacts

The amount of employment and housing growth projected for the Project Area would induce a commensurate increases in demand for infrastructure and public services (see Chapters 9 and 10 of this EIR). However, new development projects within the Project Area would be comprised of "infill" development. New infill employment and housing opportunities, as may be facilitated by implementation of the Redevelopment Plan, would be located in an area surrounded by urban development, and already served by existing utilities and public services. While utilities and service systems may need to be upgraded to serve such growth and development, the upgrading of utilities and service systems would be designed to serve only the amount of growth and development as projected under the Land Use and Transportation Element of the General Plan. Utilities and/or service improvements necessary to provide service to meet this projected demand would not be extended into undeveloped areas outside the Project Area. Nor would they include excess capacity that could allow additional growth beyond that envisioned under the General Plan. As such, the provision of additional infrastructure capacity to serve the Project Area would not induce growth beyond that already planned, and would not be significant.

Implementation of the Redevelopment Plan would also facilitate the intensification of land uses, resulting in the need to expand or improve upon existing transportation systems, including improved transit operations and intersection capacities. These transportation improvements would substantially increase efficiencies within the Project Area, but would also be offset by increased traffic and transit usage. Therefore, the growth-inducing impact of transportation and transit improvements which may be part of the Redevelopment Plan's implementation, or identified as necessary to mitigate impacts of growth and development within the Project Area, is considered *less than significant*.

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Alternatives

13.1 Introduction

The California Environmental Quality Act (CEQA, Section 15126d) requires an EIR to include a discussion of a reasonable range of alternatives to the proposed project "which could feasibly attain the basic objectives of the project" and an evaluation of their comparative merits. CEQA also requires that the EIR explain why specific project alternatives that were considered at one time in developing the project proposal, were rejected in favor of the project proposal. The selection of alternatives is to be guided by the provision of reasonable choices, the promotion of informed decision-making, and informed public participation. An EIR need not evaluate alternatives that would have effects that cannot be determined, or for which implementation would be remote and speculative.

Among the alternatives to be addressed, CEQA Sections 15126d(2) and 15126d(5) require that the EIR evaluate the "No Project" alternative, and identify an "environmentally superior" alternative based on comparative analysis among project alternatives. The discussion of alternatives is intended to focus on those alternatives that are capable of avoiding any significant environmental impacts or reducing them to a level of less than significant. Such alternatives should be discussed, even if they may "impede to some degree the attainment of the project objectives, or would be more costly" (CEQA, Section 15126d(3)). Additionally, consistency with the City of Oakland General Plan policies and land use designations was a criterion for selection of the alternatives that have been analyzed.

13.1.1 Project Objectives

The objectives of the Project are re-stated below in order to compare the alternatives to the Project as set forth by the Redevelopment Agency and the Project Area Committee.

1. Improve the quality of housing by assisting new construction, rehabilitation, and conservation of living units in the Project Area.

2. Maintain and improve the condition of the existing affordable housing in the Project Area.

3. Increase opportunities for home ownership in the Project Area.

4. Develop renter stabilization strategies that encourage and assist renters to remain in the Project Area.

5. Mitigate and reduce conflicts between residential and industrial uses in the Project Area.

6. Provide streetscape improvements, utility undergrounding, open-space and community facilities to enhance neighborhood quality and foster economic and neighborhood vitality.

7. Support recreation, education, healthcare and programs for all members of the Project Area community, especially youth, seniors and disabled persons.

8. Improve public safety for people living and working in the Project Area.

9. Restore blighted properties in the Project Area.

10. Assist neighborhood commercial revitalization, and attract more uses that serve the local community including neighborhood-serving retail.

11. Retain existing businesses and attract new businesses to Project Area locations designated for business activity; promote economic development of environmentally sound, light industrial and commercial uses.

12. Increase employment opportunities for Project Area residents.

13. Facilitate economic development by improving and rehabilitating substandard buildings and targeting infill on vacant lots on commercial corridors in the Project Area.

14. Minimize/eliminate environmental hazards within the Project Area.

15. Improve infrastructure, transportation, and public facilities throughout the Project Area.

16. Incorporate ongoing community participation in the redevelopment process so residents of all income and wealth levels, geographic areas, language groups and ages have opportunities to learn about and participate in the redevelopment decision-making process.

17. Promote equitable development that benefits the residents of the Project Area and minimizes the displacement of current residents and businesses.

18. Maintain the mixed-use character of the Project Area in a manner equally beneficial to both businesses and residents.

19. Preserve and enhance existing residential neighborhoods and core industrial and commercial areas.

20. Not encourage or support block-busting development, developments that demolish historically significant structures that can be rehabilitated, or developments which destroy the positive functioning character of existing areas.

21. Support and recognize the benefit of new residents and incomes that can be encouraged through market-rate development and done without displacing existing residents or businesses or destroying the existing cultural assets of the area.

22. Encourage and assist the rehabilitation of historically significant properties to avoid demolition or replacement.

23. Relocate displaced residents or businesses, whenever possible and feasible and with their consent, within the Project Area.

24. Not concentrate any affordable housing as stand-alone high density projects, but rather as infill projects on scattered sites and/or mixed-income projects.

25. Improve street configuration on main arterials and their relationship to the surrounding neighborhoods; implement urban design programs for street improvements such as center dividers, bulb-outs, tree planting, and landscape improvements.

26. Establish an ongoing communication with the Oakland Housing Authority concerning its role and responsibility to see that scattered sites undergo design upgrades, reconstruction, and improved general maintenance.

27. Promote sustainable development and "green building" practices.

28. Facilitate through technical assistance the implementation of the goals of the Redevelopment Plan.

29. Not relieve any governmental agency or department of its responsibilities.

Additionally, a key Project Objective for the Redevelopment Plan is the attainment of City of Oakland General Plan goals, policies, objectives, and implementation of General Plan land use designations. This Project objective is more fully described and defined in Chapter 3: Project Description, of this EIR.

13.1.2 Factors in Selecting Alternatives

Variables under the Redevelopment Plan (i.e., the Project)

The proposed Redevelopment Plan consists of both additional and alternative means by which to enhance the financing capabilities, personnel resources and regulatory powers of the City of Oakland to assist in elimination of blight and the achievement of economic revitalization of the Project Area.

The additional financing capabilities included in the Redevelopment Plan consist of establishment of tax increment financing. Under this financing program, as enabled by state Redevelopment Law, the increment of growth in property tax assessment from within the Project Area is deposited into a fund to be held by the Redevelopment Agency. The Agency may then use this fund to pay the principal of and interest on loans, monies advanced to, or indebtedness

incurred by the Redevelopment Agency to finance or refinance, in whole or in part, the Redevelopment Plan.[1]

The additional personnel and human resources assumed under the Redevelopment Plan include the City of Oakland Redevelopment Agency and its staff, as well as the Project Area Committee comprised of residents, businesses and community organizations from the Project Area. The Redevelopment Plan assumes a commitment of time and effort by the Agency and its staff will be applied toward those projects and programs identified in the Redevelopment Plan and its subsequent 5-year implementation plan, together with the input and guidance of the Project Area Committee.

The Redevelopment Plan would enable use of additional regulatory capabilities and powers by the Redevelopment Agency as authorized under California Redevelopment Law. Examples of such capabilities and powers include the ability to purchase, sell and/or develop property; provide for the relocation of displaced residents and/or businesses; and to monitor and cause hazardous materials to be removed (e.g., the Polanco Act; see Chapter 9: Hazardous Materials).

Application of Variables under the Project

Under the proposed Redevelopment Plan (the Project), financing, personnel and regulatory powers of California Redevelopment Law would be used by the Redevelopment Agency to implement a number of potential projects, programs and other activities as more specifically described in Chapter 3: Project Description of this EIR. These projects, programs and other implementation activities potentially include affordable housing and housing improvements; public infrastructure, civic and neighborhood improvements; commercial, industrial and businesses improvements; and regulatory policies and controls on new development. Additionally, under California Redevelopment Law and local ordinance, 25% of the tax increment funds generated from the Project Area must be used by the Agency to increase and improve the supply of affordable housing for persons of low and moderate income. The location of this supply of affordable housing may be within the Project Area or elsewhere within the City.

Application of Variables under the Alternatives

The alternatives presented below are defined as a re-focusing of the financing, staffing and regulatory capabilities of the Redevelopment Agency to achieve greater implementation of one or more goals of the Redevelopment Plan, with potentially less implementation of other goals. These alternatives have been selected to satisfy CEQA requirements for a No Project Alternative, to enable informed decision-making, and to identify and evaluate a reasonable range of alternatives that would permit a reasoned choice.

[1] Pursuant to Article XVI, Section 16 of the California Constitution

13.2 Alternatives Considered and Rejected

13.2.1 Alternatives Previously Rejected

In developing alternatives for this analysis, the EIR authors referred to the *Oakland General Plan Land Use and Transportation Element (LUTE) EIR* (SCH #97062089), prepared for the City of Oakland by Environmental Science Associates, March 1998. CEQA Guidelines states,

> *"Where a previous environmental document has sufficiently analyzed a range of reasonable alternatives and environmental impacts for projects with the same basic purpose, the lead agency should review the previous documents. The EIR may rely on the previous documents to help it assess the feasibility of potential project alternatives, to the extent that the circumstances remain substantially the same as they relate to the alternatives."*[2]

Consistent with this guideline, the alternatives that were considered in this previous EIR have been reviewed, and have not been re-analyzed. The alternative's analysis from this previous EIR is hereby incorporated by reference. The list of alternatives previously analyzed in the LUTE EIR included the following:[3]

No Project LUTE Alternative

A No Project - General Plan Land Use and Transportation Element (LUTE) alternative in which the 1980 General Plan's land use designations would have remained in place. This alternative would have called for "continued separation of land uses into commercial, industrial and manufacturing areas, despite the fact that much of what exists on the ground today is already mixed use."

When the City of Oakland approved the Land Use and Transportation Element of the General Plan, it rejected this alternative as being infeasible. This alternative lacked recognition of existing land use conditions, and was unable to achieve the goals and visions as articulated by Oakland residents during the General Plan preparation. This EIR does not identify any new environmental impacts as a result of the Project's implementation of the Oakland General Plan LUTE that have not already been disclosed in the LUTE EIR as certified by the City. Thus, this EIR presents no new information that would justify the City's reconsideration of an amendment to the LUTE Element, and this alternative has been rejected from further consideration.

Alternative LUTE Land Use Designations

An Alternative LUTE Land Use Designation alternative was considered that re-designated land uses for various sites as contemplated during preparation of the LUTE. No specific land use alternatives for the Project Area were identified under this alternative.

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[2] CEQA Guidelines, Section 15126.6(f)

[3] City of Oakland 1998, LUTE EIR, page IV-4

When the City of Oakland approved the Land Use and Transportation Element of the General Plan, it rejected this alternative because of it did not respond to neighborhood goals and visions as articulated by Oakland residents during the General Plan preparation. It would also not have included the goal of revitalization of specific activity centers along major transportation corridors. This EIR does not identify any new environmental impacts as a result of the Project's implementation of the Oakland General Plan LUTE that have not already been disclosed in the LUTE EIR. Thus, this EIR presents no new information that would justify the City's reconsideration of an amendment to the LUTE Element, and this alternative has been rejected from further consideration.

Environmentally Superior LUTE Alternative

An Environmentally Superior LUTE alternative was considered that would have specified lower levels of development in areas with environmental constraints, and would have included "stronger policies regarding impacts on air quality, transportation, fire protection and other adverse impacts" of the LUTE. No specific land use alternative or policy for the Project Area was identified under this alternative.

When the City of Oakland approved the Land Use and Transportation Element of the General Plan, it rejected this alternative because of the economic hardships it would impose and because it might inadvertently create more adverse impacts than positive impacts. If future development in Oakland were constrained or became much more costly to undertake, there is a strong likelihood that growth would move elsewhere in the region, resulting in continued urban sprawl throughout the greater Bay Area. This could trigger even greater congestion on Oakland's freeways with attendant air quality impacts that would be detrimental to the whole Bay Area. Higher development costs and economic stagnation could ultimately have physical impacts such as increased blight and abandonment of structures. If the tax base were to decline, local revenues would decrease and City services could be reduced.

This EIR does not identify any new environmental impacts as a result of the Project's implementation of the Oakland General Plan LUTE that have not already been disclosed in previous environmental review documents certified by the City. Thus, this EIR presents no new information that would justify the City's reconsideration of an amendment to the LUTE Element, and this alternative has been rejected from further consideration.

13.2.2 Alternative Location

An alternative location for the Project has not been considered as an alternative for review in this EIR for the clear reason that no other location would permit achievement of the Project objectives of eliminating blight and restoring economic vitality to the West Oakland Project Area. Alternative Project boundaries (i.e., a smaller or larger Project Area) have also been rejected from further consideration. The boundaries of the Project Area have been established through a process that has included public participation and documented evidence of blighted conditions. The Project Area boundaries also abut other existing redevelopment districts in the vicinity, and this Project Area represents the last portion of West Oakland not already within a Redevelopment District. The Project Area boundaries were formally approved by the City

Council via resolution. This EIR presents no new information that would cause this previous decision of the City to be reconsidered.

13.2.3 No West Oakland Transit Village Alternative

An alternative that was considered early on in the EIR process included a No West Oakland Transit Village alternative. This alternative was considered because the West Oakland Transit Village represents the largest potential individual development program within the Project Area and would result in the most substantial potential environmental effects related to traffic generation and related air emissions, and demand for public services and infrastructure. It is also located in an area that is subject to significant noise levels from adjacent BART trains, and was previously subject to potential toxic air contaminants and odor emissions from the previously existing Red Star Yeast facility.

The West Oakland Transit Village has been retained as part of the Redevelopment Plan (i.e., this alternative has been rejected) for the following reasons:

- The West Oakland Transit Village has been an integral component of land use planning efforts for West Oakland for many years, and is included in all previously prepared plans. These previously prepared plans that rely on, anticipate or plan for the West Oakland Transit Village include:
    - *CWOR Visions and Strategies*, 1995,
    - *Envision Oakland,* March 1998,
    - *Mandela Parkway Corridor Plan,* April 1998,
    - *West Oakland 2000, Transportation and Economic Development Study*, August 1998,
    - *7th Street/McClymonds Corridor Neighborhood improvement Initiative Community Plan*, May 1999,
    - *West Oakland Transit Village Action Report*, February 2001, and
    - City of Oakland General Plan, *Land Use and Transportation Element* (LUTE), March 1998.
- A key development component of the City of Oakland General Plan (LUTE) is the designation and establishment of Transit-Oriented Districts (TODs) intended to take advantage of the opportunities presented by Oakland's eight region-serving BART stations. The area surrounding the West Oakland BART station offers significant opportunities for compact mixed-use types of development that could include housing, business and other services. This strategy supports city and regional goals to foster sustainable development linking transit with higher density housing types.
- The previously existing Red Star Yeast facility may have presented a potential constraint to full development of the West Oakland Transit Village due to the level of its emissions of

toxic air contaminants in the immediate vicinity. However, since this facility has been closed down it no longer poses a potential constraint to full implementation of all portions of the Transit Village plan.

13.3 No Project Alternative

13.3.1 Description of No Project Alternative

Under the No Project Alternative, the proposed Redevelopment Plan would not be adopted. Future land use and development within the Project Area would continue to be subject to the policies of the City of Oakland General Plan, and to applicable land use regulations as contained in the City zoning code. Without adoption of the Redevelopment Plan, no tax increment would be generated and property taxes would continue to be distributed according to current formulas. The staffing and regulatory capabilities afforded to the Redevelopment Agency under California Redevelopment Law would not be made available toward achievement of the objectives the Redevelopment Plan within the Project Area under this alternative.

Full General Plan Implementation

As noted in Chapter 4: Land Use and Planning Policy, the proposed Redevelopment Plan is consistent with the General Plan, including but not limited to the LUTE, the OSCAR, the Historic Preservation Element and the Housing Element. Given this consistency, one variant of the No Project Alternative is the ongoing implementation of the City of Oakland General Plan on a project-by-project basis. This definition would include generally the same level of growth and development as projected for the Project (i.e., the development of approximately 1,838 net new households, an increase in population of approximately 4,209 people and approximately 3,184 net new employment opportunities). These projections represent the aggregate of all development anticipated to occur within the Project Area over the next 20-year period.

Limited General Plan Implementation

A second possible variant of the No Project Alternative is based on the assumption that enhancement of the Project Area's function, appearance and economic vitality would not be possible through the normal workings of government or the private sector alone.[4] Under this definition, it would only be through adoption of the Redevelopment Plan and implementation of its financial, regulatory and other assistance programs that the physical and economic burdens caused by blighted conditions in the Project Area can be overcome. These blighted conditions prevent full utilization of the Project Area and thus full implementation of the General Plan. Without the direct or indirect assistance of the Redevelopment Plan, full implementation of the General Plan may not be feasible.

[4] This assumption was fundamental to the preparation of the Redevelopment Plan and is not an assumption made by the EIR preparers.

However, there are a number of development projects within the Project Area that are either under construction, that have been approved by the City but not yet built, that have development applications on file with the City, or for which pre-application meetings have been conducted with City staff and applicants. The aggregate buildout of these development projects, hereafter referred to as "likely development projects," are included in the projections of total growth and development anticipated to occur within the Project Area by year 2025 under the Project. Given these development projects' current status, it is reasonable to assume that they would move forward, with or without the benefits of redevelopment. This assumption is not intended to imply that City approval not already granted is forthcoming for any individual project included in this category. It only indicates that the current market demand appears to support the development potential represented by these likely development projects. The "likely development projects" comprise the following development potential:

- approximately 560 net new housing units, including approximately 328 affordable housing units,[5]
- approximately 188,000 square feet of net new or reused commercial/industrial space and parking facilities that would generate approximately 370 net new employment opportunities, and
- based on regional demographic trends as forecasted for the area, an overall net increase in population of approximately 1,560 people.

It is difficult to predict the extent of growth and development that is likely to occur within the Project Area without the benefits of redevelopment. However, based on the information presented above, the maximum range of potential development would be consistent with that projected for the Project, and the minimum range of development is represented by the aggregate of "likely development projects." This range of development potential under the No Project Scenario is therefore represented by between 560 and 1,838 net new residential units, between 370 and 3,184 net new employment opportunities, and a net increase in population of between 1,560 and 4,209 people.

13.3.2 Ability of No Project Alternative to Reduce or Avoid Significant Environmental Impacts

Full General Plan Implementation

Under the variant of the No Project Alternative that assumes that full implementation of the General Plan is possible without a redevelopment program, growth and development within the Project Area would be the same as projected for the proposed Project. Therefore, the potential environmental consequences associated with this growth and development would be the same as identified in this EIR.

[5] "Affordable" is defined as projects with city and/or other public funds available for subsidies.

Limited Implementation of the General Plan

Under the second variant of the No Project Alternative, it is reasonable to assume that a portion of the growth and development projected for the area would occur. This portion of growth and development is represented, at a minimum, by the aggregate of "likely development projects". Under this limited development scenario, approximately 30% of the projected increase in net new housing units would be anticipated, and approximately 12% of the projected increase in net new employment opportunities would be anticipated. Under this definition, the environmental consequences as compared to those potentially significant impacts of the Project would generally be as follows:

Land Use Incompatibilities

Reduction and elimination of existing land use incompatibilities within the Project Area is dependent upon a transition of land use over time, consistent with the "Business Mix" and "Housing/Business Mix" land use designations. Without new redevelopment activity, this transition of land uses would not occur, and existing incompatible land uses would generally remain.

Emissions Generated by Construction Activities

The total short-term emissions associated with future construction activity would be substantially reduced under this alternative, but individual projects would generate significant dust and construction emissions, and mitigation measures would be applicable.

Compatibility of Population Increase with Ambient Air Quality

Under this scenario, the limited growth and development as projected for the Project Area would not be disproportionately higher than the projected citywide growth rate. This alternative would not result in a disproportionate increase of residents located in proximity to pollutant emissions and odor sources.

Construction Noise Increases

The total short-term increase in noise levels associated with future construction activity would be substantially reduced under this alternative, but individual projects would generate significant construction noise, and mitigation measures would be applicable.

Compatibility of Future Land Uses with Noise Environment

Since the extent of new development under this scenario would be much less than under the Project, the number of new uses that might be subject to noise levels considered conditionally acceptable or normally unacceptable would be reduced. However, individual projects that may be located along primary transportation corridors would be subject to these projected cumulative noise levels, and mitigation measures would be applicable.

Water and Sewer Infrastructure Capacity

Since the extent of new development under this scenario would be much less than under the Project, the overall demands on water and sewer infrastructure would be reduced. However, individual projects may require localized improvements to water delivery or wastewater collection systems, and mitigation measures would be applicable.

13.3.3 Environmental Benefits not Realized

Under either variant of a No Project Alternative, the potential benefits of redevelopment in assisting with alleviation of adverse environmental conditions would not be realized. A list of those potential environmental benefits of redevelopment that could not be realized under a No Project alternative includes the following:

- The powers and authorities that are granted by the state to redevelopment agencies under the Polanco Act to investigate and cause remediation of hazardous materials would not be made available within the Project Area.
- The Redevelopment Agency's ability to enter into legal agreements with property owners that could facilitate removal and/or relocation of problem uses contributing to land use incompatibilities (particularly incompatibilities related to air emissions or noise generation) would not be possible.
- No tax increment funds would be generated. Thus, no affordable housing funds would be set aside for use in production and preservation of affordable housing opportunities, or to make home ownership available to more low-and moderate-income households within the Project Area.
- Potential redevelopment funding and other types of redevelopment assistance would not be available for improvements such as:
    - implementation of the Mandela Parkway Corridor Plan or other programs intended to re-establish previously divided communities;
    - funding of traffic safety improvements such as increasing and enforcing restrictions on truck traffic;
    - assistance in providing additional parking supply to meet current demands and projected future needs;
    - funding of needed public infrastructure systems or community facilities that are needed to either correct current deficiencies or to attract new development by reducing cost that would otherwise have to be borne by the private sector alone; and
    - assistance in funding programs that are designed to preserve and restore existing historic resources.

13.3.4 Conclusions

The No Project Alternative fulfills CEQA requirements for consideration of the effects of not approving or adopting the proposed Redevelopment Plan (the Project). The No Project Alternative would not be capable of accomplishing the basic Project purpose of alleviating the physical and economic burdens caused by blighted conditions. These conditions prevent full utilization of the area, and full implementation of the General Plan. The No Project alternative would not assist in achieving any of the Project objectives identified above.

The No Project Alternative may serve to reduce or avoid certain environmental consequences associated with growth and development. However, such growth and development is not precluded and, in fact, is permitted and encouraged under current policies and regulations. It is likely that under the No Project Alternative, the full extent of growth and development as projected under the Project would take longer to materialize.

13.4 Project Alternatives

Under the proposed Project, the financing capabilities, personnel resources, and regulatory powers and authorities under California Redevelopment Law would be used by the Redevelopment Agency to implement a number of potential projects, programs and other activities as more specifically described in Chapter 3: Project Description of this EIR. These potential projects, programs and other implementation activities include a wide range of economic development stimulus programs, private property reinvestment and revitalization strategies, public services and infrastructure improvements; and environmental remediation/clean-up activities. The Project Alternatives presented below have been considered that would narrow the range of financing, staffing and regulatory capabilities under the Redevelopment Plan to achieve greater implementation of one or more goals of the Redevelopment Plan, with potentially less implementation of other goals. These alternatives are more fully described below.

13.4.1 Alternative #1: Private Property Reinvestment and Revitalization

Under Alternative #1, a Redevelopment Plan would be approved but it would be amended to eliminate those potential implementation projects, programs and other activities specifically intended to assist in the growth and development of new housing units or new job opportunities within the Project Area. This alternative would be specifically designed to implement those General Plan strategies intended to maintain and enhance established neighborhoods within the Project Area, but would not assist in implementation of those General Plan strategies intended to promote growth and change. Redevelopment would not be used as an implementation tool for targeted economic development, but could be used to support targeted community development efforts that might encourage private investment in existing residences and businesses.

Redevelopment Plan Components Retained

Under Alternative #1 several of the Redevelopment Plan's potential implementation projects, programs and other activities would be retained. These projects and programs would include:

- affordable housing programs such as include first-time homebuyer programs and renter-to-owner assistance programs;
- housing improvement programs designed to assist low- and moderate-income homeowners in making repairs to existing residences, community restoration programs that purchase and/or rehabilitate deteriorated residential properties, removal of blight and debris from residential areas; and acquisition and relocation of properties contributing to conflicts between residential areas and adjacent industrial uses;
- business retention programs; and
- façade improvements.

Redevelopment Plan Components Not Retained

Under Alternative #1, redevelopment funds and other redevelopment tools would not be used to support new public and/or private residential or commercial development projects. The specific implementation projects, programs and other activities included under the Redevelopment Plan (the Project) that would not be retained include:

- increased housing supply programs (the Affordable Housing Program, as required by state law and local ordinance, would still provide for 25% of the gross tax increment funds received by the Agency to be deposited into a fund used to assist in the production and preservation of affordable housing opportunities. However, this program would not be used to create new, additional affordable housing units in the Project Area);[6]
- affordable housing strategies that would provide subsidies to developers to lower the costs of producing new housing;
- specific public infrastructure improvements designed to attract development to the area by eliminating or reducing costs that would otherwise have to be borne by the private sector;
- the elimination of "brownfield" sites via Polanco Act powers or other redevelopment actions that would facilitate or assist in the construction of new residential, commercial or industrial uses;
- desirable business recruitment programs;

[6] City redevelopment policies enable affordable housing funds generated from within the Project Area to be used to construct new affordable housing units elsewhere in the City.

- employer incentive programs such as land acquisition, environmental assessment, site cleanup, site preparation and/or land write-down that would facilitate the redevelopment of obsolete and/or vacant properties; or
- developer incentive programs intended to reward developers of new residential or commercial projects for incorporating community goals into their projects.

13.4.2 Alternative #2: Public Infrastructure and Facilities Improvements

Under Alternative #2 a Redevelopment Plan would be approved, but it would be amended to eliminate those potential implementation projects, programs and other activities specifically intended to directly assist in the reinvestment and redevelopment of private properties. This alternative would be specifically designed to alleviate existing deficiencies in many of the basic public infrastructure systems, and to improve many of the civic facilities intended to support the quality of life in West Oakland such as parks, civic centers, schools and libraries. Under this alternative, redevelopment would not be used as an implementation tool for directly targeted economic development, but would instead be used to support public improvements that might act as a catalyst to encourage private investment in surrounding properties.

Redevelopment Plan Components Retained

Under Alternative #2, certain Redevelopment Plan implementation projects, programs and other activities would be retained. These projects and programs would include'

- Infrastructure improvements such as correcting utility and communication system deficiencies,
- Under-grounding utilities,
- Improving sidewalks and curbs and gutters; and providing streetscape amenities and streetscape installations such as lighting, signage, fencing, street furniture and landscaping, and traffic and transportation improvements such as improving access to public transit; enhancing bicycle and pedestrian facilities; funding street, roadway, and freeway ramp improvements; increasing and enforcing restrictions on truck traffic within neighborhoods; and providing new traffic lights, signals and signage where needed.
- Providing new or improved community facilities such as community centers, recreation facilities, libraries, schools, parks, planting strips along roadways, open spaces and public spaces.
- It may also include new playgrounds, day-care centers and cultural/education/community resource centers.

Redevelopment Plan Components Not Retained

Under Alternative #2, redevelopment funds and other redevelopment tools would not be used to support new public and/or private residential or commercial development projects, reinvestment in private properties and businesses. The specific implementation projects, programs and other

activities included under the Redevelopment Plan (the Project) that would not be retained include:

- The variety of proposed Project programs designed to increase the supply of housing, make housing more affordable, and improve existing housing stock. The Affordable Housing Program as required by state law and local ordinance would still provide for 25% of the gross tax increment funds received by the Agency to be deposited into a fund used to assist in the production and preservation of affordable housing opportunities. However, this program would not be used to create new, additional affordable housing units in the Project Area.
- Environmental improvement program that would provide Agency authority and/or funds, potentially together with other city, state and/or federal funding programs to remediate environmental hazards, hazardous materials and waste.
- Business improvement programs designed to assist and encourage private business owners to undertake property rehabilitation and redevelopment efforts, potentially including providing capital (through loans, grants or other funding mechanisms), and developing public programs to assist and support private businesses
- Nor would it include use of Redevelopment authority to augment and enhance current City development requirements on private commercial or business projects that may seek redevelopment assistance, or assist in private redevelopment projects.

13.4.3 Alternative #3: Environmental Hazard Remediation

Under Alternative #3 a Redevelopment Plan would be approved, but it would be amended to eliminate all potential implementation projects, programs and other activities other than those specifically intended to remediate environmental hazards, hazardous materials and waste. Alternative #3 would specifically include such projects as identifying, eliminating and expediting the cleanup of "brownfield" sites. Under this alternative, redevelopment would not be used as an implementation tool for directly targeted economic development, nor would it be used to support public improvements that might act as a catalyst to encourage private investment in surrounding properties. Instead, redevelopment efforts would be focused on remediation and elimination of the hazardous conditions that currently exist within the Project Area, thereby making it a more healthy and attractive location for existing and potential future residents and businesses.

Redevelopment Plan Components Retained

Under Alternative #3, only a focused subset of the Redevelopment Plan's potential implementation projects, programs and other activities would be retained. These projects and programs would include:

- Implementation of the Polanco Redevelopment Act to the full extent possible. This Act, applicable only in redevelopment areas, authorizes a redevelopment agency to take action to require the investigation and clean up of an identified release of hazardous materials in accordance with applicable state and federal laws. The Redevelopment Agency may also perform the cleanup itself with the oversight of the DTSC, the San Francisco Bay

Regional Water Quality Control Board (RWQCB) or local agency if the site owner or operator refuses to do so. If the clean up is completed in accordance with an approved clean up plan and is performed to the satisfaction of the responsible agency, the Redevelopment Agencies, developers, subsequent land owners, and lenders would receive immunity from liability for the contamination under this legislation. This act also includes cost recovery provisions to allow the Redevelopment Agency to pursue cost reimbursement from the responsible party for actions taken by the agency. Senate Bill 1684, passed in September 2002, was enacted to make this act permanent.

- Implementation of the Oakland Urban Land Redevelopment Program, a collaborative effort by the City of Oakland and other agencies charged with enforcing environmental regulations in Oakland to streamline the clean up and redevelopment of moderately contaminated sites. Redevelopment assistance would be used as part of the program to provide a consistent set of guidelines for the application of risk-based corrective actions, clarifying environmental investigation requirements, standardizing the regulatory process, and establishing Oakland-specific, risk based corrective action cleanup standards for qualifying sites. Benefits of standardizing this process include reduced investigation, remediation, and overall project costs; more accurate cost estimating; expedited regulatory approval of the corrective action plans; expedited regulatory site closure; and earlier realization of redevelopment goals.

- The Redevelopment Agency would also seek to provide existing and potential new businesses within the Project Area that handle hazardous or acutely hazardous materials with technical assistance, loans or grants intended to ensure compliance will all local, regional, state and federal laws governing such substances. These technical assistance programs are more specifically described as mitigation measures in Chapter 8: Hazards and Hazardous Materials, of this EIR.

- Additionally, the Redevelopment Plan would include programs, projects and other implementation activities specifically intended to enforce truck prohibitions in residential neighborhoods, assist in the abatement of existing hazardous building materials, and support efforts to reduce the emission of air pollutants from vehicles and stationary sources.

Redevelopment Plan Components Not Retained

Under Alternative #3, redevelopment funds and other redevelopment tools would not be used to support new public and/or private residential or commercial development projects, or reinvestment in private properties or public facilities. The specific implementation projects, programs and other activities included under the Redevelopment Plan (the Project) that would not be retained include:

- The variety of proposed Project programs designed to increase the supply of housing, make housing more affordable, and improve existing housing stock. The Affordable Housing Program as required by state law and local ordinance would still provide for 25% of the gross tax increment funds received by the Agency to be deposited into a fund used to assist in the production and preservation of affordable housing opportunities.

However, this program would not be used to create new, additional affordable housing units in the Project Area.

- Business improvement programs designed to assist and encourage private business owners to undertake property rehabilitation and redevelopment efforts, potentially including providing capital (through loans, grants or other funding mechanisms), and developing public programs to assist and support private businesses,
- Use of Redevelopment authority to augment and enhance current City development requirements on private commercial or business projects that may seek redevelopment assistance, or assist in private redevelopment projects,
- Nor would it include those potential implementation projects, programs and other activities specifically designed to alleviate existing deficiencies in many of the basic public infrastructure systems, and to improve many of the civic facilities intended to support the quality of life in West Oakland such as parks, civic centers, schools and libraries.

13.3.4 Environmental Analysis of the Alternatives

Growth Potential

As discussed above under the No Project Alternative, the proposed Redevelopment Plan is consistent with the General Plan. Given this consistency, it could be assumed that ongoing implementation of the City of Oakland General Plan would result in residential and non-residential growth and development even without redevelopment assistance.

However, it is also reasonable to assume that the physical and economic burdens caused by blighted conditions in the Project Area would continue to suppress economic development and residential property investment, and that only a portion of the growth and development projected for the area would occur. This portion of growth and development is represented, at a minimum, by the aggregate of "likely development projects" as described above. Under this "likely development" scenario, approximately 30% of the projected increase in net new housing units would be anticipated, and approximately 12% of the projected increase in net new employment opportunities would be anticipated under any of the Alternatives that do not provide direct redevelopment assistance to foster new growth and development.

Ability of Alternatives to Reduce or Avoid Significant Environmental Impacts

Full General Plan Implementation

Under the definition of any of the Project Alternatives which assumes that full implementation of the General Plan is possible without redevelopment assistance being directed toward the assistance of new growth and development, growth and development within the Project Area would be the same as projected for the proposed Project. Therefore, the potential environmental consequences associated with any of the Alternatives would be the same as identified for the Project.

Limited Implementation of the General Plan

The second definition for any of the Alternatives assumes that General Plan implementation would be limited to the amount of growth and development represented by the aggregate of "likely development projects" without redevelopment assistance being directed toward the assistance of new growth and development. Under this definition, the environmental consequences of the Alternatives would generally be comparable to those identified above under the No Project - limited General Plan implementation alternative, including the following:

- Without new redevelopment activity, the General Plan's anticipated transition of currently incompatible land uses would not occur and existing incompatible land uses would generally remain.
- Short-term emissions associated with future construction activity would be substantially reduced as compared to the Project.
- Growth and development in the Project Area would not result in a disproportionate increase of residents located in proximity to pollutant emissions and odor sources.
- Short-term increase in noise levels associated with future construction activity would be substantially reduced as compared to the Project.
- The number of new uses that might be subject to noise levels considered conditionally acceptable or normally unacceptable would be reduced as compared to the Project.
- The overall demands on water and sewer infrastructure would be reduced as compared to the Project, but individual projects may require localized improvements to water delivery or wastewater collection systems.

Environmental Benefits of the Alternatives

Under each of the Project Alternatives a redevelopment plan would be approved, and the potential environmental benefits of redevelopment in assisting with alleviation of adverse environmental conditions (blight) could potentially be utilized, depending on the availability of funding. Such benefits include:

- the powers and authorities under the Polanco Act to investigate and cause remediation of hazardous materials;
- the ability to enter into legal agreements that could facilitate removal and/or relocation of incompatible land uses,
- the generation of tax increment funds to be used in the production and preservation of affordable housing opportunities; and
- redevelopment funding and other types of redevelopment assistance for needed public infrastructure and service improvements.

13.4.5 Conclusions Regarding the Project Alternatives

Funding Capabilities

The Redevelopment Agency's ability to fund any of these potential environmental benefits, or any other potential implementation projects, programs or activities of the Redevelopment Plan is dependent upon the generation of property tax increment. Under state Proposition 13, property taxes rates are capped, with limited exceptions, at one percent of full cash value at the time of acquisition. Property is re-assessed at market value for tax purposes only when it changes ownership, and increases in value are limited to an annual inflation factor of no more than two percent. Therefore, the generation of tax increment, which is used to fund the Redevelopment Plan's implementation activities, is only "triggered' when property changes ownership. Programs such as blight removal, façade improvements, residential property enhancements and other community enhancements would potentially increase the value of property, but this value would not translate into tax increment until properties are actually sold. A portion of tax increment could be expected to accrue as a result of first-time home buyer and renter-to-owner assistance programs, but the majority of tax increment as projected under the Project would be as a result of property sales intended to enable new growth and development.

Under any of the Project Alternatives whereby redevelopment projects, programs and other implementation activities would not be targeted as a catalyst for new growth and development, the generation of tax increment would be substantially limited. With limited tax increment generation, the Redevelopment Agency's ability to implement the range of potential projects, programs and other activities, including those that result in environmental benefits, would be similarly limited.

Ability to Achieve Project Objectives

None of the Project Alternatives are capable of accomplishing all of the basic Project objectives. These alternatives would limit the Redevelopment Agency's participation in such programs as assisting construction of new housing opportunities and expanding affordable housing. Redevelopment would not be used in support of attracting new businesses, promoting economic development or increasing employment opportunities. Additionally, based on the discussion above, this alternative may not be capable of generating the tax increment revenues necessary to support the full range of projects, programs and other potential implementation activities that are identified as objectives of the Project.

Although the Project Alternatives may reduce certain significant environmental impacts associated with residential growth and development as compared to the Project, they would not assist the City in meeting its demand for new housing opportunities, nor would they assist in meeting the City and the community's goals for economic development. To the extent that housing demand and economic development is not met within the City via infill development and reuse, it is likely that this demand will then stimulate the need for additional housing and economic development elsewhere in the region. To the extent that this 'displaced' development may be located in "greenfield" developments elsewhere in the region, its resulting environmental impacts on traffic, air quality and public services and infrastructure would be equal to or greater than the impacts of the proposed Project.

13.5 Environmentally Superior Alternative

The alternatives examined in this EIR consist of alternative strategies by which the resources and powers of the Redevelopment Agency may be used to implement varying degrees of redevelopment objectives. As indicated under the No Project Alternative, the growth and development that is projected to occur within the Project Area could be realized over time with or without the Project or any of the alternatives. To the extent that the Project or any alternative redevelopment plan facilitates or assists in this growth and development, then the resulting environmental consequences can be attributed to redevelopment.

The No Project Alternative would not facilitate or provide any assistance to future growth and development within the Project Area, and thus would result in the least environmental impacts. However, the No Project Alternative would also be incapable of achieving any of the Project sponsor's objectives of revitalizing the Project Area's economy, or alleviating existing environmental problems contributing to the blighted conditions within the Project Area.

In the absence of the No Project Alternative, any of the Project Alternatives would direct less of the Redevelopment Agency's resources toward facilitating or assisting in Project Area growth and development as compared to the Project. However, these alternatives would limit the Redevelopment Agency's efforts toward elimination of all forms of blight that contribute to environmental degradation. These alternatives may not be capable of generating sufficient tax increment revenues necessary to support the full range of projects, programs and other potential implementation activities that are identified as objectives of the Project. Because each of the Project Alternatives would limit to some degree the extent to which redevelopment is used to alleviate blighted conditions that exist within the Project Area, each of these Project Alternative would result in only partial clearing of blighted conditions, and environmental degradation would remain.

The proposed Project (implementation of the Redevelopment Plan as proposed) is the only alternative that addresses alleviation of the full range of blighted conditions that exist within the Project Area. These blighted conditions include environmental hazards and toxic materials, public infrastructure and service deficiencies, and land use incompatibilities. Therefore, the proposed Project, including all mitigation measures recommended in this EIR, represents the environmentally superior alternative.

14

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