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Metropolitan Transportation Authority

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Metro

PLANNING AND PROGRAMMING COMMITTEE
SEPTEMBER 14, 2011

SUBJECT: CRENSHAW/LAX TRANSIT CORRIDOR

ACTION: APPROVE FINAL ENVIRONMENTAL IMPACT STATEMENT/FINAL ENVIRONMENTAL IMPACT REPORT

RECOMMENDATION

A. Approve the Project Definition, which is based on the Locally Preferred Alternative (LPA) of an 8.5 mile Light Rail project from Crenshaw/Exposition to Metro Green Line Aviation station with 6 stations that was previously approved by the Board in December 2009 and incorporate several changes including:
   1. La Brea Avenue Grade Separation;
   2. Below-grade segment from Exposition Boulevard to 39th Street;
   3. Partially Covered Trench Adjacent to LAX as an interim condition;
   4. Maintenance Facility near LAX (Arbor Vitae/Bellanca)

   Attachment A shows the project map.

B. Certify the Crenshaw/LAX Transit Corridor Final Environmental Impact Statement/Final Environmental Impact Report (FEIS/FEIR); Attachment B contains the Executive Summary. The full report will be available upon request or at: www.metro.net/crenshaw. This action is contingent upon the Federal Transit Administration (FTA) approving the document for public availability to satisfy requirements of both the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA);

C. Authorize the Chief Executive Officer (CEO) to file a Notice of Determination (Attachment C) with the Los Angeles County Clerk and State of California Clearinghouse; and

D. Adopt the:
   1. Finding of Fact and Statement of Overriding Considerations in accordance with the California Environmental Quality Act (Attachment D);
   2. Mitigation Monitoring & Reporting Plan (MMRP) (Attachment E).

ISSUE

The FEIS/FEIR defines the project. The Board must now approve the project as defined, certify the FEIS/FEIR, and adopt the Finding of Fact and Statement of Overriding Considerations, and the MMRP. The Crenshaw/LAX Transit Corridor project is a Measure R project and is contained in the Long Range Transportation Plan (LRTP) and the Southern California Association of Governments Regional Transportation Plan.

DISCUSSION

CEQA requires that we balance, as applicable, the economic legal, social, technological, and other benefits of the project against its unavoidable impacts when determining whether to approve the project. CEQA Guidelines Section 1509(a) state that if the specific economic, legal, social, technological or other benefits of the project outweigh the unavoidable adverse effects, those effects maybe considered acceptable. The Board must find that notwithstanding the disclosure of these significant and unavoidable impacts, there are specific overriding economic, legal, social, technological, and other reasons for approving this project and that these reasons serve to override and outweigh the project's significant unavoidable effects. Thus, the adverse effects are considered acceptable. CEQA requires us to support, in writing the specific reasons for considering a project acceptable when significant impacts are not avoided or substantially lessened.

Section 21086.6 of the California Public Resources code requires that public agencies approving a project with an EIR adopt a MMRP. The purpose of the MMRP is to ensure that the mitigation measures identified in the FEIR to mitigate the potentially significant environmental effects of the project are, in fact, properly carried out. We are responsible for assuring full compliance with the provisions of the MMRP.

A comprehensive community outreach program was conducted throughout the environmental planning phase of the project. In addition to many rounds of public meetings and workshops, tours, and more than sixty individual project briefings, we conducted four formal Public Hearings following the release of the Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR). Following the release of the Supplemental DEIS/DEIR addressing the maintenance facility location and Section 4(f) parkland and historic resources analysis, we conducted one Public Open House/Public Meeting and one Public Open House/Public Hearing. Copies of all public testimony and comments along with our responses have been included in the FEIS/FEIR. In addition, following the release of the FEIS/FEIR, notices were sent to those who commented on the DEIS/DEIR, residents and businesses along the project route and advertisements were placed in newspapers with general circulation in the project corridor to inform them of the availability of the document.

FEIS/FEIR Design Options

The FEIS/FEIR carried forward the Centinela below-grade grade separation (Design Option 3), Crenshaw/Vernon Station (below grade – Design Option 5), a below-grade approach to the Exposition Line between Exposition Boulevard and 39th Street (Design Option 6), and the Aviation/Manchester optional station as options to the LPA.

Project Definition

Various refinements were made to the initial LPA during the Advanced Conceptual Engineering (ACE) and initial Preliminary Engineering (PE) phases. These refinements were required due to engineering constraints, potentially significant environmental effects, and financial feasibility and are recommended for adoption as part of the project in the FEIS/FEIR.

Four of the major refinements to the LPA for the Project Definition are described below:

1. La Brea Avenue Grade Separation

The Board adopted LPA defined an elevated structure and aerial station on the west side of La Brea Avenue for the Florence/La Brea station. During ACE and initial PE, preliminary geotechnical investigations indicated traces of the Newport-Inglewood earthquake fault crossing at this location. To address the seismic condition and comply with the Alquist Priolo Fault Zoning Act which requires avoidance of active faults at facilities where life safety may be an issue, a below-grade crossing was recommended and the location of the station was moved approximately 700 feet further east (east of Market Street). These refinements provide for greater safety, compliance with Alquist Priolo Fault Zoning Act, and an easier recovery of transit service in case of seismic activity. In addition, the change from elevated to below grade at La Brea Avenue results in at-grade crossings at Ivy and Eucalyptus Streets. The LPA included grade-separated crossings at Ivy and Eucalyptus Streets required by the transition from the elevated alignment at La Brea Avenue back to grade. As a result of the location refinements, crossing at these two street locations did not require grade separation per the MTA Grade Crossing Safety Policy for Light Rail Transit.

2. Below-grade Segment from Exposition Boulevard to 39th Street (Design Option 6)

The Crenshaw/Exposition station had an at-grade alignment and station configuration as the base condition, as well as a below-grade design option (Design Option 6) which both underwent further analysis during the ACE and initial PE phases. Extensive evaluations were completed on the at-grade alignment and station configuration at Exposition Boulevard. All analyzed at-grade configurations were deemed to be infeasible due to a combination of physical and extensive right-of-way constraints with significant traffic and land use impacts. Consultations with staff from the California Public Utilities Commission (CPUC), the Community Redevelopment Agency of Los Angeles (CRA – LA), and the Los Angeles Department of Transportation (LADOT)

indicate that an at-grade approach would not be acceptable to these agencies. For these reasons, the below-grade configuration is recommended between Exposition Boulevard and 39th Street which, when combined with the previously adopted below grade section, results in a continuous below-grade segment between Exposition Boulevard and 48th Street.

3. Partially Covered Trench Adjacent to LAX as an interim condition

Adjacent to the LAX South Runway Complex, the alignment follows the Metro-owned Harbor Subdivision right-of-way, but lies within the designated Runway Protection Zone (RPZ) of LAX. During the initial PE phase of the project, we proposed an alternative configuration design of a depressed and partially covered trench adjacent to the LAX south runways with the addition of a cable barrier net over the open section between the runways and the addition of a concrete parapet wall and fence around the open area. The extensive investigations and discussions with the Federal Aviation Administration (FAA) and Los Angeles World Airports (LAWA) found that they will allow the partially covered trench configuration as an interim condition to meet the budgetary requirements of the Crenshaw/LAX project. The design of a partially covered trench will include provisions to allow future covering of additional open sections. We are working to secure formal permit approval for the partially covered configuration from FAA. We also anticipate that the Record of Decision on the project will allow for the construction of the partially covered LAX trench and the fully covered LAX trench.

4. Maintenance Facility near LAX (Arbor Vitae/Bellanca)

With the Board adoption of the LPA, the two previously identified locations for the project's maintenance facility were removed from further consideration. Since then, we explored many alternative sites and completed an environmental review through a Supplemental DEIS/Recirculated DEIR of four potential maintenance facility locations. The Board at its April 2011 meeting adopted the Arbor Vitae/Bellanca site (near LAX) as the LPA Maintenance Facility Site. The maintenance facility site is approximately 17.6 acres and is located in the City of Los Angeles. It meets the medium and long-tem requirements of the Crenshaw/LAX line, the Metro Green Line, South Bay Metro Green Line Extension and Green Line to LAX projects. At its August 2011 meeting, the Board approved the cost allocation to each respective transit project based upon the number of cars required by each line in 2035.

<u>Crenshaw/Vernon Station (Design Option 5)</u>

A station at Crenshaw/Vernon which is approximately 0.5 to 0.6 miles south of the Crenshaw/Martin Luther King Jr. Station was included and fully analyzed in the environmental review and a design option to the Project, per Board direction with the adoption of the LPA. Environmental impacts of this design option are declared and considered in the FEIS/FEIR. At its May 2011 meeting, the Board directed releasing the request for proposal for design/build contracts with bid options on: 1) Crenshaw/Vernon underground station, 2) an unfinished station box at

Crenshaw/Vernon that would allow a future subway station to be completed, or 3) at-grade 48th Street station. Recommendation to construct this station is contingent upon the construction bids coming in within the project funding. Therefore, this decision resulted in no immediate change to the Project Definition.

Project Cost

The 2009 LRTP provides $1.715 billion (Year of Expenditure - YOE). The estimated project cost is approximately $48.8 to $100 million (YOE) over the budget defined by our LRTP. As we continue with the PE phase including value engineering, evaluation of contract strategies and other project refinements, the project cost will be further refined. Further, we will follow the Board adopted Unified Cost Management Process and Policy as we strive to align the project cost and available funding. The Board will be asked later this year to adopt a life-of-project budget. Per the Unified Cost Management Process and Policy, the project will not move forward unless the project costs are in alignment with the $1.715 billion allocated in the LRTP. We will follow the Board's May 26th direction that the Crenshaw/Vernon (Leimert Park Village) station may be built, if the construction bids for the base project and this design option are within the $1.715 billion funding.

FINANCIAL IMPACT

Funding of $110,000 to complete the FEIS/FEIR is included in the FY 12 budget in cost center 4330 (South Bay Area Team), project 465512 (Crenshaw/LAX Transit Corridor Project), and account 50316 (Professional Services). Funding of $38.35 million for PE is included in the FY 12 budget in cost center 8510 (Construction Project Management), project 865512 (Crenshaw/LAX Transit Corridor Project), and account 50316 (Professional Services). Since this is a multi-year project, the Executive Director of Transit Project Delivery and Project Manager will be responsible for budgeting future year's costs.

ALTERNATIVES CONSIDERED

The Board could defer or not approve the Project Definition, certify the FEIS/FEIR or adopt the Findings and Statement of Overriding Considerations, as well as the MMRP. However, these actions would delay the project schedule which calls for issuance of procurement documents in late 2011 and award of a design-build construction contract in late 2012. Such a delay could add cost to the project.

NEXT STEPS

Upon Board approval, we will file the Notice of Determination for the Crenshaw/LAX Transit Corridor Project with the Los Angeles County Clerk and State of California Clearinghouse and will work with the FTA to issue a Record of Decision. We will continue with PE and value engineering and return in Fall 2011 for the Board's consideration of adopting life-of-project budget.

ATTACHMENTS

A. Project Map
B. Crenshaw/LAX Transit Corridor FEIS/FEIR Executive Summary
C. Notice of Determination
D. Findings of Fact and Statement of Overriding Considerations
E. Mitigation Monitoring Plan

Prepared by: Roderick Diaz, Director, Systemwide Planning/Transit Corridors
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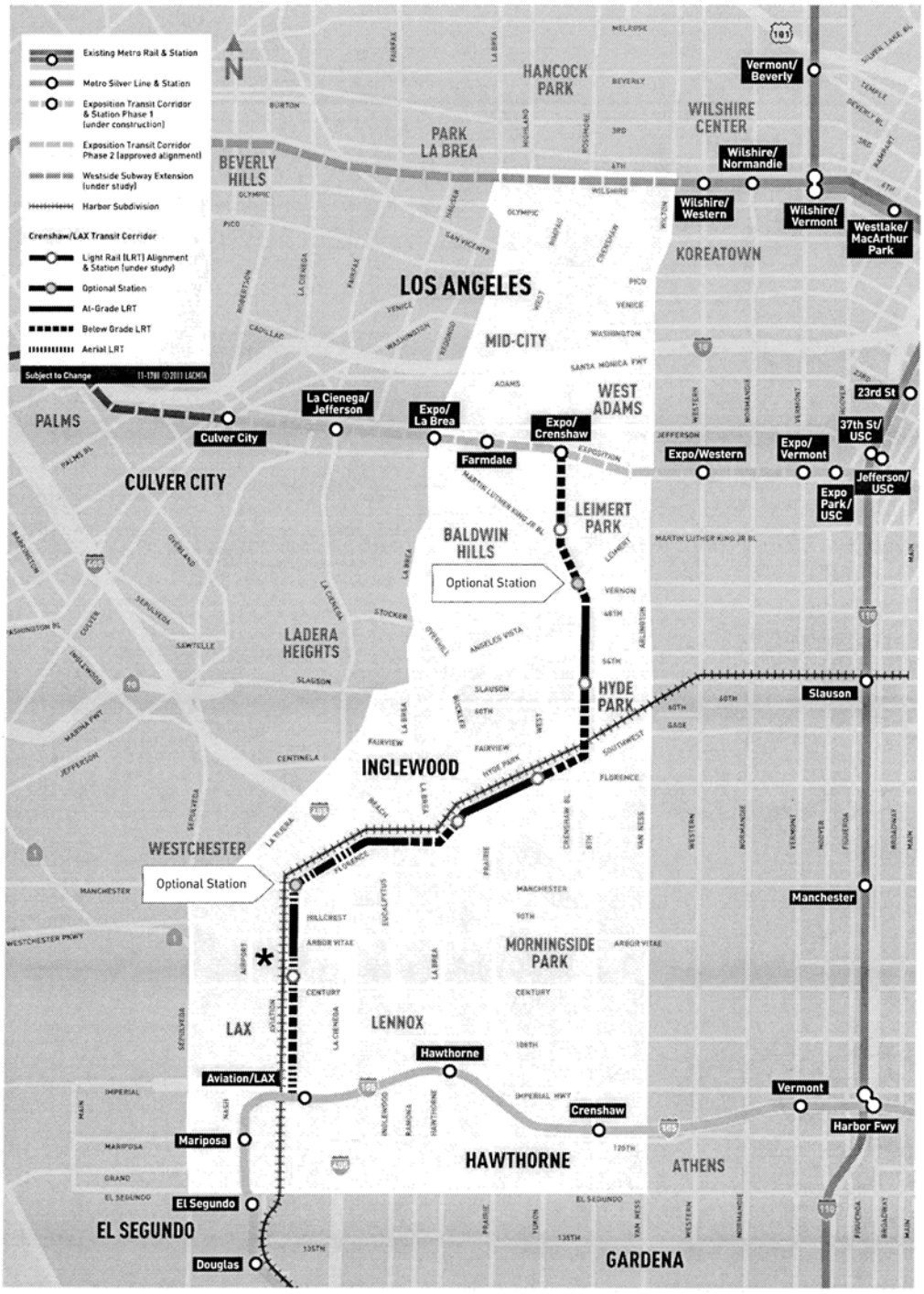
Arthur T. Leahy
Chief Executive Officer

ATTACHMENT A

Project Map



* Maintenance Facility

ATTACHMENT B

FEIS/FEIR EXECUTIVE SUMMARY

Crenshaw/LAX Transit Corridor Project

Final Environmental Impact Report/ Final Environmental Impact Statement

Metro

EXECUTIVE SUMMARY

August 2011

State Clearing House No. 2007091148

U.S. Department of Transportation
Federal Transit Administration

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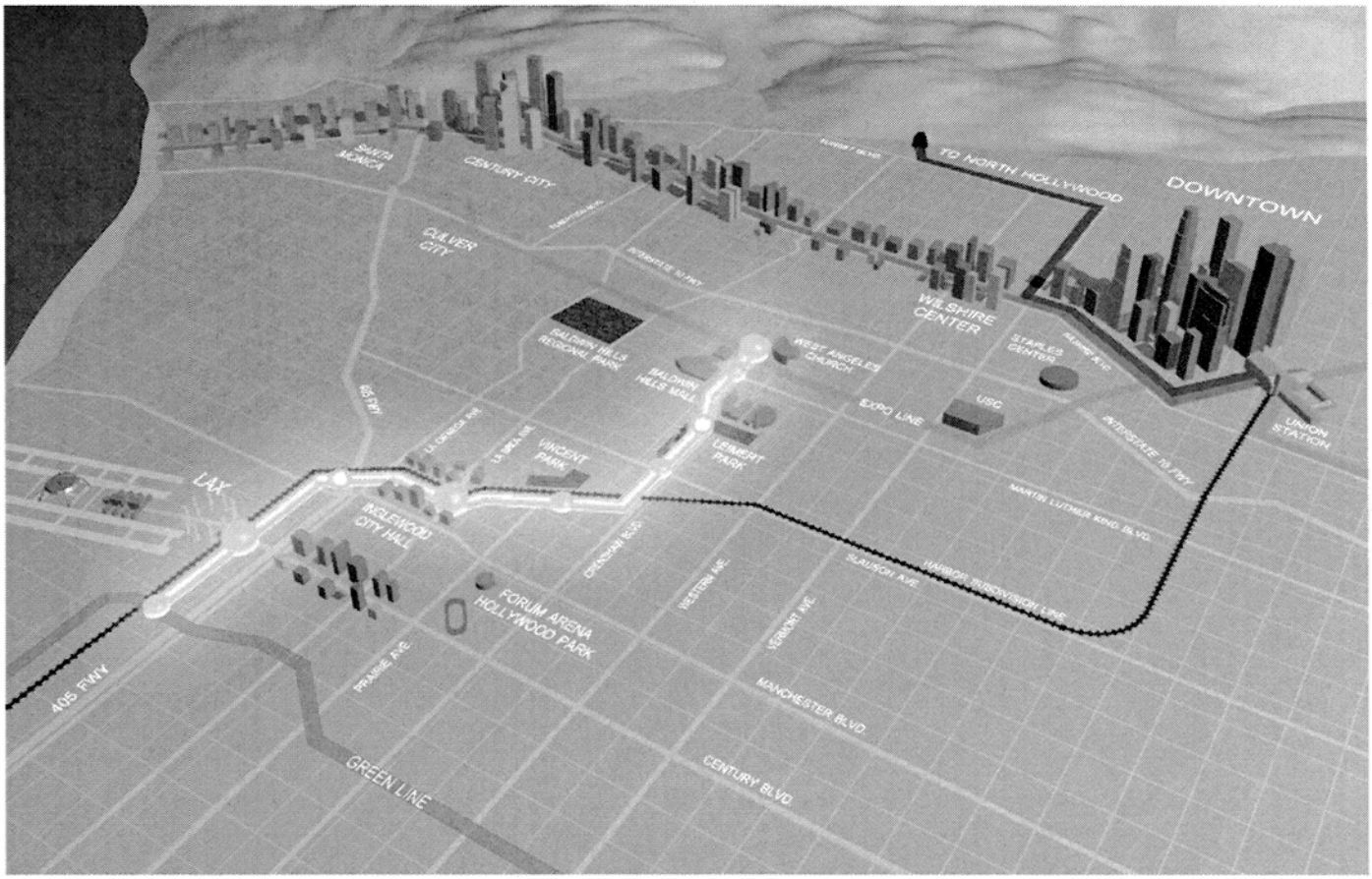


Crenshaw/LAX Transit Corridor As Part ot the Regional Transportation System.

ES.1 Introduction

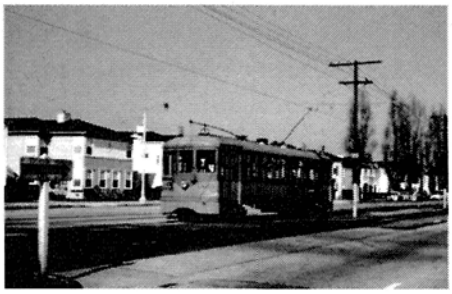
The Crenshaw/LAX Transit Corridor, a heavily traveled north-south oriented urban corridor in Los Angeles County, California, is being considered for transit improvements by the Los Angeles County Metropolitan Transportation Authority (Metro) in cooperation with the Federal Transit Administration (FTA). The Federal Aviation Administration (FAA) is also a cooperating agency for the project with expertise in aviation matters due to the project's proximity to LAX. These agencies have initiated an environmental review of proposed transit improvements in the corridor and based on the comments received, the conceptual engineering activities, additional technical studies, and extensive community outreach program, the Metro Board of Directors adopted the Light Rail Transit (LRT) Alternative as the Locally Preferred Alternative (LPA). For purposes of the environmental review, Metro is serving as Lead Agency under the provisions of the California Environmental Quality Act (CEQA) and the FTA is Lead Agency as required by the National Environmental Policy Act (NEPA). The environmental review culminates in the preparation of this Final Environmental Impact Statement (FEIS) to satisfy Federal requirements and a Final Environmental Impact Report (FEIR) to satisfy State requirements. This summary highlights the planning and review process and comparative evaluation of the LPA and design options for the Crenshaw/LAX Transit Corridor Project that will be considered for approval.

The National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require an environmental review of the potential impacts resulting from the implementation of a proposed action or project prior to approval of that action or project.

Intended Use of this Environmental Document

This document describes the existing conditions and environmental setting in the Crenshaw/LAX Transit Corridor. The environmental review process has provided the public with an opportunity to review and comment on the alternatives and the environmental analysis presented in the Draft Environmental Impact Statement (DEIS)/Draft Environmental Impact Report (DEIR). This FEIS/FEIR evaluates the Locally Preferred Alternative (LPA) against the existing conditions under CEQA and future conditions without the project under NEPA (No Build Alternative). Where appropriate, mitigation measures are identified to reduce potentially adverse environmental effects that may result from implementation of the proposed project.

The FEIS/FEIR does not make recommendations regarding the approval or denial of the Crenshaw/LAX Transit Corridor Project. This FEIS/FEIR is intended as a disclosure document, to inform public agency decision-makers and the public of the environmental effects of the LPA and design options that remain under consideration. Metro and the FTA shall consider the information included in this FEIS/FEIR, along with other information which may be presented to the agency, prior to the adoption of the project. Other agencies, such as the California Department of Transportation, and the Cities of Los Angeles, Inglewood, Hawthorne, and El Segundo,and the County of Los Angeles, have also been involved in reviewing the project and participate on the Technical Advisory Committee (TAC). On the Federal level, agencies include the Advisory Council on Historic Preservation, Federal Aviation Administration, Federal Railroad Administration, the Occupational Safety and Health Administration, and the Environmental Protection Agency.



View of the Yellow Car Line 5, which operated in the medians Crenshaw Boulevard and Leimert Avenue in the 1950's, heading south on Leimert Avenue towards Crenshaw Boulevard.

Location of the Crenshaw/LAX Transit Corridor

The Crenshaw /LAX Transit Corridor study area is generally a north-south corridor that extends approximately ten miles in length through much of Central Los Angeles. The study area includes approximately 33 square miles and portions of five jurisdictions: the Cities of Los Angeles, Inglewood, Hawthorne, El Segundo, and portions of unincorporated Los Angeles County. The study area is generally defined as the area extending north to Wilshire Boulevard and the Park Mile area of Los Angeles; east to Arlington Avenue; south to El Segundo Boulevard and the downtown Hawthorne area; and west to Sepulveda Boulevard, La Tijera Boulevard, and La Brea Avenue. Three major interstate highways traverse the study area, including the Santa Monica Freeway (I-10) and Glenn Anderson Freeway (I-105), running east-west and the

View of the Crenshaw Boulevard looking north from the Hyde Park area.

San Diego Freeway (I-405) which runs north-south. The Harbor Freeway (I-110) parallels the corridor, running north-south immediately to the east of the study area.

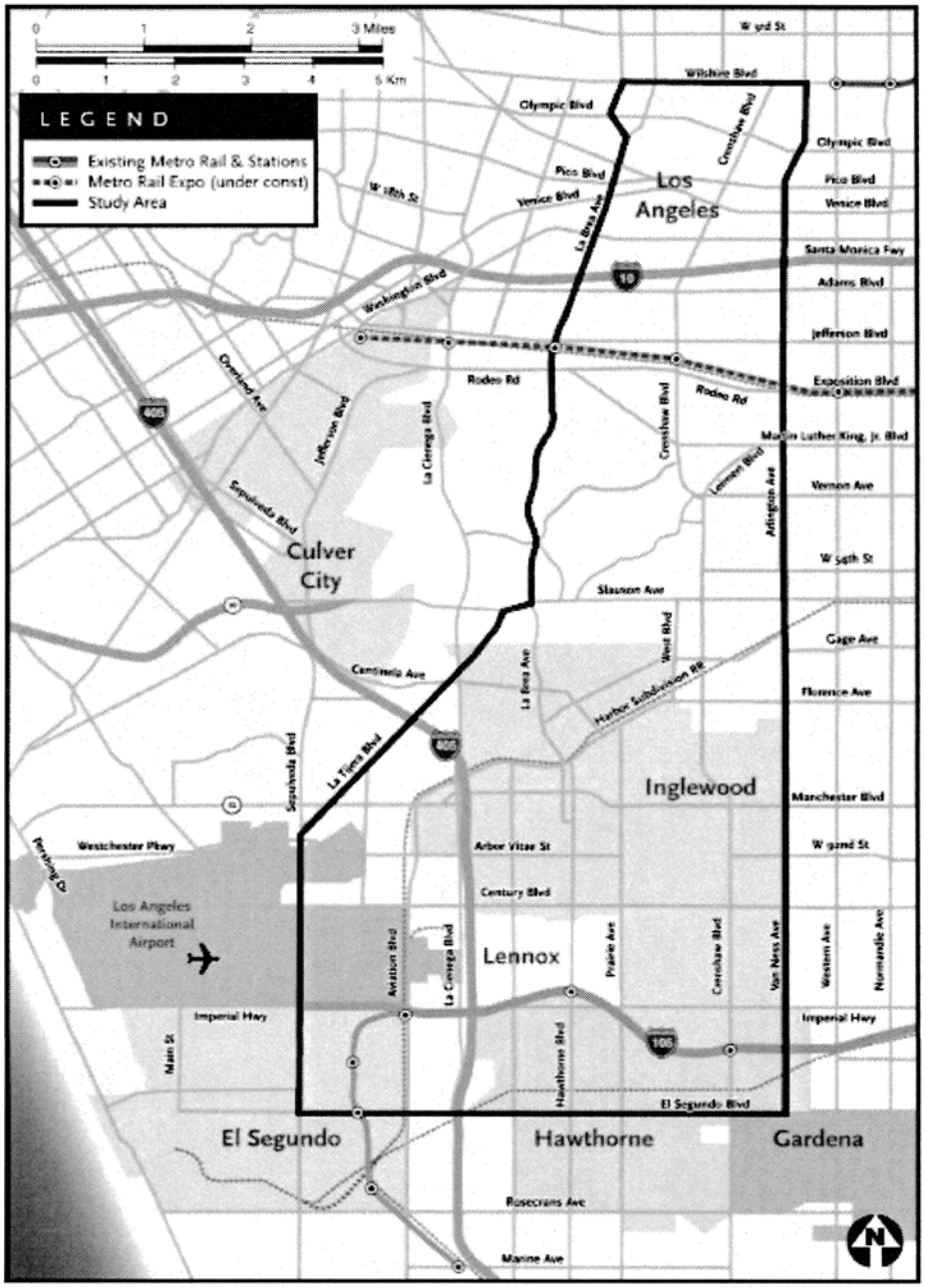
Project Elements Under Consideration and Analyzed in the FEIS/FEIR

LPA. Consideration of the project is based upon a Locally Preferred Alternative, which is described below.

Route. From a southern terminus at the Metro Green Line, the alignment would follow the Harbor Subdivision Railroad right-of-way, adjacent to Aviation Boulevard/Florence Avenue and continue northeast to Crenshaw Boulevard where it would travel north within the middle of the Crenshaw Boulevard right-if-way to the Exposition/Crenshaw Station, adjacent to the Metro Exposition Line currently under construction. The length of the route of the proposed project is 8.5 miles, and the length of the LRT service is 12 miles since the proposed service operates over both new infrastructure and existing infrastructure (the existing Metro Green Line).

Stations. Stations are located at: Aviation/Century (aerial), Florence/La Brea (at grade), Florence/West (at grade), Crenshaw/Slauson (at grade), Crenshaw/Martin Luther King Jr. (below grade), and Crenshaw/Exposition(below grade)

Grade Separations. Grade separations include the following:



The Crenshaw Corridor includes five jurisdictions and covers approximately 33 square miles.

- Adjacent to the LAX south runways (fully-covered below-grade trench, as approved by FAA as the ultimate build condition)
- Aerial across Century Boulevard
- Aerial across Manchester Avenue
- Aerial across La Cienega Boulevard/I-405
- Below grade across La Brea Avenue
- Below grade Between Victoria Avenue and 60th Street

- Below grade between 48th Street and Exposition Boulevard

With regard to the separation adjacent to the LAX south runways, the FAA requires and Metro concurs that ultimately a 1,600 foot segment covering the rail trench alignment crossing through the central portion of the LAX runway protection zones (RPZ) will be built by Metro in order to meet FAA airport design standards. The RPZ's function is to enhance the protection of people and property on the ground. The FAA has agreed to the transit alignment, but with conditions that the transit corridor must be below grade and covered. The FAA has also agreed to allow a Partially-Covered LAX Trench Option as a temporary initial development option in order to meet Metro budgetary constraints.

The environmental analysis in this environmental document evaluated the potential for environmental impacts for the LPA fully covered below-grade trench and also the partially-covered LAX Trench Option, and determined no environmental impacts resulting from either of the designs. Although the Metro Board may initially select the Partially-Covered LAX Trench Option in the Project Definition, Metro has agreed to completely cover a 1,600 foot portion of the trench as required by FAA to meet airport design standards, when future Metro funding becomes available.

Park and Ride Facilities. Park-and-ride facilities would be located at the Florence/La Brea, Florence/West, and Crenshaw/Exposition Stations.

Maintenance Facility. A maintenance facility would be located at Arbor Vitae/Bellanca (Site #14) - This 17.6-acre site is located in the City of Los Angeles.

In addition to the LPA, the following two shorter segment variations, called Minimum Operable Segments (MOSs) and five design options to the LPA are also evaluated in the FEIS/FEIR:

MOSs. The following shorter segment variations of the LPA are evaluated:

- **MOS-King** - 8-mile segment extending from the Metro Green Line (as the southern terminus) in the south to the Crenshaw/King Station in the north.

- **MOS-Century** - 7.4-mile segment extending from the Aviation/Century Station in the south to the Crenshaw/Exposition Station in the north.

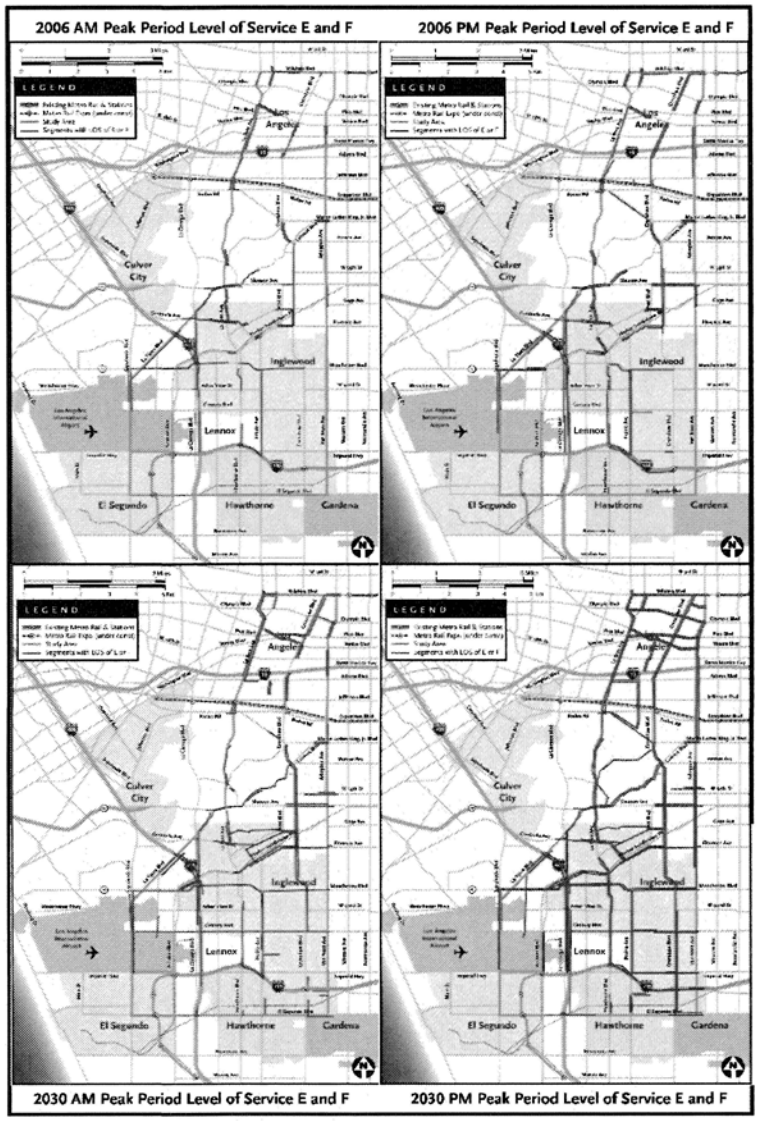
Design Options. The following design options are evaluated in addition to the LPA:

- Partially-Covered LAX Trench Option - an interim solution to the fully covered trench until additional Metro funding can fully cover the segment adjacent to the LAX south runways

- Optional Aviation/Manchester Station - additional aerial or at-grade station
- Cut-and-cover crossing at Centinela - replaces at grade configuration
- Optional Below Grade Crenshaw/Vernon Station - additional station in Leimert Park
- Alternate Southwest Portal at Crenshaw/King Station Option – replaces portal on southeast corner of the Crenshaw/Boulevard/Martin Luther King Jr. Boulevard intersection

At the time of the publication of this FEIS/FEIR, the proposed project is based on the LPA and incorporates the Partially-Covered LAX Trench design option. Since several other design options and MOSs are analyzed, the Metro Board has the option to adopt a Project Definition that includes a combination of the revised LPA and any of the other elements (MOSs and design options). For example, the Metro Board has already directed that the Crenshaw/Vernon station option be continued as a design option for purposes of procuring construction bids. The Federal Record of Decision will be based upon the ultimately adopted Project Definition by the Metro Board.

Who is on the Metro Board? Metro is governed by a 13-member Board of Directors comprised of: five Los Angeles County Supervisors; the Mayor of Los Angeles; three Los Angeles mayor-appointed members; four city council members representing the other 87 cities in Los Angeles County; and the Governor of California appoints one non-voting member.



The number of street segments in the corridor that will be overloaded and congested will double between today and the year 2030.

ES.2 Purpose and Need

Previous Planning Studies

In 1967, the Crenshaw/LAX Transit Corridor was initially included in the region's first modern rail system plan. Over the past 40 years, Metro and its predecessor agencies - the Southern California Rapid Transit District (SCRTD) and the Los Angeles County Transportation Commission (LACTC) have undertaken numerous plans and studies that documented the lack of connectivity and mobility and the need for transportation improvements in the Crenshaw/LAX Transit Corridor. Studies concluded that transportation within and from the Crenshaw/LAX Transit Corridor was constrained, congested, and urgently in need of system improvements.

Metro has completed three transportation studies of the Crenshaw/LAX Transit Corridor over the past 13 years alone. In 1994, the Crenshaw-Prairie Corridor Preliminary Planning Study clearly identified the need for high-capacity transit system improvements. These options were studied further in December 2000, with the Crenshaw-Prairie Corridor Route Refinement Study. This report identified the need for viable transportation alternatives for the Crenshaw/LAX Transit Corridor. In 2003, the Crenshaw-Prairie Corridor Major Investment Study (MIS) was completed to assist decision-makers in evaluating the most effective solution, or phasing of solutions, to the transportation challenges identified in the Crenshaw/LAX Transit Corridor while achieving local goals and objectives. The MIS provided the foundation for the inclusion of the Crenshaw/LAX Transit Corridor into the Metro Long Range Plan. A description of each of these three previous studies is presented in Section 1.0 Purpose and Need of the FEIS/FEIR.

View of Interstate 405 near Hughes Parkway. I-405 is the only north-south high capacity transportation facility within the corridor and it is congested for many hours of the day.

Need for the Project

This section describes the need for the Crenshaw/LAX Transit Corridor. The following factors highlight the need for transit improvements such as the proposed project. Each of these factors is briefly explained and described in this section.

- Peak Period Congestion
- Limited Transportation Accessibility
- Poor Connections with Regional Transportation
- Limited Access to Services Outside of the Corridor
- The Corridor's Economic Future Is Dependent on Improved Accessibility
- High Transit Demand, Transit Dependency, and Transit Operation Challenges
- Benefit to the Environment and Improved Sustainability for Corridor Communities

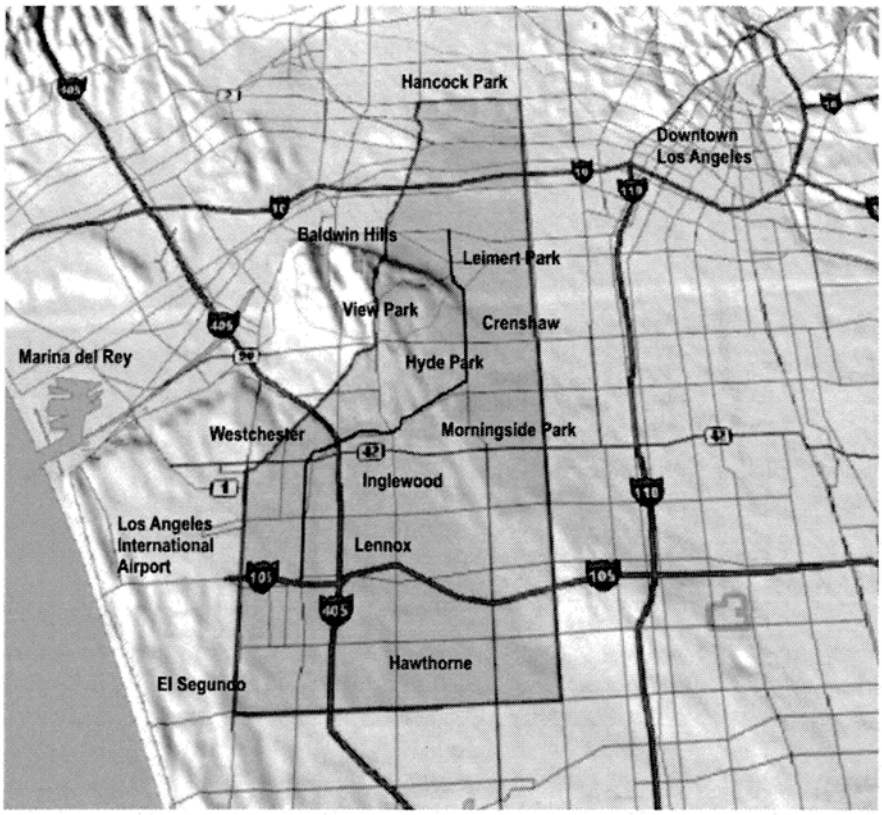
Travel demand forecasts prepared by the Southern California Association of Governments (SCAG) and Metro over the past decade have identified the need for transit improvements throughout the Southern California Region, particularly in Los Angeles County, to meet the mandates of the federal Clean Air Act and address the increasing mobility needs of the region.

The population and employment densities of the study area are approximately four times that of Los Angeles County based on the Southern California Association of Governments (SCAG) 2006 and projected 2030 data.

The 2008 SCAG Regional Transportation Plan (RTP) determined that travel conditions in the Crenshaw/LAX Transit Corridor will worsen by 2030 and the area will bot meet regional objectives for transportation mobility, accessibility, reliability, or safety without additional transportation improvements. Subsequent travel demand forecasting conducted for the current update of the Metro Long Range Transportation Plan has confirmed the continuing need for mobility improvements in the corridor. Existing Transportation facilities and services within the Crenshaw/LAX Transit Corridor include arterial streets, freeways, bus routes, and rail lines. The topography and street grid of the corridor present unique challenges to existing transportatino facilities and services. There are few north-south arterials in the corridor that cross the western portion of the Crenshaw/LAX Transit Corridor. As a result of this constrained network, pressure is placed on nearby north-south arterials such as La Cienega Boulevard and La Brea Avenue.

Peak Period Congestion

Los Angeles has the distinction of being the most congested urban area in the country, according to the most recent annual survey of traffic congestion levels

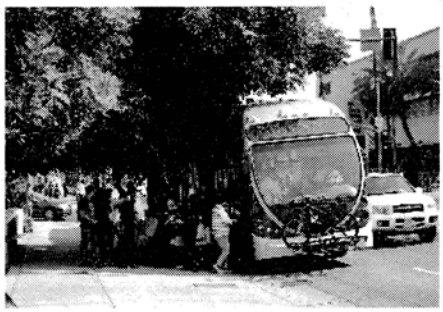


The Baldwin Hills are a significant topographic constraint in the Crenshaw Corridor. The feature limits the continuity of the transportation network in both north-south and east-west directions increasing the importance of efficient traffic flow along Crenshaw Boulevard.

The Crenshaw Corridor is largely a residential community. Access to regional transportation linking to jobs, services and education is key. Pictured here is a morning rush hour view of Crenshaw Boulevard near the entrance to the I-10 which connects the corridor to Downtown and West Los Angeles.

conducted by the Texas Transportation Institute. Current freeway and surface arterial facilities cannot be sufficiently expanded to handle the forecasted travel demand. The number of roadway segments within the Crenshaw/LAX Transit Corridor that are congested, that is locations where traffic volumes consume more than 90 percent of the street capacity, is expected to more than double between 2006 and 2030 in both the AM peak travel period, 7:00 a.m. to 9:00 a.m. and the PM peak travel period, 3:00 p.m. to 7:00 p.m.

Local Roadways. By 2030, congestion is expected for Crenshaw Boulevard north of Manchester Boulevard to Wilshire Boulevard, the northern terminus of the study area. In addition, La Brea Avenue, Hawthorne Boulevard and Prairie Avenue, between Manchester Boulevard and the I-105 would continue to experience heavy traffic conditions and congestion during the morning peak period. The increased traffic congestion would result in lower peak period travel speeds along these corridors, generally below 30 miles-per-hour with speeds below 20 miles-per-hour along some sections of Crenshaw Boulevard.



Existing Rapid Bus service along Crenshaw Boulevard (lines 710 and 740) has been well received.

Freeways. The I-10, I-105 and I-405 experience high levels of congestion, particularly during peak commute periods. The I-105 and I-405 also experience heavy traffic throughout the day as they provide regional access to West Los Angeles and Los Angeles International Airport (LAX). Based on the 2006 Caltrans traffic counts, the I-105 and I-405 carry an annual average daily traffic (AADT) volume of approximately 247,000 and 305,000 vehicles per day near LAX, respectively. The AADT for the I-10 within the study area is also high, at approximately 301,000 vehicles per day. The I-10 has peak period congestion levels rated at F3, meaning that the freeway operates at Level of Service (LOS) "F" conditions for more than three hours in each peak travel period (Caltrans, 1998). Between 2006 and 2030, peak period traffic volumes on the freeway segments within the corridor are expected to increase by 20 to 90 percent. Based on traffic forecasts for the AM peak period, traffic volumes on the I-10 near Crenshaw Boulevard are anticipated to increase by more than 50 percent, from approximately 31,000 vehicles to 48,000 vehicles. During the same peak period, traffic volumes on the I-405 are forecasted to grow 40 to 50 percent, from approximately 30,000 vehicles to 43,000 vehicles. On the I-105, AM peak period traffic volumes are expected to increase by approximately 20 percent or more, with up to 90 percent increases in the westbound direction near LAX. This would result in AM peak period traffic volumes increasing from approximately 23,000 vehicles in 2006 to 30,000 vehicles in 2030.

Limited Accessibility

While the Crenshaw/LAX Transit Corridor is served by two east-west running interstates, the I-10 and I-105, the corridor is constrained by the lack of north-south mobility. Major sections of the arterial network in the corridor are at or near capacity, resulting in severe congestion and a bottlenecked corridor. The terrain of the corridor, generally characterized by a series of small hills, also precludes the provision of major east-west streets in the study area from Exposition Boulevard south to Manchester Boulevard, adding further limitations to north-south traffic flow. Implementation of an effective north-south transportation network within the Crenshaw/LAX Transit Corridor is vital to alleviate current and projected connectivity and mobility problems. Improving transportation in this corridor would affect corridor residents and businesses by providing essential linkages from residential areas to commercial, activity, employment, and institutional centers within and adjacent to the corridor.

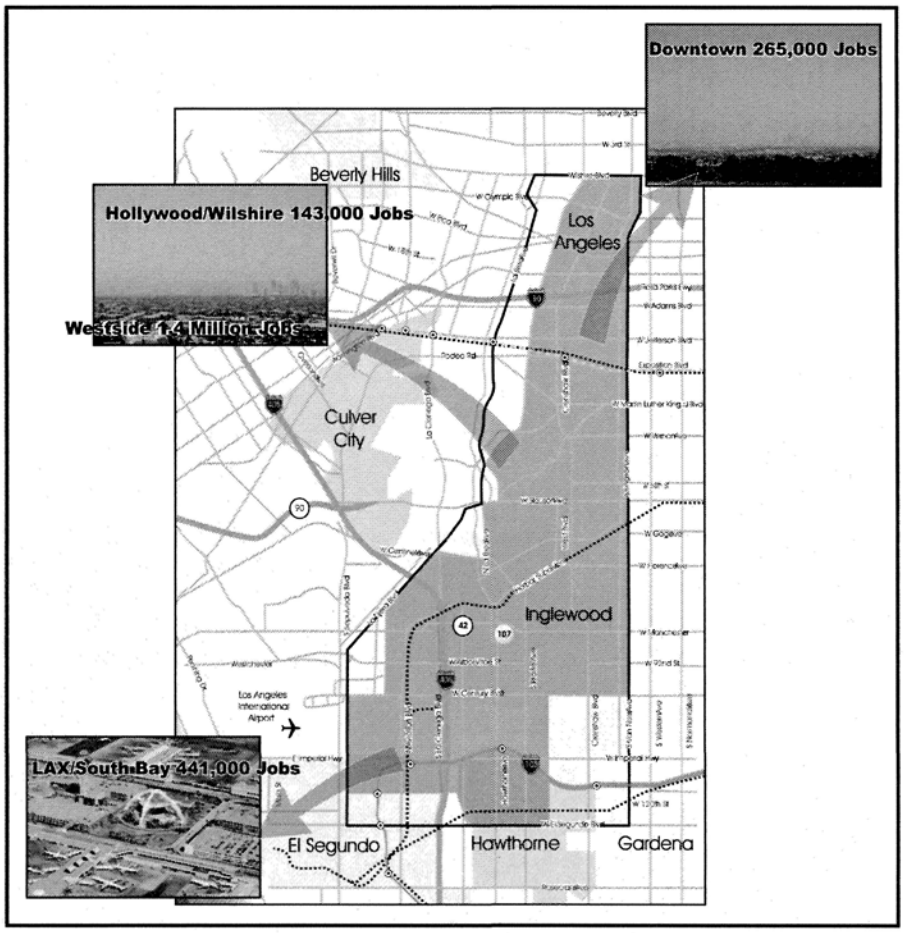
Poor Connections to Regional Transportation

The corridor currently has poor connections to the regional transportation system, as there are no north-south high capacity transportation connections within the corridor. This lack limits mobility and transportation choices. Typically, the Crenshaw/LAX Transit Corridor residents must make several local bus and/or "Rapid Bus" transfers in order to access the existing regional transit system with an average travel time from 32 to 42 minutes. The corridor's primary transit service, bus transit, is constrained by vehicular congestion and increased demand for service, resulting in a lack of effectiveness and passenger convenience.

By 2030, the Crenshaw/LAX Transit Corridor transit demand is projected to increase by approximately 55 percent. Without significant improvements and capacity enhancement, the corridor's transit system will be substantially overburdened, and mobility to and from the corridor will be significantly constrained. There is an urgent need to improve transportation mobility and reliability in the corridor by improving both the level and quality of transit service. As population and employment continue to grow, the lack of regional transportation system connections will become more detrimental to future corridor travel and economic development.

Limited Access to Services Outside of the Corridor

One of the key components to socioeconomic mobility is access to jobs, services and education. The Crenshaw/LAX Transit Corridor is predominantly residential in character. While the corridor contains important regional destinations such as LAX, the Forum, and Hollywood Park as well as local destinations including the Baldwin Hills-Crenshaw Plaza, the AMC Magic Johnson 15 movie theatre complex, the Nate Holden Performing Arts Center, the West Angeles Church of God in Christ, and other religious institutions, jobs, retail services and colleges are located outside of the corridor. With the implementation of transit improvements in the Crenshaw/LAX Transit Corridor, many of the transit-dependent residents would be able to easily access important destinations outside of the corridor, as well as take advantage of community civic centers located in the cities of Inglewood and Hawthorne, and a large number of shopping districts and centers located in



The vast majority of jobs are found outside of the Crenshaw/LAX Transit Corridor. Transit access to Downtown LA, Hollywood, Wilshire Corridor, Century City, South Bay and West Los Angeles is a critical element to the sustainability of communities within the Crenshaw/LAX Transit Corridor.

Koreatown, the Crenshaw District, and downtown Inglewood.

Although the Crenshaw/LAX Transit Corridor contains several employment destinations, active retail centers, and stable residential neighborhoods, there are many more activity and employment centers located outside of the corridor toward downtown Los Angeles, the Westside and South Bay. Corridor travelers have limited options and accessibility. Future transportation improvements within the corridor will need to reflect a multi-modal strategy providing travelers with a more complete set of transportation alternatives.

The Corridor's Economic Future Is Dependent on Improved Accessibility

A majority of the Crenshaw/LAX Transit Corridor is encompassed by redevelopment areas within the Cities of Los Angeles, Inglewood, and Hawthorne. City redevelopment agencies function in attracting private investment into economically depressed communities, eliminating blight and abandoned or unsafe properties. There is a strong connection between redevelopment and revitalization of these areas and transportation system improvements. Increased accessibility, mobility, and links to transit provide opportunity for increased development densities. All or portions of 11 redevelopment plan areas are located within the corridor. A majority of the corridor's key activity and employment destinations are currently preparing expansion (e.g. Baldwin Hills/Crenshaw Plaza), revitalization (e.g. , downtown Inglewood), or redevelopment plans (e.g.,, Hollywood Park). The success of these projects and the corridor's economic future are strongly dependent on improved local and regional accessibility.

High Transit Demand, Transit Dependency, and Transit Operation Challenges

The existing population and employment density in the Crenshaw/LAX Transit Corridor is extremely high and very transit supportive. The corridor population and employment densities are four times higher than Los Angeles County as a whole. The corridor has a high concentration of low-income, minority, transit-dependent residents. More than 49 percent of all corridor households are designated as low income. In addition, 16 percent of all households in the corridor do not have access to an automobile, compared to 8 percent in the County's urbanized area. Forecasts show a growing transit-dependent population, with a projected 55 percent increase in corridor residents that rely on, or will rely on the area's transit system.

As a result of the higher than average transit ridership in the corridor, many of the buses serving the corridor are at or over capacity, resulting in overcrowding, rider pass-bys and loading delays. These issues then contribute to uneven headways and related schedule problems. Overcrowding also reduces the life of buses and contributes to higher maintenance costs. Bus operating conditions are affected by traffic conditions under which the service operates, passenger loading time, and bus-stop spacing.

The corridor has substantial traffic congestion, high bus ridership and load factors, and closely spaced bus stops. Combined, these factors result in declining bus operating speeds, reducing competition with the private automobile. Currently, local bus service in the Crenshaw/LAX Transit Corridor operates at 10 to 13 miles-per-hour and the Metro Rapid buses operate at 13 to 15 miles-per-hour during AM and PM peak periods. Operating speeds are expected to decline further in the future as congestion increases.

Benefit to the Environment and Improved Sustainability for Corridor Communities

The corridor is contained within the South Coast Air Basin, which has the worst air quality in the nation. Mobile source emissions from vehicles are the single largest contributor to air quality problems in the basin. The Crenshaw/

What is an Alternatives Analysis? Transit projects typically proceed through the FTA's process, consisting of five formal steps: Alternatives Analysis Study, Environmental Impact Statement, Preliminary Engineering, Final Design, and Construction. The Alternatives Analysis Study is designed to examine all the potential transit options available and determine a locally preferred alternative.

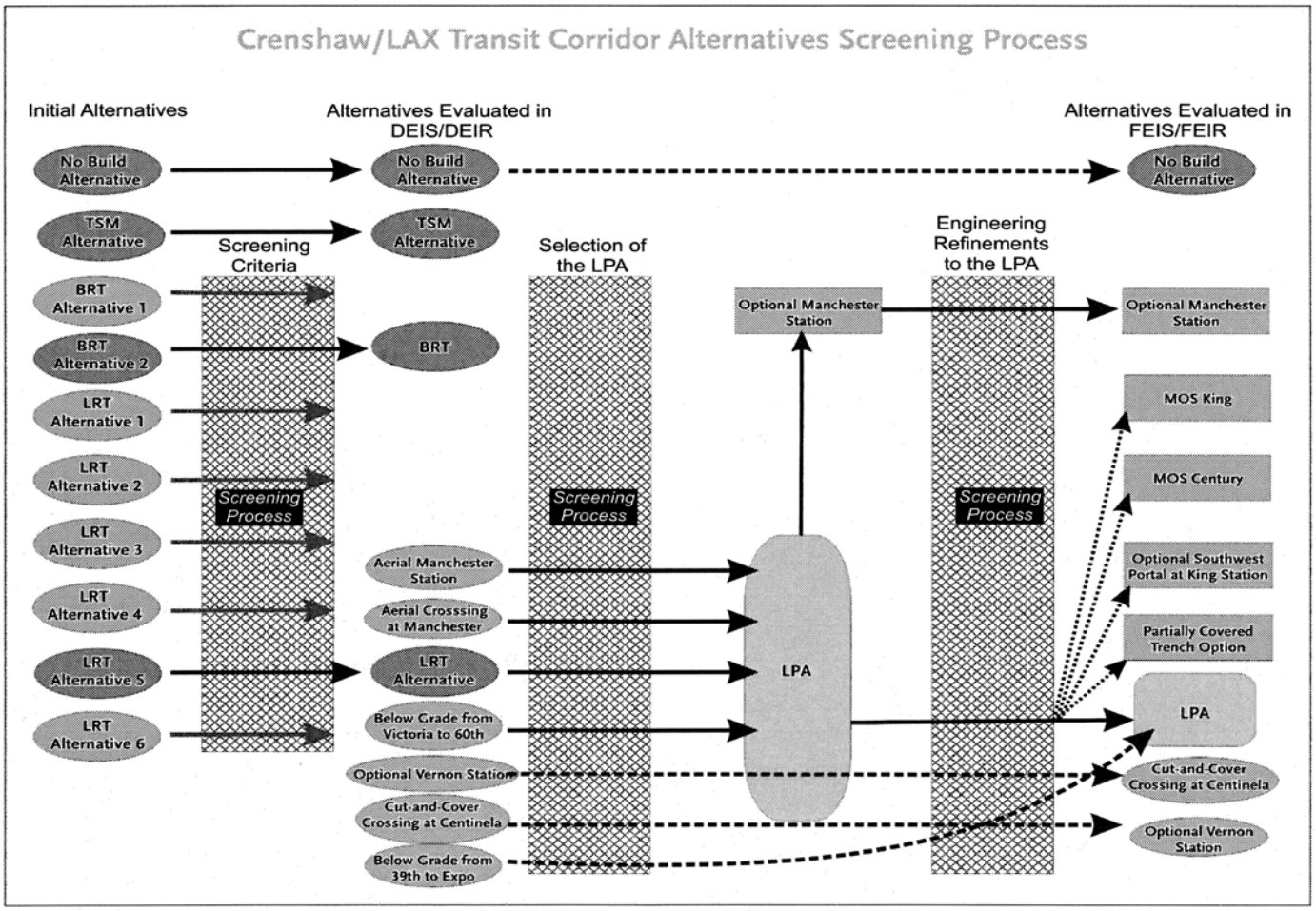
CONSIDERATION OF ALTERNATIVES

LAX Transit Corridor Project would provide transportation and transit improvements that would provide the area with an energy-efficient way of reducing the number of vehicles on roadways and freeways. This would contribute to the improvement of Southern California's regional and local air quality, and a reduction in greenhouse gas emissions. Moreover, both Federal and State government are placing increased emphasis on improving the sustainability of neighborhoods and communities. Improved accessibility utilizing transit improvements will greatly aid in achieving sustainability for neighborhoods and communities within the corridor that are highly dependent on access to employment, services and education resources outside of the boundaries of the corridor.

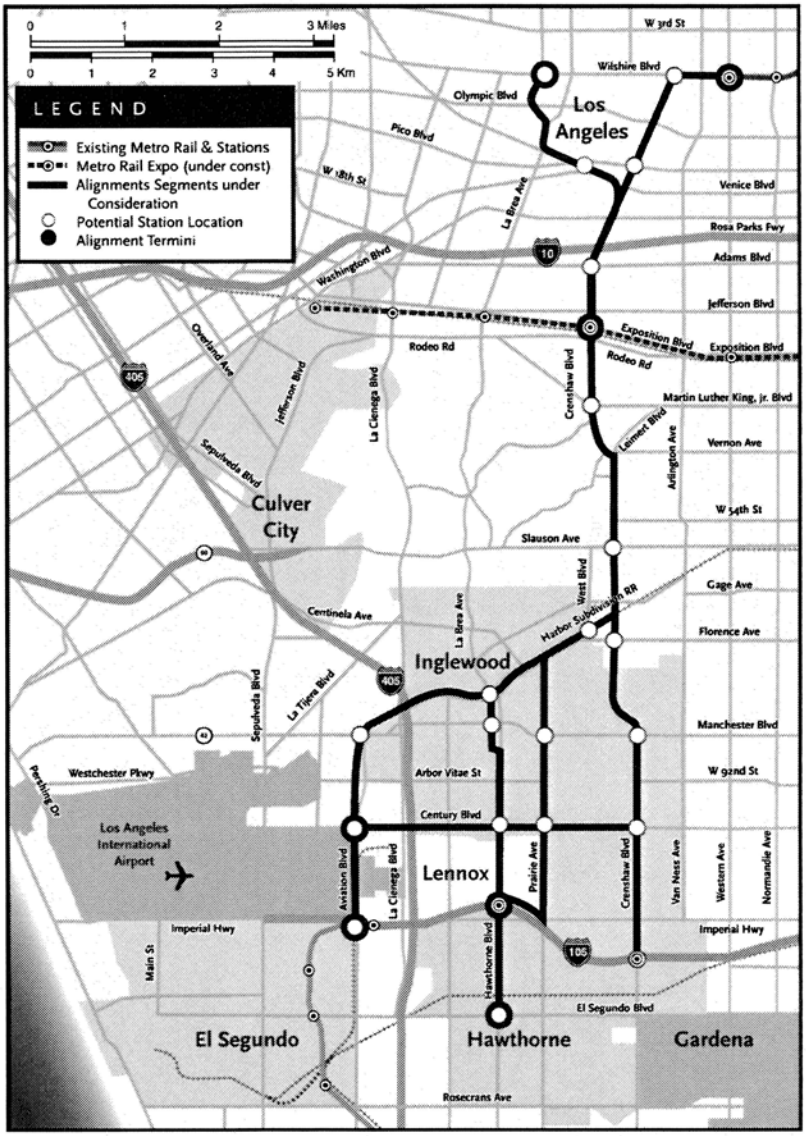
ES.3 Alternatives Considered

As part of the environmental review process, Metro followed an established protocol to identify the transit alternatives and issues to be analyzed, including seeking input from the public, corridor stakeholders, and other affected parties. The alternatives in the DEIS/DEIR provided a reasonable range of possible alternatives, which met the project goals and objectives. As part of this process, Metro considered all reasonable alternatives before selecting the preferred alternative.

The process typically results in the narrowing down of options and alternatives are eliminated based on their effectiveness, environmental impacts, efficiency, financial feasibility, and equity. The end result of the process is the selection of a locally preferred alternative, or LPA, by the Metro Board. The identification and screening of the alternatives is shown below.



CONSIDERATION OF ALTERNATIVES



Initial alignment alternatives were built up from a variety of alignments in the corridor.

Locally Preferred Alternative Selection Process

Prior to the selection of a Locally Preferred Alternative (LPA), the initial alternatives were presented at scoping meetings and reviewed with input from the public and various agencies. The alternatives were screened using engineering and environmental constraints such as comparing transit design configurations and alignments to existing right-of-way widths and then to the surrounding community and environment. The alternatives included a No-Build Alternative, a Transportation System Management (TSM) Alternative, a Bus Rapid Transit (BRT) and Light Rail Transit (LRT) operating along different alignments.

Evaluation of Alternatives

A list of criteria was used in order to compare the performance of each alternative.

These criteria included:

- Regional Connectivity
- Key Environmental Effects
- Economic Development/Land Use Planning
- Ridership
- Travel Time and Reliability
- Cost-Effectiveness
- Financial Capability
- Regulatory Constraints

The results of the analysis showed that the LRT Alternative would:

- Generate the greatest benefits to travel time along the corridor;
- Generate more riders along the segment between the Exposition Line and the Metro Green Line;
- Improve accessibility for passengers in several corridors;

What is an LPA? The DEIS/DEIR process culminated in the Metro Board of Directors making a recommendation for the Locally Preferred Alternative (LPA). A LPA is the project alternative that the Lead Agency feels would best balance the needs of the population for which the project serves. This recommendation was based on the results of the environmental evaluation as well as public opinion conveyed throughout the public participation process. The selection of an LPA has allowed the project to move forward into more advanced design and engineering, with a more detailed environmental analysis as presented in this FEIS/FEIR.

- Provide economic development in the corridor;
- Create more opportunities for linkages with adjacent development
- Provide the largest degree of travel time savings, reliability and ridership for comparable segments;
- Provide the strongest support of community goals for economic development; and
- Provide connections with other elements of the Metro rail system, including the ability to facilitate a connection to LAX airport-service.

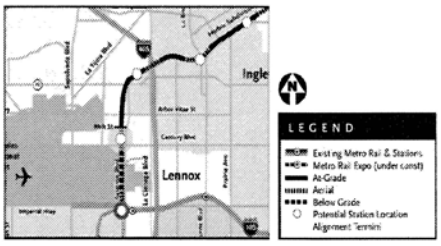
Selection of a Locally Preferred Alternative

Following circulation of the DEIS/DEIR, a LPA Recommendation Report was prepared which proposed the adoption of the Light Rail Transit Alternative, including several design options, as the locally preferred alternative. Based on the environmental review, conceptual engineering activities and technical studies, as well as feedback from an extensive community outreach program, the Metro Board of Directors adopted the Light Rail Transit Alternative as the Locally Preferred Alternative.

The Board Adopted LPA Included the Following Options:

Design Option 1

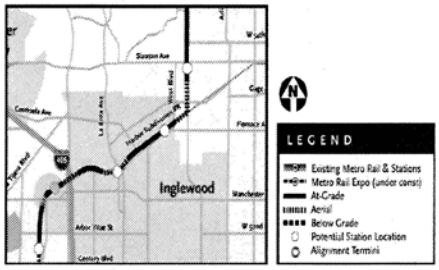
Design Option 1 involves an aerial station on the north side of Century Boulevard instead of an at-grade station located approximately 1,500 feet north of Century Boulevard near 96th Street.



Design Option 1 is an elevated station at Century Boulevard.

Design Option 2

Design Option 2 involves an aerial crossing rather than an at-grade crossing at Manchester Avenue. An aerial crossing over Manchester Avenue would replace the at-grade LRT alignment and would extend an aerial alignment approximately 1,300 feet within the Harbor Subdivision. The over crossing would consist of an 800-foot bridge and 250-foot approaches on each side. The aerial alignment would return to grade on the north side of Manchester Avenue before the at-grade station proposed on the north side of Hindry Avenue.



Design Option 2 is an elevated crossing above Manchester Avenue

Design Option 4

Design Option 4 involves a cut-and-cover alignment between Victoria Avenue and 60th Street instead of an aerial alignment, starting on Crenshaw Boulevard and extending into the Harbor Subdivision. The below-grade alignment would be built as a cut-and- cover tunnel.

Design Option 4 is a below grade alignment from 60th street to Victoria Avenue.

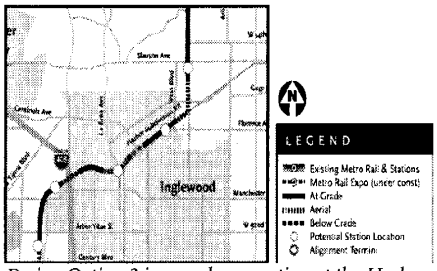
Based on the evaluation, Design Options 1, 2 and 4 would address technical and environmental requirements and woule best meet the goals and objectives established for the corridor while staying within the proposed budget for the project. Design Option 1 would facilitate a potential connection to LAX, providing the largest amount of regional connectivity which would lead to higher potential ridership once that connection is established. Design Option 2 would eliminate potential traffic impacts at the Manchester Avenue crossing. This key environmental effect would be achieved at a relatively low cost compared to the other design options. Design Option 4 would also eliminate key environmental effects, specifically related to the aerial structure impacts to the visual character of the Hyde Park neighborhood, which is a low income area that is subject to environmental justice consideration. Because these aesthetic and community division effects would be disproportionately placed on the low income Hyde Park community environmental justice impacts would also occur. Design Option 4 eliminates these potential environmental effects. For these reasons, Design Options 1, 2, and 4 were recommended to be incorporated into the LPA.

Design Options Carried Forward with the LPA

Three other design options were not recommended as part of the LPA but were authorized for continued environmental review and advanced conceptual engineering so that they could be implemented at a later time, should funding become available. The three design options to be carried forward included:

Design Option 3

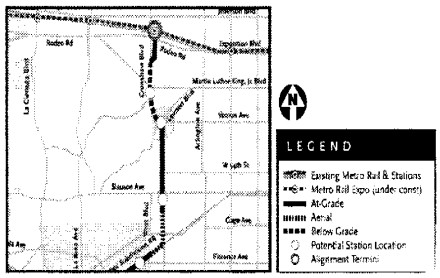
Design Option 3 involves a cut-and-cover crossing instead of an at-grade crossing at Centinela Avenue. An LRT under-crossing at Centinela Avenue would replace the at-grade LRT alignment proposed under the LPA and would extend approximately 2,000 feet within the Harbor Subdivision. The under-crossing would consist of a 200-foot long bridge with a 700-foot depressed LRT alignment section on the west and an 1,100-foot depressed section on the east side of Centinela Avenue.



Design Option 3 is a grade separation at the Harbor Subdivision and Centinela Avenue.

Design Option 5

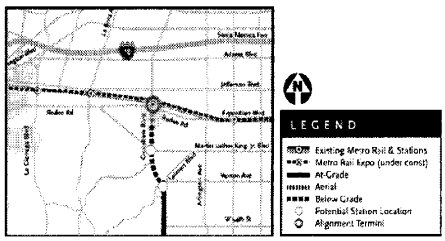
Design Option 5 involves a below-grade station at Vernon Avenue in Leimert Park. The Crenshaw/Vernon station is an optional below-grade station. This would be within a half mile of Crenshaw/King Station.



Design Option 5 considers the feasiblity of two stations in close proximity at Crenshaw/King and at Crenshaw/Vernon. The Crenshaw/Vernon station is the optional station.

Design Option 6

Design Option 6 involves a below-grade alignment between 39th Street and Exposition with a below-grade station at Crenshaw Boulevard and Exposition Boulevard. A below-grade alignment between 39th Street and Exposition Boulevard would replace the at-grade LPA alignment and would extend the tunnel north of Martin Luther King Jr. Boulevard to Exposition Boulevard with a below-grade station.



Design Option 6 is a below grade alignment along Crenshaw Boulevard between Exposition and 39th Street.

Supplemental Draft Environmental Impact Statement/Recirculated Draft Environmental Impact Report

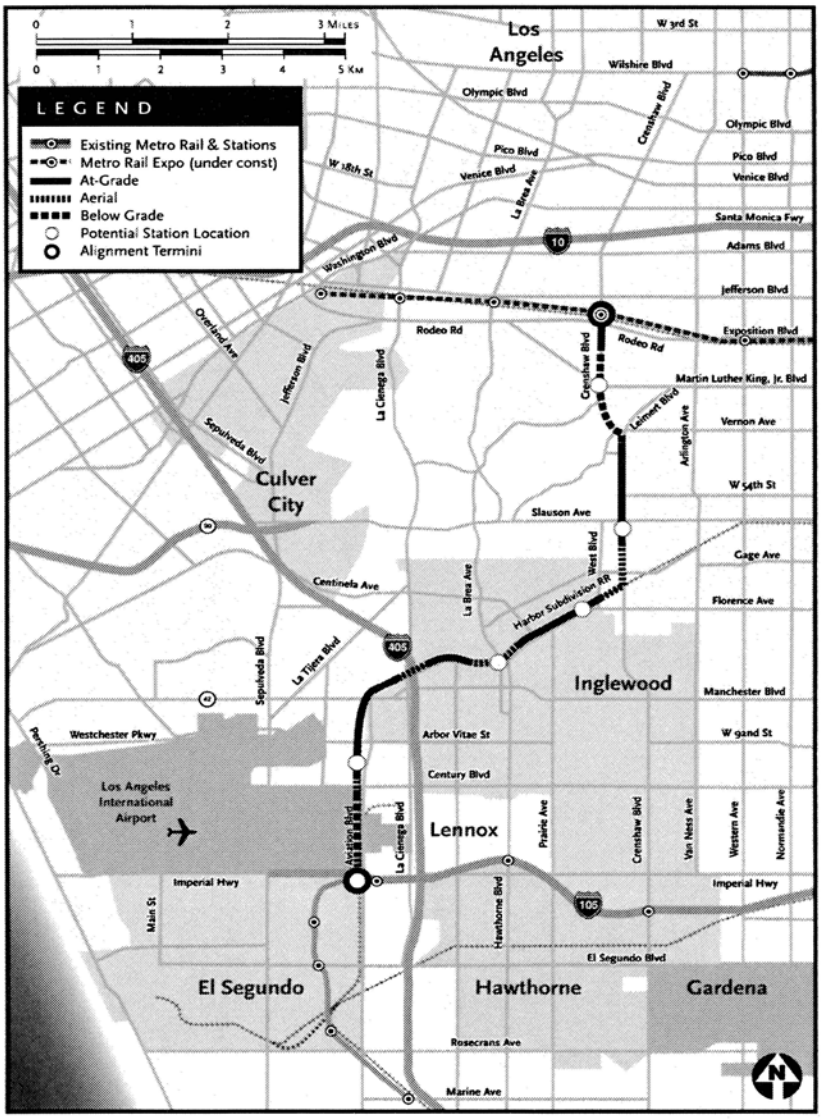
Four initial maintenance and operations facility sites were evaluated in the DEIS/DEIR. These sites were compared using evaluation criteria such as size and proximity; land use and zoning; land ownership; buffers; potential expansion; community disruption; and most valuable and best use. Based on the analysis, these four potential maintenance sites were ranked from most preferred to least preferred.

Based on public comments and concerns expressed during the comment period, the Metro Board, as part of its actions on the Project, removed from further consideration the two maintenance facility sites (Sites B and D) in the cities of Los Angeles (Westchester) and El Segundo that were evaluated in the DEIS/DEIR. A Supplemental Draft Environmental Impact Statement (SDEIS)/Recirculated Draft Environmental Impact Report (RDEIR) was prepared to provide environmental analysis of four new alternative maintenance facility sites for the proposed project. In addition, a Section 4(f) Evaluation of eligible historic resources and parklands within the updated APE for the project was completed.

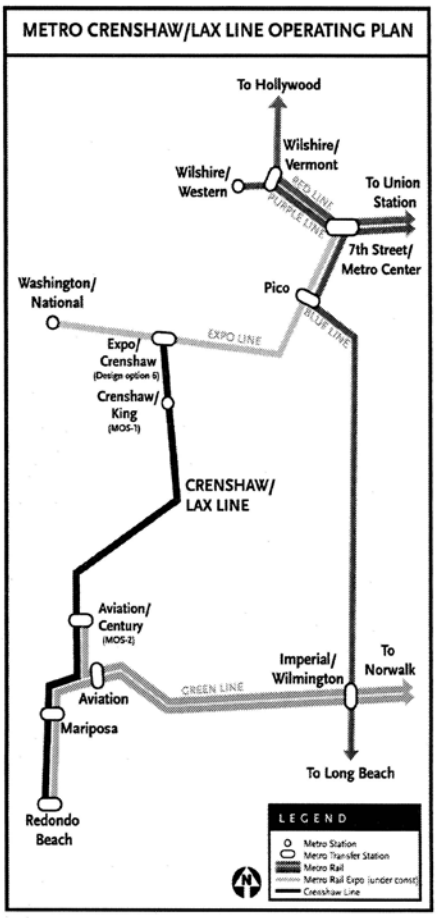
Refinements to the Locally Preferred Alternative (LPA)

Following adoption of the LRT as the Locally Preferred Alternative, various refinements were required due to engineering constraints, environmental concerns, and budgetary considerations. The refinements to the LPA associated with this base project are described below.

La Brea Avenue Crossing.
An open trench configuration across La



LPA Alignment. The LPA route is approximately 8.5 miles in length. It extends from the Exposition Light Rail line to the Green Line. This baseline option includes at grade, below grade and elevated sections, with six stations, as shown above.



LPA operation will involve a single service from Exposition/Crenshaw to Aviation/Century, with a connection to the Redondo Beach Station along new infrastructure and the Metro Green Line.

Brea Avenue with an at-grade station east of the Market Street.

Segment from 39th Street to Exposition Boulevard.

The LPA's northern terminus at the Crenshaw/Exposition Station had an at-grade configuration with a design option for a below-grade alignment (Design Option 6), which would extend a tunnel between 39th Street and a below-grade Crenshaw/Exposition Station. During the ACE phase, all analyzed at-grade configurations were determined infeasible due to physical constraints and significant traffic and land use impacts. Design Option 6 is determined to be a feasible alternative to an at-grade alignment and is recommended for inclusion into the project definition, contingent upon the section's financial feasibility. In the event that Design Option 6 cannot be incorporated into the project, the FEIS/FEIR also considers two Minimum Operable Segments (MOS) alternatives that would be consistent with the Metro financial plan for the project. MOS-King would extend from the Metro Green Line to the King Station, at a distance of 8

CONSIDERATION OF ALTERNATIVES

Below-grade trench alignment along Aviation Boulevard, adjacent to LAX south runways.

miles. MOS-Century would extend from the Metro Exposition Line to the Aviation/ Century Station, at a distance of 7.4 miles, and would include Design Option 6. MOS-Century would also require a bus feeder connection to the Metro Green Line at the southern end. If constructed, either MOS would be consistent with the established financial plan for the Crenshaw/LAX Transit Corridor Project. As stated previously, the Partially-Covered LAX Trench Option has been incorporated into the project definition as an interim solution to the fully covered condition. The Partially-Covered Trench configuration would allow a concrete cap over 1,000 feet of the below grade track with two 500-foot covered sections. Two other design options that may be incorporated into the project definition (based on potential for cost savings and reduction in environmental impacts in one case, and based upon Board action in the other). These options will further be explored through the preliminary engineering phase and during the procurement of design build contracts.

Alternate Southwest Portal at Crenshaw/ King Station Option. This option involves an alternate portal at the southwest corner of the Crenshaw Boulevard/Martin Luther King Jr. Boulevard intersection. During the preliminary engineering phase of the project, Metro determined that a providing connection in front of the Broadway building (Walmart) could provide increased access to the regional mall. In addition, potential cost savings and fewer displacements could be achieved through less property acquisition (The portal would be located within the existing landscaped sidewalk adjacent to the Broadway building and would provide vertical circulation to the underground Crenshaw/King Station). The portal could also be located in the basement of the Broadway building to provide a direct connection to the Baldwin Hills Crenshaw Plaza. This alternate portal is not included within the current project financial plan and would only be implemented if the land were privately funded or if easements to privately-owned land are granted. This station is located at the most heavily developed area of the entire line with a major shopping center near the site. While this design option is not yet incorporated into the project definition, negotiations with the mall owners may yield savings which allow it to be adopted as part of the project definition.

Below-Grade Crenshaw/Vernon Optional Station. Since the adoption of the LPA, the Metro Board, at its May 2011 meeting, directed the below-grade Crenshaw/ Vernon Station to be considered as an option within the procurement of design-build contracts. While this action did not incorporate the optional station into the project definition, it placed an emphasis on carrying the design forward for the design-build procurement process. It may be implemented if bids for the project

What is the Harbor Subdivision? The Harbor Subdivision is a freight rail corridor, approximately 26 miles in length, that traverses southwest Los Angeles County from Vernon to Wilmington. In the early 1990s, Metro purchased the portion of the corridor between Redondo Junction and Watson Yard, along with several other rail rights-of-way, to further the development of the region's rapid transit system. Metro has initiated an Alternatives Analysis Study (AA) for the Harbor Subdivision Transit Corridor. The study will examine potential transit service along the Metro-owned Harbor Subdivision.

Existing view of the Aviation Boulevard/Manchester Avenue intersection.

Aerial structure across Manchester Avenue.

including this design option fall within the project funding amount.

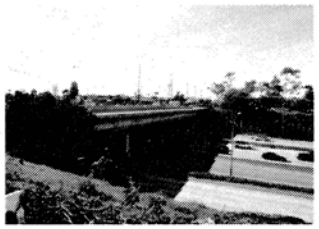
Project Alignment

The southern terminus of the alignment would begin at the existing Metro Green Line Aviation Station which is in an aerial configuration, and transition northerly to a below-grade trench configuration, south of 111th Street, as it passes adjacent to the LAX south runways. The baseline configuration of the project near LAX Runway 25L and 25R ends is a cut-and-cover trench that is covered with a reinforced concrete roof. This is based on comments received from the Federal Aviation Administration (FAA) and Los Angeles World Airports (LAWA) on the DEIS/DEIR. There is also an interim option for a depressed partially-covered trench. After clearing the south runways north of 104th Street, the alignment would transition to an aerial configuration across Century Boulevard.

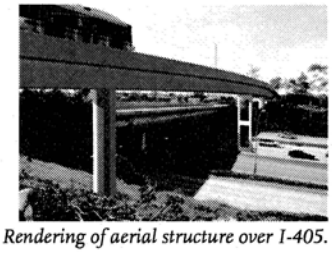
At Century Boulevard, the LRT alignment would be located on a new bridge constructed west of, and adjacent to, the existing railroad bridge. The alignment would transition to an at-grade configuration north of the Wally Park structure and operate at-grade across Arbor Vitae Street and would transition to an aerial structure across Manchester Avenue. The alignment would transition back to grade level for at-grade crossings at Isis and Hindry Avenues. The LRT alignment would transition to an aerial configuration across La Cienega Boulevard and the I-405 and would return to grade before Oak Street.

The alignment would continue at grade to the east with at-grade crossings at Oak Street, Cedar Street, Ivy Street, and Eucalyptus Avenue. The alignment would descend to a below-grade trench configuration under La Brea Avenue with an open cut station to the east of La Brea Avenue. The alignment would transition back to grade east of La Brea Avenue until Victoria Avenue. At-grade crossings would occur at Centinela Avenue, West Boulevard and Brynhurst Avenue and an at-grade station would be located to the west of West Boulevard.

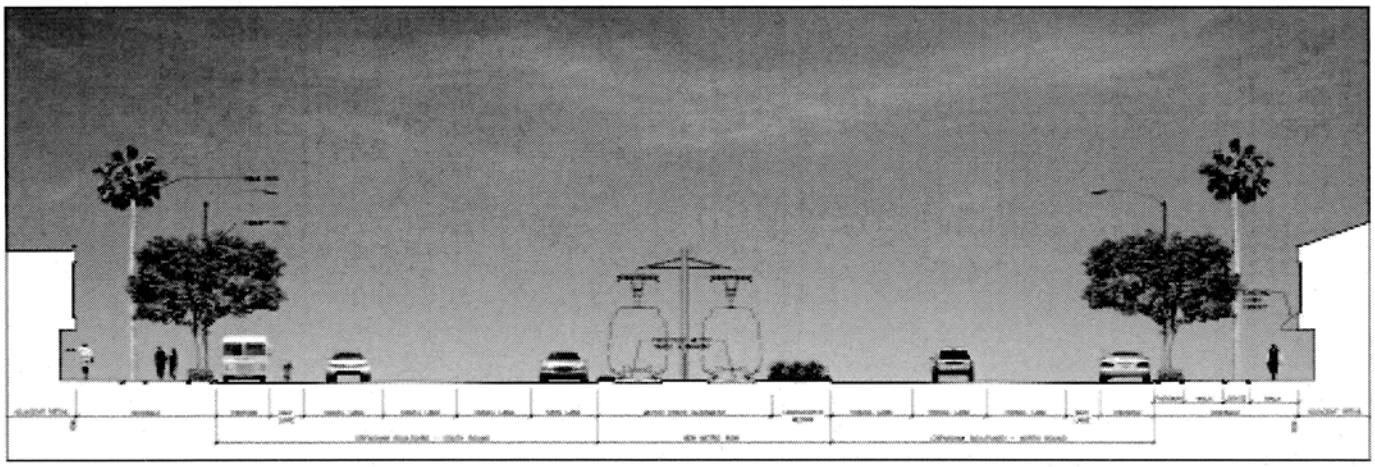
West of Victoria Avenue, the alignment would transition to a below-grade tunnel and continue along the Harbor Subdivision until Crenshaw Boulevard where it would continue north under Crenshaw Boulevard until north of 59th Place where it would transition to grade level in through a portal in the middle of the Crenshaw Boulevard median. The alignment is required to be below grade under this segment of Crenshaw Boulevard because the street right-of-way width is 100 feet, which would be insufficient to accommodate an at-grade



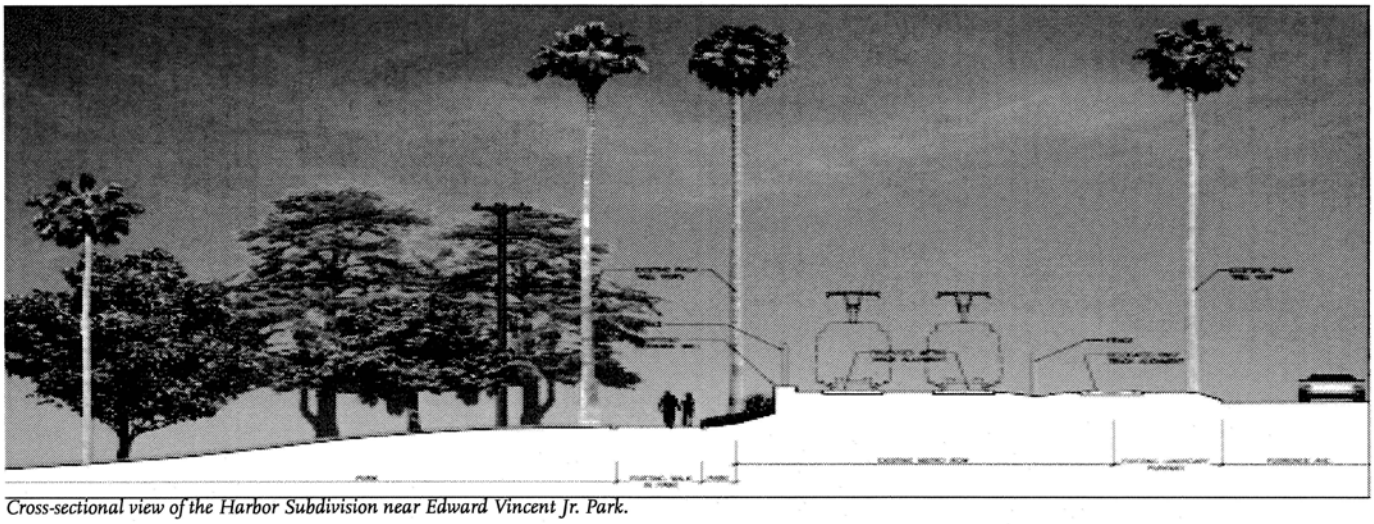
Existing view of Florence Avenue crossing at I-405.



Rendering of aerial structure over I-405.



Cross-sectional view of Crenshaw Boulevard between 54th and 57th Streets

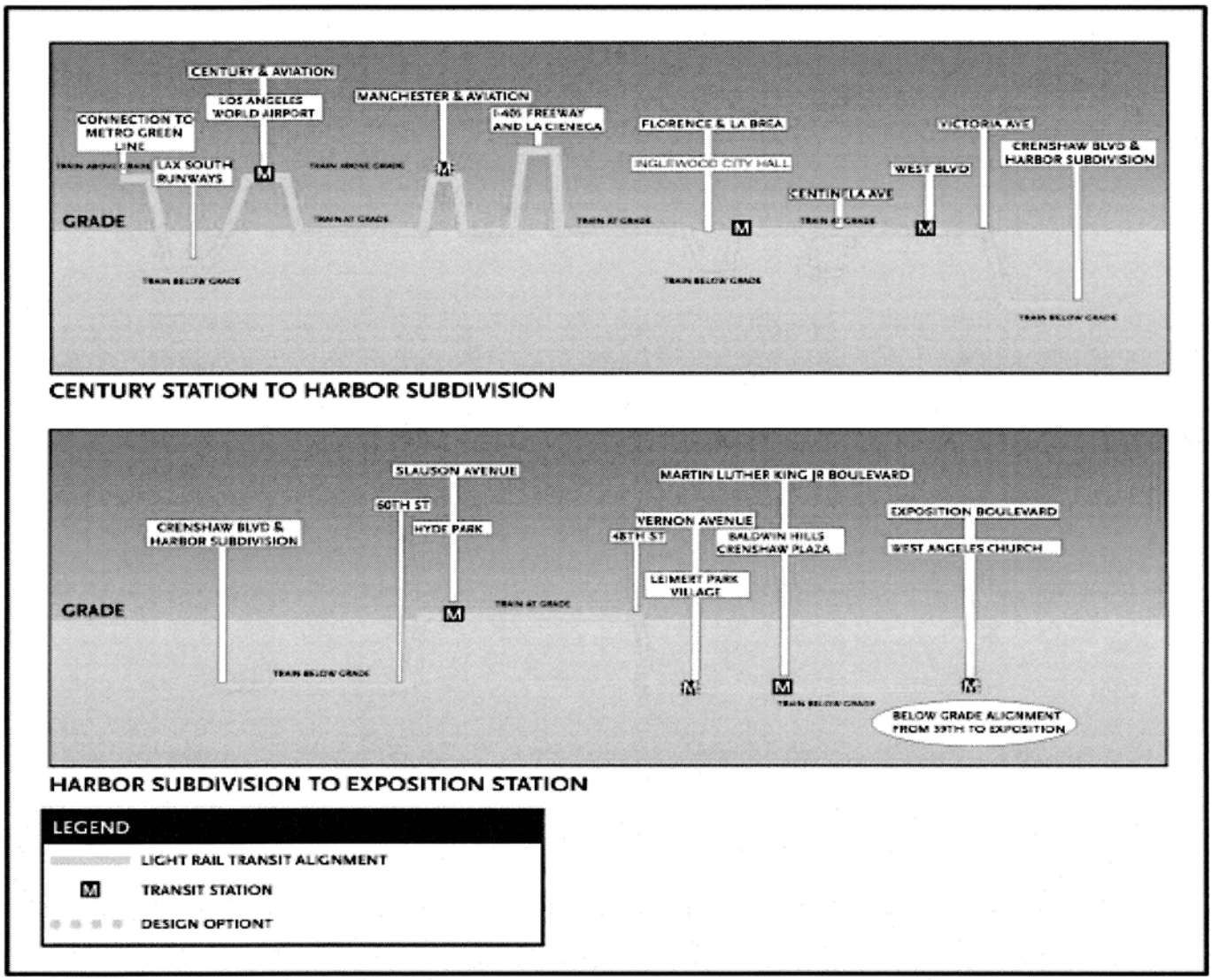


Cross-sectional view of the Harbor Subdivision near Edward Vincent Jr. Park.

LRT without reducing roadway lane capacity.

The alignment would travel at grade in a new median of Crenshaw Boulevard south of 59th Street to 48th Street. The frontage roads along Crenshaw Boulevard would be eliminated where the alignment is operating at grade. There would be an at-grade station in the median of Crenshaw Boulevard, south of Slauson Avenue. The alignment would transition to a below-grade configuration north of 48th Street through a portal in the median of Crenshaw Boulevard. The alignment would be below grade for the remainder of the alignment either to the terminus associated with an MOS at King or at Exposition Boulevard (the terminus for the LPA), with the incorporation of Design Option 6. The below-grade alignment could be built as either a bored or cut and cover tunnel. The choice of tunneling methodology will be based on an analysis of the length and depth of the tunnel section. Below-grade stations would be located in the median of Crenshaw Boulevard at King and Exposition Boulevards with portal entrances on properties adjacent to Crenshaw Boulevard.

What is an Overhead Contact System? A distinctive feature of LRT is that the vehicles draw power from overhead wires, known as the overhead contact system (OCS). This allows LRT systems to be integrated with other at-grade transportation modes, such as automobiles and pedestrians.



Vertical Profile of the LPA Alignment.

MOS-Century would follow the same alignment described above, but beginning at the Crenshaw/Exposition Station with the incorporation of Design Option 6 and terminating at the Century Station.

Stations and Station Parking. The LPA would include six stations for passenger access and three park-and-ride facilities. The location and size of the park-and-ride facilities was refined during the advanced conceptual engineering process. Together, these facilities would satisfy the transit corridor's parking demands.

For transit passengers' convenience and to control capital, operating, and maintenance costs, the proposed stations, including signage, maps, fixtures, furnishings, lighting, and communication equipment, would have a consistent design similar to the existing Metro LRT stations. LRT Station types would be either at-grade, aerial, or below grade, and

LRVs would be equivalent to those Metro operates on the existing Metro Blue, Green and Gold Lines. Each vehicle would be equipped for independent two-way operation, with a driver's cab at each end and would have equal performance in either direction.

are comprised of 270 feet long platforms that accommodate LRT trains with up to three cars. The project includes two at-grade stations, one underground station, one trench station, and one above ground (aerial) station.

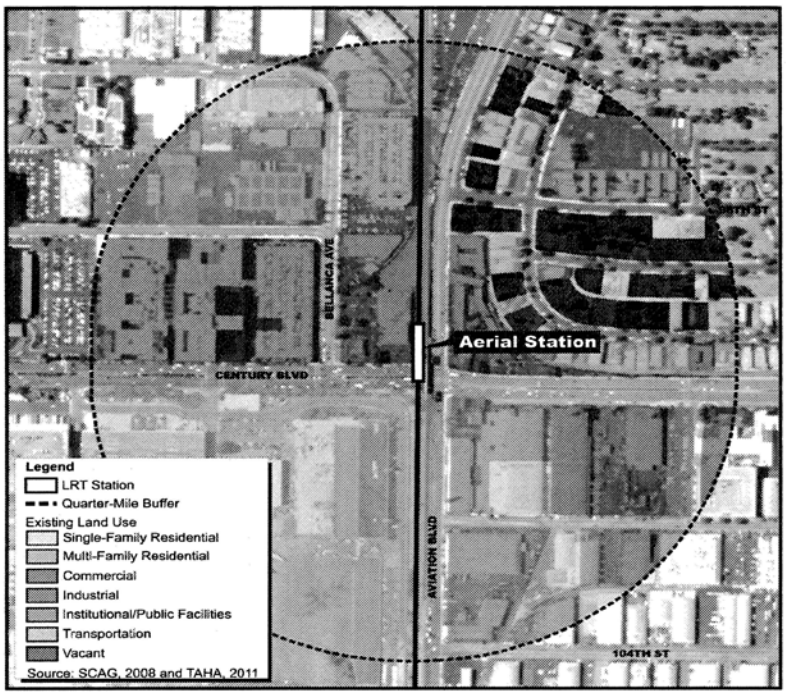
- Aviation/Century (aerial)
- Florence/La Brea (at grade)
- Florence/West (at grade)
- Crenshaw/Slauson (at grade)
- Crenshaw/King (underground)
- Crenshaw/Exposition (underground with Design Option 6)

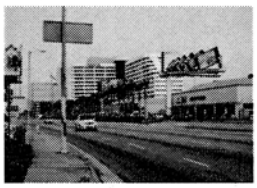
All platforms would be fully accessible and comply with the Americans with Disabilities Act (ADA). Outdoor platforms would be well-lighted and include amenities, such as canopies that cover a minimum 30 percent of the platform area, seating, bike lockers, bike racks, trash receptacles, and artwork. The LRT stations would also include signage, safety, and security equipment which would provide real-time information.

Supporting LRT Facilities. The LPA construction would include installing trackwork, an overhead contact system (OCS) distributing electricity to light rail vehicles (LRVs), traction power substations (TPSS) located about one mile apart, signaling and communication systems, and a vehicle maintenance and operations facility which would operate 24 hours a day, seven days a week.

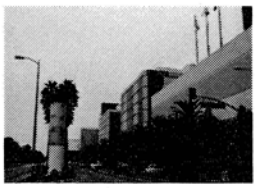
Systems: The LRT fixed guideway would consist of continuously welded rails. The rails would be embedded in a concrete slab or installed on crossties and ballasts. The LRT OCS would consist of steel poles installed along the operating right-of-way to support the electrical power line. The poles would be approximately 25-feet tall and would be installed at 90 to 170 feet intervals. The poles would generally be located in the center of the right-of-way, between the two tracks, wherever possible. In some locations, the poles would be located on both sides of the LRT tracks. The overhead electrical power lines are suspended above the LRT tracks. Electricity for LRT operations would be supplied to the OCS from traction power substations (TPSS), located along the proposed LRT alignment. These electrical substations would be enclosed structures located near the LRT alignment. Development of the substations, in some cases, would require an access roadway for maintenance vehicles. Electrical substations would be required for approximately each mile of single or double-track. Communications and signaling (C&S) buildings house train control and communications for LRT operations in a central facility at each station. Each facility is an enclosure located within the station site area, typically adjacent to a station platform. Positioning of a C&S building must be done to provide clearances for maintenance and servicing, and to maintain sight lines for LRT operations.

AVIATION/CENTURY STATION





Aviation and Century, Looking East



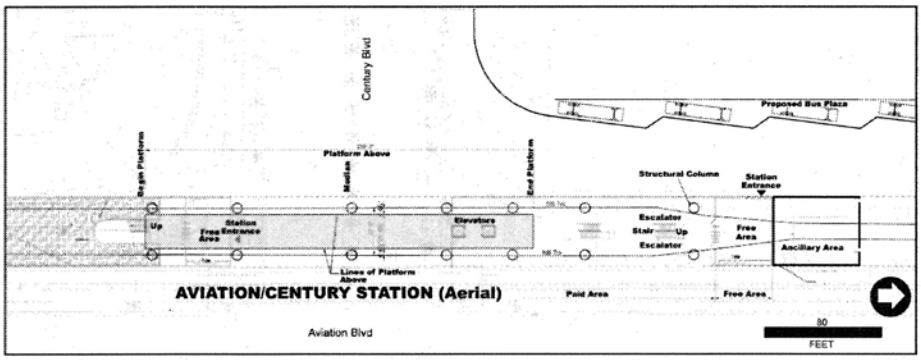
Century Looking East, Gateway to LAX

Existing view of Century Boulevard at Aviation Boulevard.

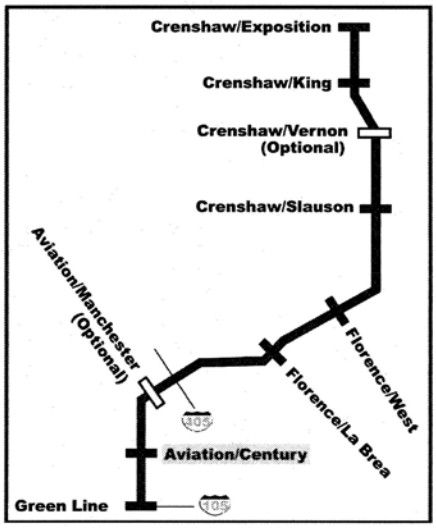
Rendering of the aerial station at Century/Aviation Boulevards.

Aviation/Century Station

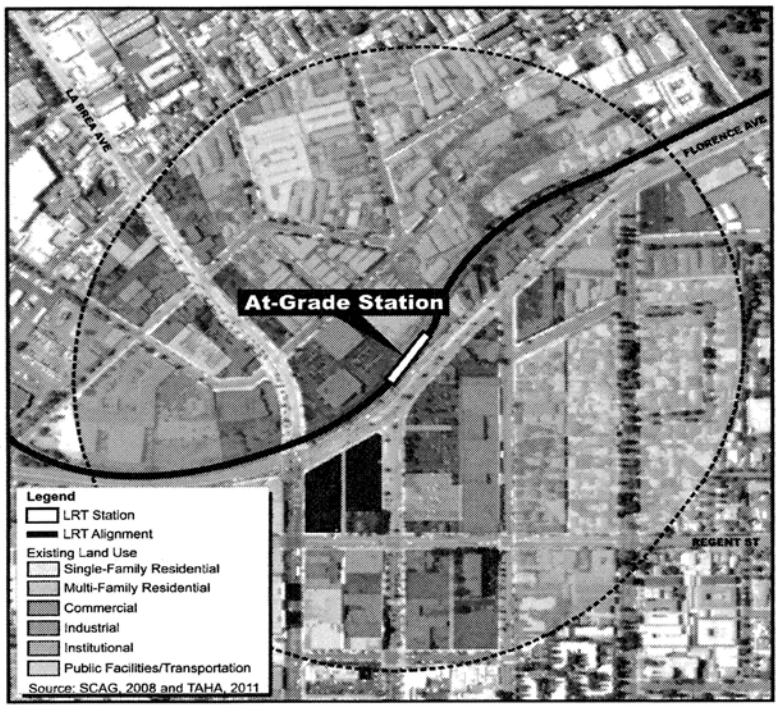
The Aviation/Century Station will serve as a new major gateway between Metro's regional transit system and LAX. The station will be aerial and designed to accommodate a future connection to the LAX People Mover. A bus transfer plaza will be provided on the west of the station to provide multimodal access to the system.



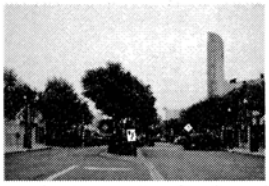
The above figure shows the location of the Aviation/Century Station located at the aerial crossing over Century Boulevard at Aviation Boulevard.



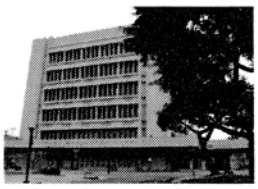
FLORENCE/LA BREA STATION



Metro



Market Street, City of Inglewood



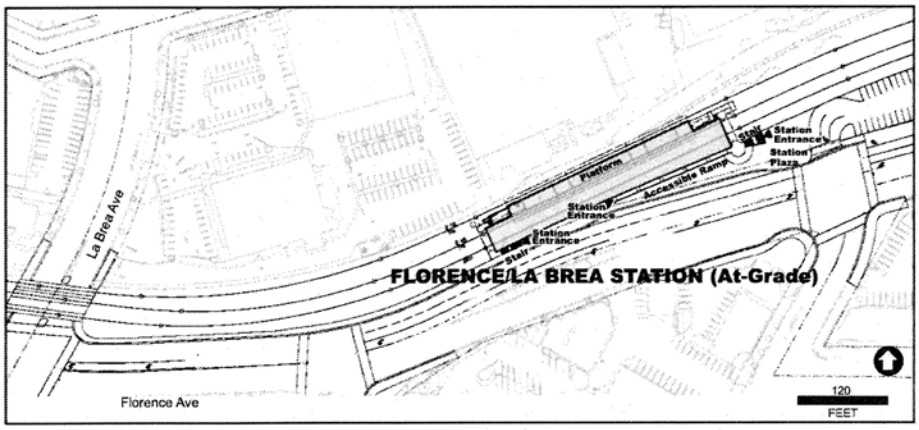
Inglewood Municipal Courthouse

Existing view of the Florence/La Brea Station site.

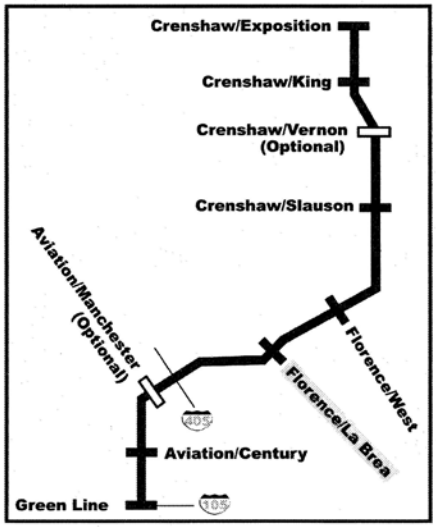
Rendering of the at-grade Florence/La Brea Station east of Market Street along Florence Avenue.

Florence/La Brea Station

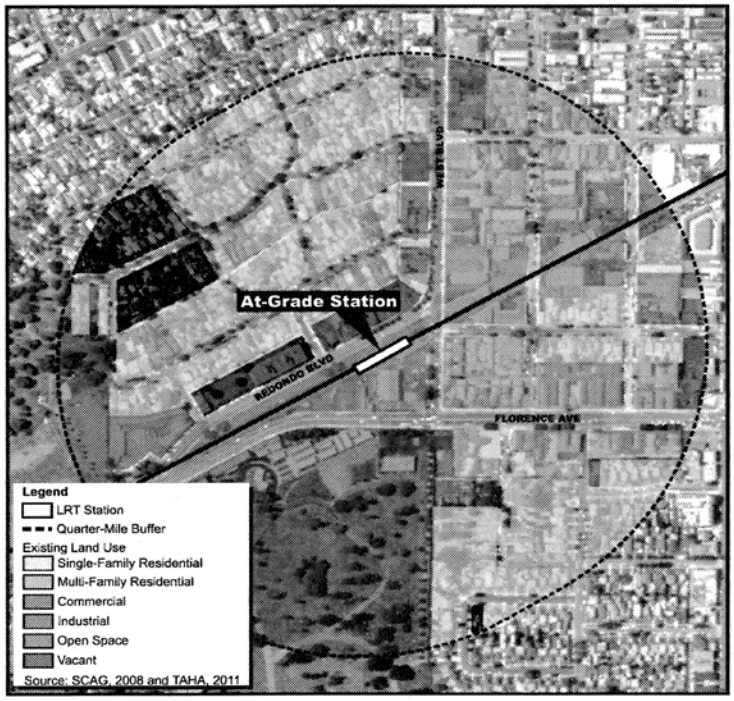
The Florence/La Brea Station will provide access to Downtown Inglewood and the City of Inglewood Civic Center. The station would also serve commercial uses along Market Street to the south and residences to the north, east, and west. This station will also include a park-and-ride lot.

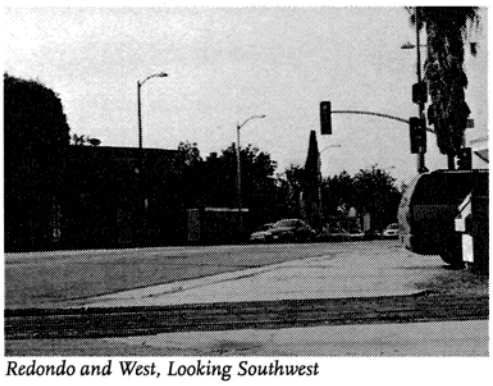


The above figure shows the location of the at-grade Florence/La Brea Station located east of Market Street along Florence Avenue.

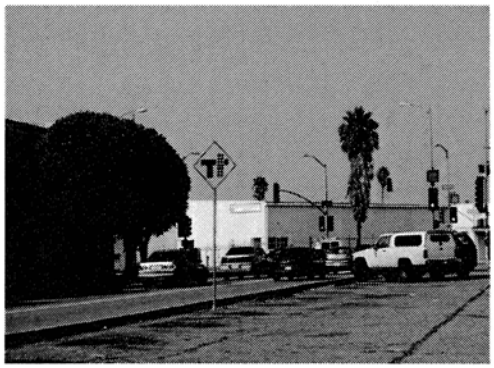


FLORENCE/WEST STATION





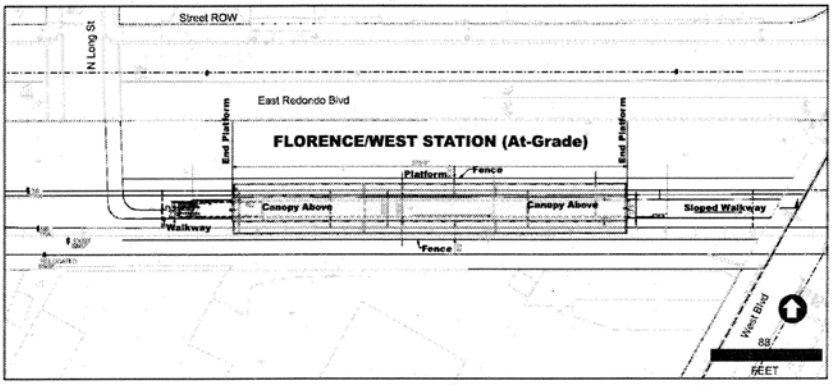
Redondo and West, Looking Southwest



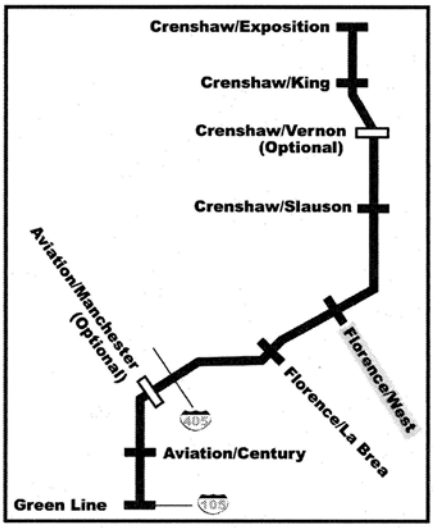
Redondo and West, Looking East

Florence/West Station

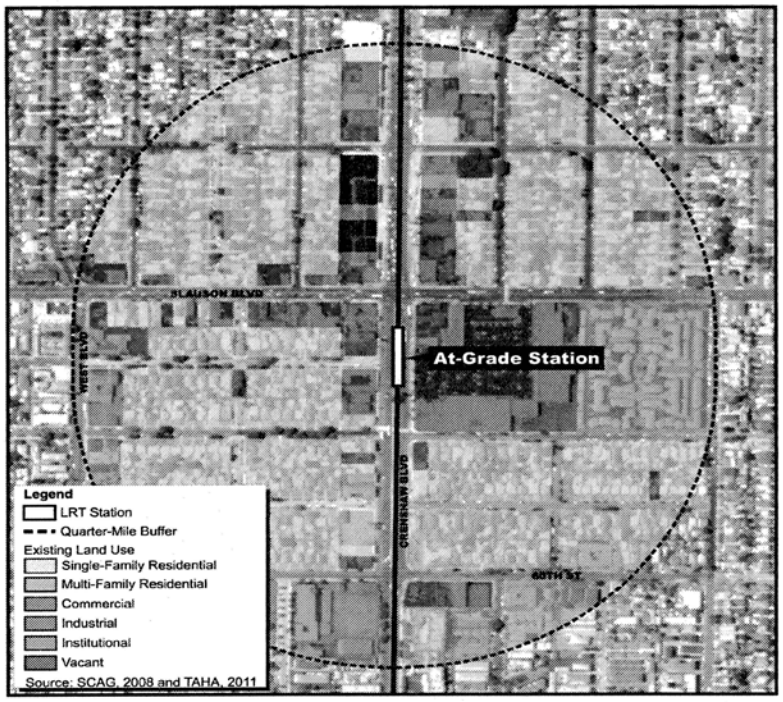
The Florence/West Station will provide access to West Boulevard and Florence Avenue, servicing the residential communities of Morningside Park and Hyde Park, as well as Edward Vincent Jr. Park to the west. This station will also include a park-and-ride lot



The above figure shows the location of the at-grade Florence/West Station, adjacent to the south of East Redondo Bouelvard.

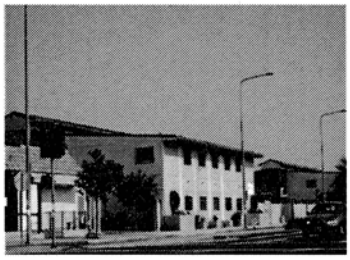


CRENSHAW/SLAUSON STATION

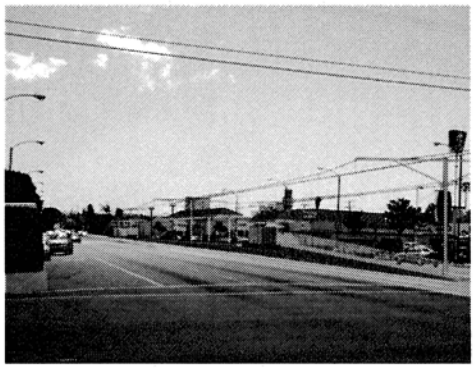


Metro

Crenshaw Plaza



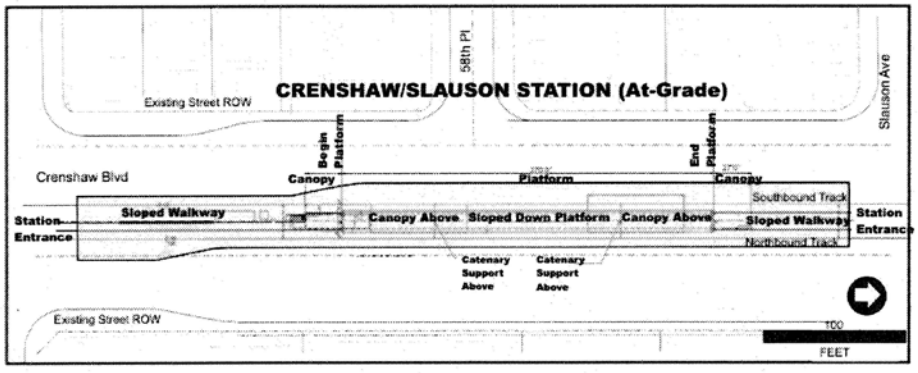
View Park Prep High school



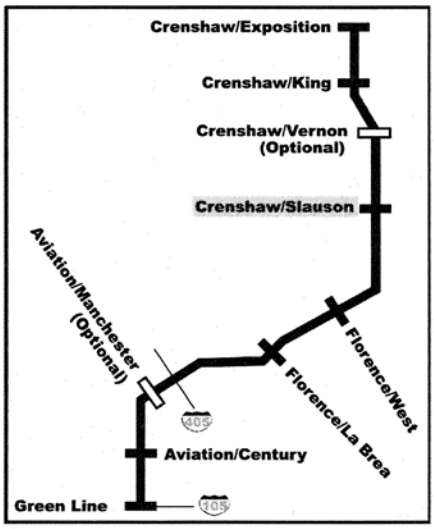
Rendering of Crenshaw/Slauson Station looking south on Crenshaw Bouelvard

Crenshaw/Slauson Station

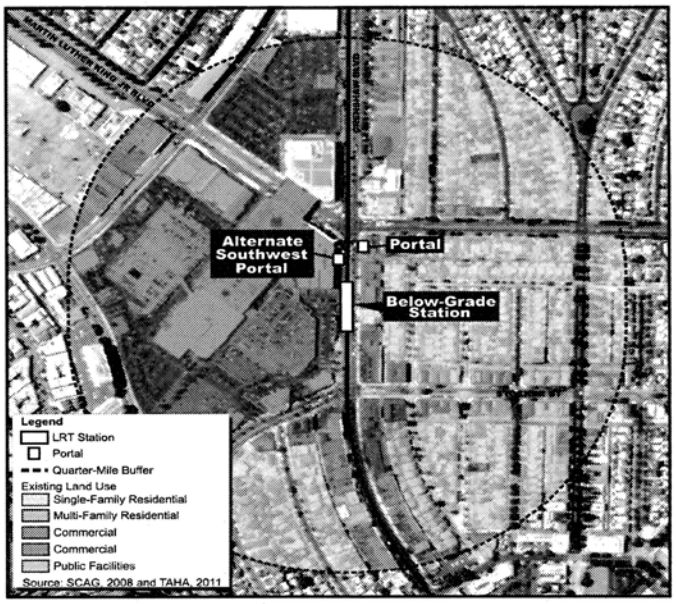
The Crenshaw/Slauson Station will service Crenshaw Boulevard, a major north-south gateway street. This station will be located in the median of Crenshaw Boulevard, south of Slauson Avenue and provide access to east-west bus routes that service Slauson Avenue and provide access to commercial neighborhoods, schools and government offices.



The above figure shows the location of the at-grade Crenshaw/Slauson Station in the median of Crenshaw Boulevard.



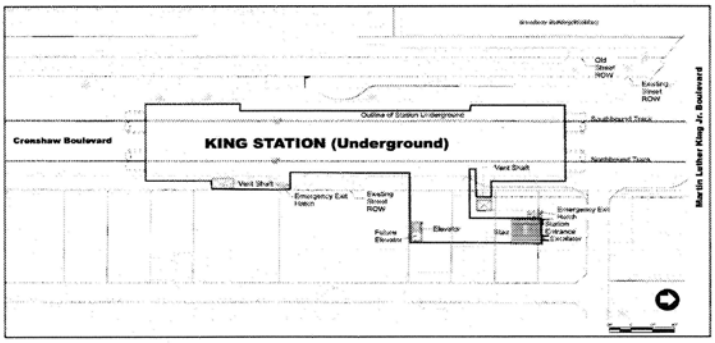
CRENSHAW/KING STATION



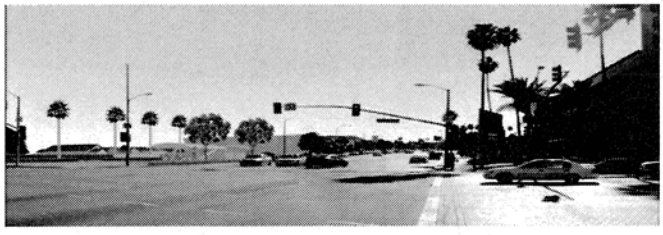
Crenshaw and King, Looking Southwest

Crenshaw/King Station

The Crenshaw/King Station will provide access to the Baldwin Hills Crenshaw Plaza shopping center, commercial uses along Crenshw Boulevard and Martin Luther King Jr. Boulevard, a major east-west street which is well serviced by local buses. This station is in walking distance to Leimert Park Village, and surround residential uses.

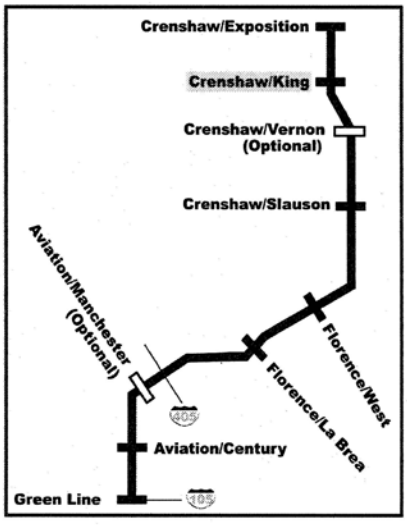


The figure to the left shows the location of the below-grade Crenshaw/King Station and station portal on the south-east corner of the Crenshaw/ Martin Luther King Jr. Boulevards intersection.

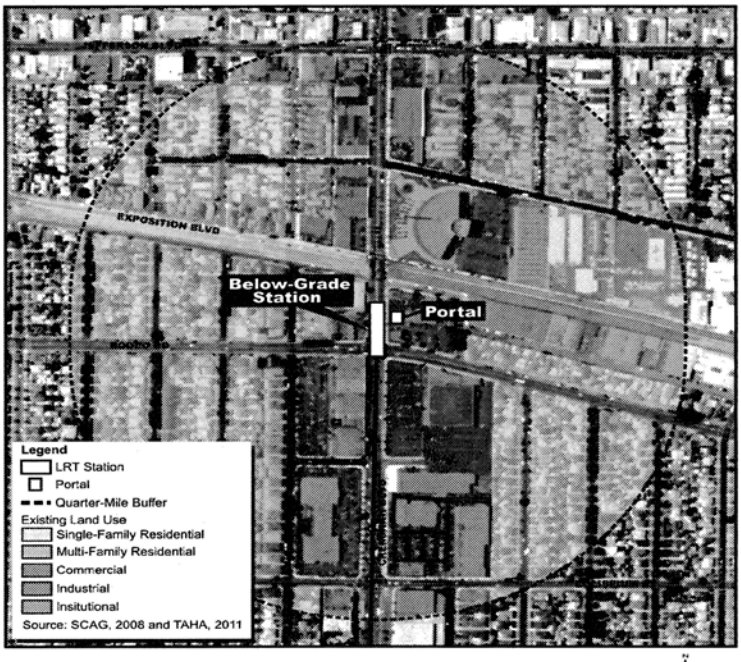


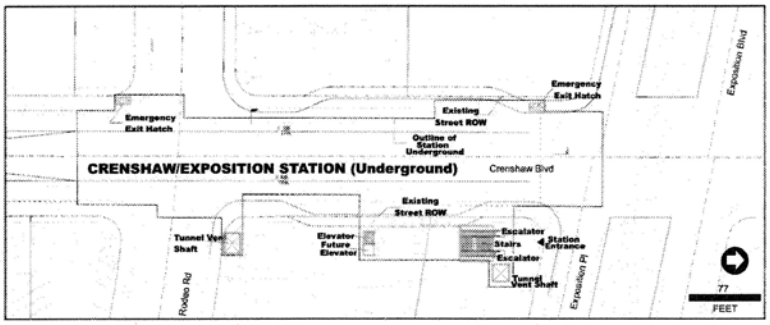
Rendering of Crenshaw/King Station portal on East side of Crenshaw Boulevard, looking south.

Rendering of Alternate South-west Portal at Crenshaw/King Station, on the west side of Crenshaw Boulevard, looking north.

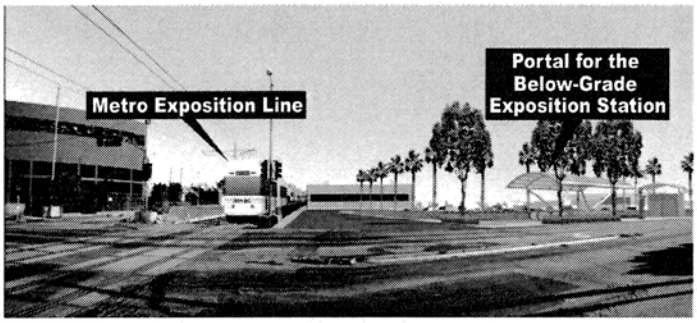


CRENSHAW/EXPOSITION STATION





The above figure shows the location of the below-grade Crenshaw/Exposition Station and station portal at the southeast corner of the Crehshaw/Exposition Boulevards intersection.



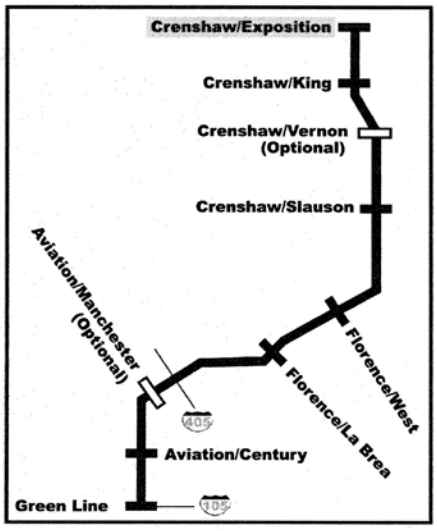
Rendering of portal for the below-grade Crenshaw/Exposition Station that is adjacent to the operation of the at-grade Exposition Line.

West Angeles Cathedral of God and Christ

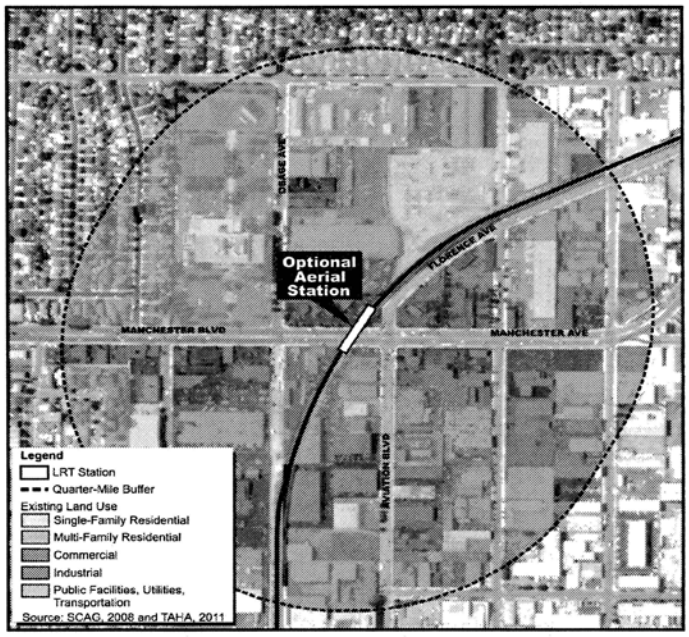
Chili Factory

Crenshaw/Exposition Station

The Crenshaw/Exposition Station is the northern terminus of the Crenshaw/LAX line with the incorporation of Design Option 6. This station will have a park-and-ride lot and allow a pedestrian connection to the Exposition Line that has an adjacent station. This connection with the Exposition Line will provide a connection to Downtown Los Angeles and Exposition Park to the east and Santa Monica and Culver City to the west.



OPTIONAL STATION-AVIATION/MANCHESTER



Metro

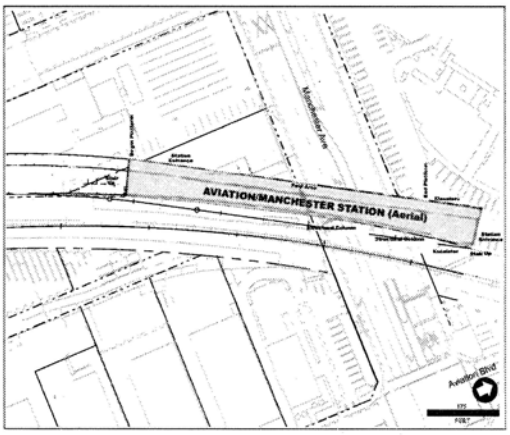
Aviation/Manchester Station (Optional)

The Optional Aviation/Manchester Station would service the commercial uses along Manchester Avenue, the residential community of Westchester-Playa Del Rey to the north and west, and the industrial areas along Florence Avenue and Aviation Boulevard.

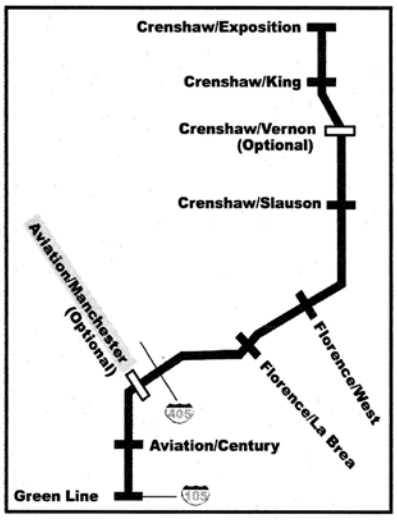
Existing view of the Aviation Boulevard/Manchester Avenue intersection.

Aerial structure across Manchester Avenue.

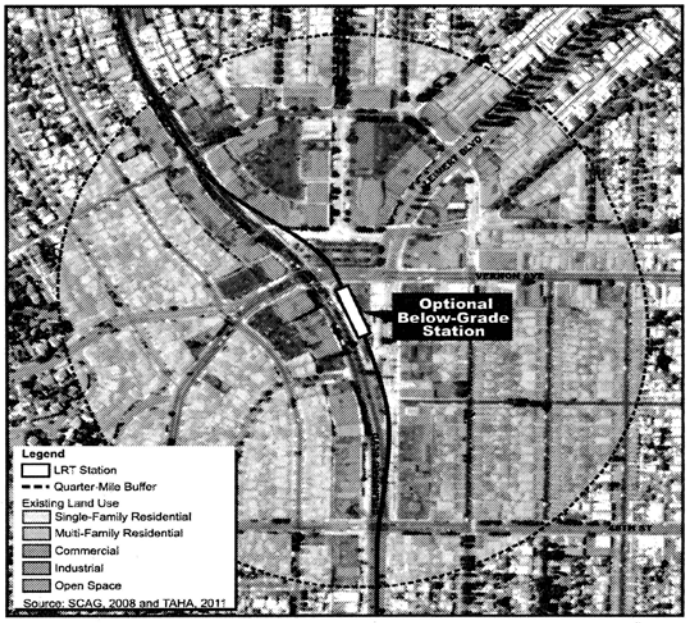
Aviation and Manchester, Looking East



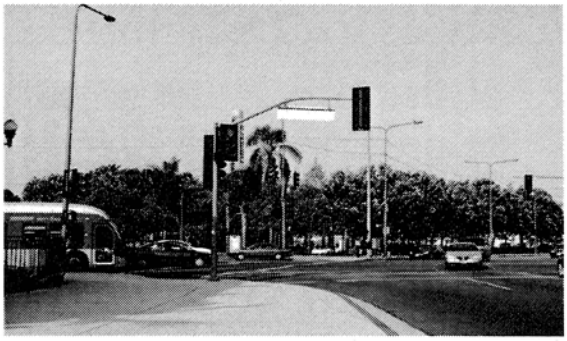
The above figure shows the location of the optional Aviation/Manchester Station at the aerial crossing at Manchester Avenue.



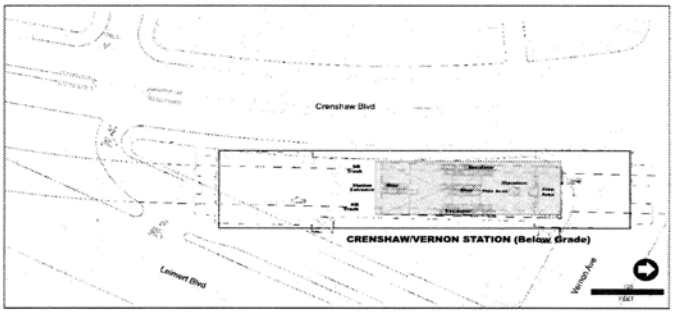
OPTIONAL STATION- CRENSHAW/VERNON



Metro



Crenshaw and Vernon, Looking East



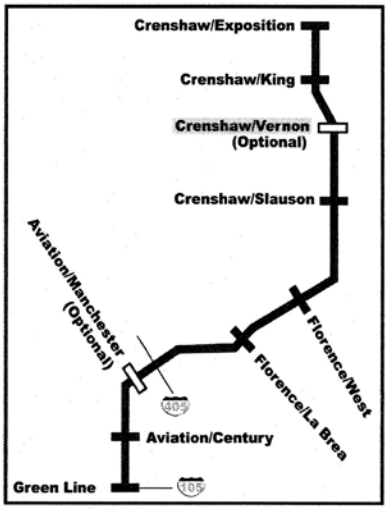
The above figure shows the location of the optional below-grade Crenshaw/Vernon Station near the intersection of Crenshaw Boulevard and Vernon Avenue.

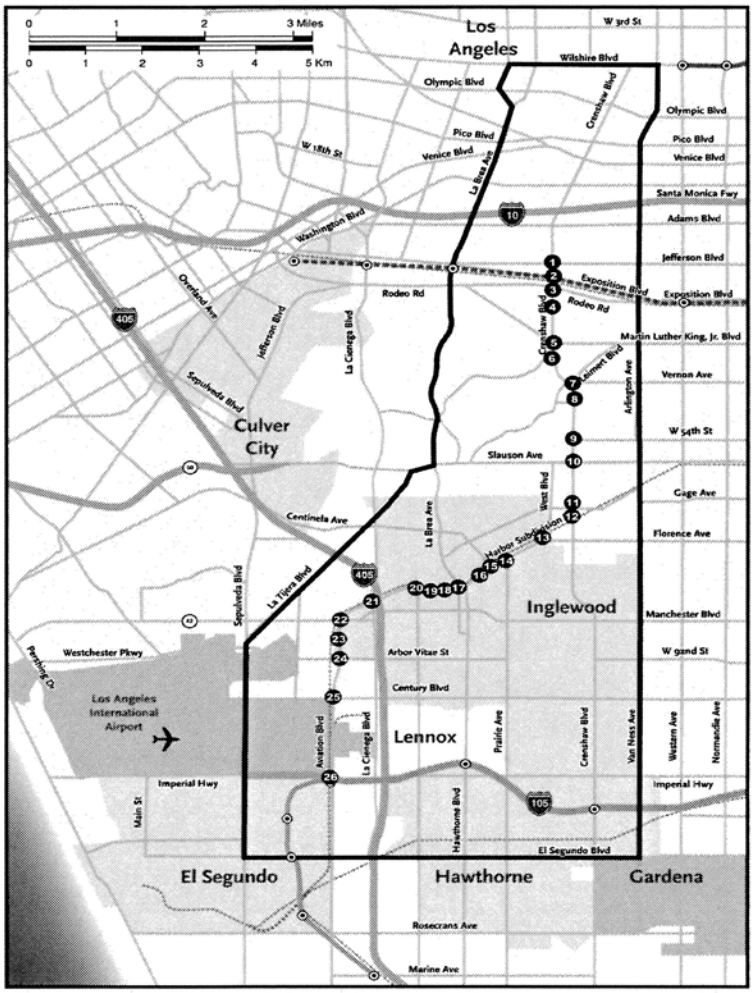
Crenshaw/Vernon Station (Optional)

The Optional Crenshaw/Vernon Station would service the residential neighborhoods of Leimert Park and View Park and the culturally oriented business in Leimert Park Village. The underground station would involve a realignment of the LPA beneath Leimert Park, and the station would be located in the Leimert Park triangle south of Vernon Avenue.

The above picture shows the existing view of the Crenshaw Boulevard/Vernon Avenue intersection.

The picture below shows the station portal located in the Leimert Park triangle south of the Crenshaw Boulevard/Vernon Avenue intersection.





The map above shows the 26 study intersections analysed for the Crenshaw/LAX Transit Corridor Project.

ES.4 Traffic and Parking

The potential construction and operation impacts for both traffic and parking impacts summarized below and further described in Chapter 3.0 Transportation Impacts of the FEIS/FEIR.

Construction Impacts. Construction of the LPA would result in traffic impacts at all Harbor Subdivision intersections. Construction of at-grade crossings would require intermittent off-peak lane reductions and closures of these crossings for up to six months. It is anticipated that these lane reductions and closures would cause traffic to divert to other locations. Most significantly would be the disruption of normal business operations as a result of intermittent site access.

Impacts to local traffic and circulation are expected with construction of the LPA aerial structures. Typical impacts associated with an aerial structure would include temporary and/or long-term lane closure, temporary removal of parking, and secondary impacts, such as increased traffic, to adjacent streets.

Cut-and-cover construction would prohibit east-west crossings at several designated locations for approximately eight months. These construction period impacts would occur at the station portals, by severely reducing the northbound movements along Crenshaw Boulevard. The number of traffic lanes would be reduced and local circulation would be impacted for extended periods of time. Intermittent lane closures would occur during off-peak and nighttime periods, in order to perform short work adjacent to the longer term work area, such as installing utility laterals, delivering large items, pouring of concrete and similar activities. Occasional lane closures would be required for certain activities such as the placement and removal of overhead concrete form and falsework, installation of tracks across crossings, installation/removal of temporary traffic decking and similar activities. These closures will vary in length and will be planned at times to reduce impacts to traffic wherever possible. The median left-turn lanes would likely be closed during the construction period, prohibiting left

The LPA would result in a savings of approximately 22 minutes saved traveling from the Exposition Line to the Metro GreenLine in 2030.

Table ES.1. Park-and-Ride Stations

Station Locations	Approximate Park-and-Ride Spaces
La Brea	100
West	120
Exposition (Design Option 6)	110

turns for up to six months. Metro would implement a construction period traffic management plan to deal with anticipated impacts related to congestion and parking. This plan would focus on maintaining traffic flow, providing alternate parking locations, maintaining access to local businesses, and minimizing disruptions to general circulation.

Operational Impacts. According to the criteria of the Los Angeles Department of Transportation, the LPA would result in traffic impacts at the Crenshaw Boulevard/54th Street intersection, where the LPA operates at grade. This impact would occur under the 140-, 130-, and 120-second signal timing for the LPA as a result of an at-grade rail crossing that would reduce the operational efficiency of the intersection. There are no feasible mitigation measures to reduce the impacts at this intersection for the 140-, 130-, and 120-second signal cycle lengths. In the locations of the alignment where the LRT will move from below-grade to at-grade, and locations where the intersecting roadways are minor and have existing partial turn restrictions, three intersections are planned for closure. These intersections on Crenshaw Boulevard are 59th Place, Coliseum Place and Rodeo Place. In addition, the CPUC requested the existing crossing at Brynhurst Avenue be considered for closure. This issue is currently being discussed with CPUC and additional analysis is expected before the final decision is reached.

The LPA would result in the loss of on-street parking. With the removal of the frontage road that parallels Crenshaw Boulevard, the existing bus stops would be relocated. Relocating the existing bus stops would result in the removal of additional on-street parking spaces on Crenshaw Boulevard. Based on advanced conceptual engineering designs, there would be a permanent loss of 142 northbound and 166 southbound on-street parking spaces between 48th Street and 60th Street.

The project is expected to result in only a minor loss of off-street parking under the LPA. This loss would occur in the Harbor Subdivision portion of the transit corridor and be limited to private off-street lots where the land would be used for station development. These private off-street parking lots would be acquired by Metro prior to construction. While the final number of parking spaces provided at any proposed park and ride lots lot will be determined at a later time, it is assumed that the proposed station parking would provide sufficient capacity to accommodate the anticipated parking demand for the LPA, which is expected to be approximately 100 spaces per station. At other stations along the corridor where off-street parking would not be provided, spillover parking to the adjacent streets may occur, but is likely to be minimal based on projected parking demand at stations with park-and-ride facilities.

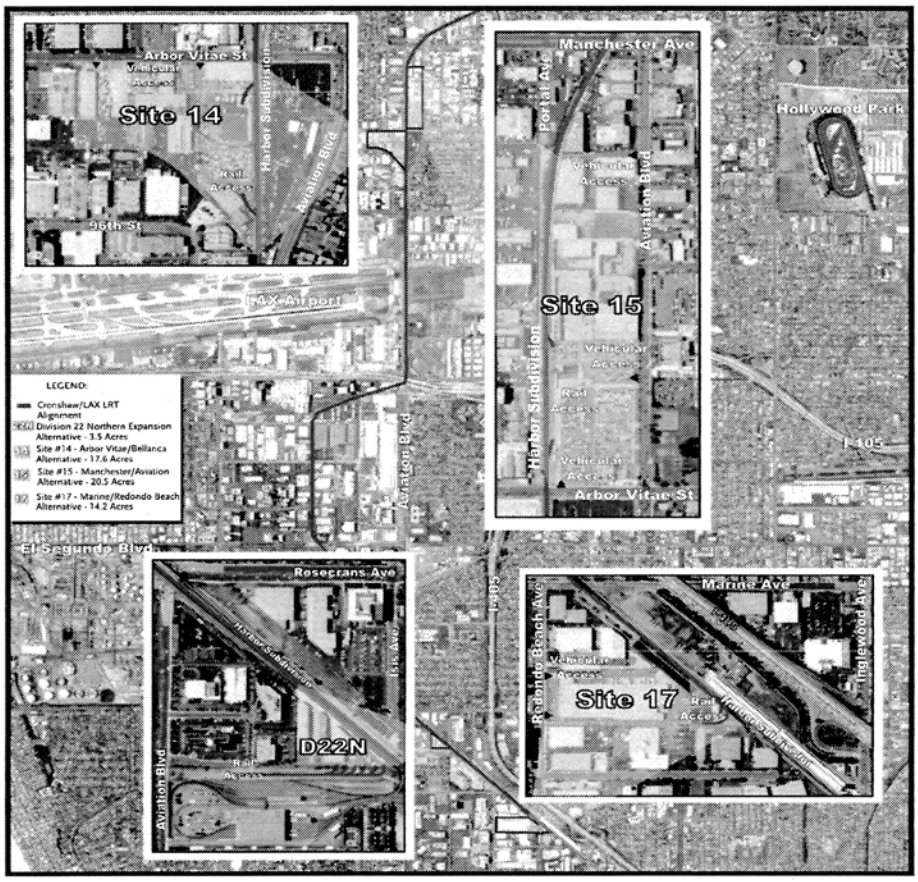
ES.5 Evaluation of Project Alignment and Stations

The FEIS/FEIR analyzes the environmental impacts and consequences associated with the implementation of the project alignment and stations. The environmental impacts and consequences associated with the maintenance facility for the project are discussed in Chapter 5.0 of this FEIS/FEIR, where detailed technical information and regulatory requirements used to evaluate the impacts of the proposed project are included in the appendices of this document. Discussion of each environmental topic is generally organized by the following structural headings:

Affected Environment/Existing Conditions describes the existing physical environment and baseline setting wherein the proposed project would occur.

Environmental Impacts/Environmental Consequences describes the anticipated changes that would result from implementation of the proposed project

EVALUATION OF MAINTENANCE SITE ALTERNATIVES



Sites of approximately 15 acres or more are desirable. A variety of sites adjacent to corridor routes were reviewed. Four sites were considered for evaluation in the Final EIS/EIR.

and a federal determination of significance is made based on the relative change from the baseline conditions (No-Build Alternative).

Mitigation Measures provides measures that would reduce or eliminate the significant or adverse impacts.

CEQA Determination evaluates the anticipated changes that would result from implementation of the proposed project against CEQA thresholds and a State determination of significance is made based on the relative change from the existing conditions.

Significant Impacts Remaining After Mitigation states the effectiveness of mitigation measures in reducing the impacts identified. A final determination is made to whether an identified impact can be reduced to a less-than-significant level, or remains significant and unavoidable after mitigation. While CEQA requires that only effects that have a "significant impact" be identified in an Environmental Impact Report, the National Environmental Policy Act (NEPA) requires that all adverse impacts of a proposed project be analyzed. Accordingly, in this joint federal and state environmental document, reference to "significant impacts" is made to fulfill this requirement under CEQA, pursuant to standards of California law. However, regardless of level of significance, all potentially adverse environmental impacts have been analyzed and mitigation proposed where feasible to reduce identified adverse effects.

ES.6 Evaluation of Maintenance Site Alternatives

In the analysis of the additional Maintenance Facility Site Alternatives, a total of 17 sites were identified for consideration. This consideration resulted in the selection of the four maintenance facility sites that were evaluated in the SDEIS/RDEIR. The impacts and consequences of the four maintenance facility site alternatives was analyzed in the same format as the project alignment and stations with the same headings and environmental topic areas. Metro has selected Site 14 as the preferred maintenance site for the Crenshaw/LAX Transit Corridor Project

A Maintenance and Operations Facility is necessary to ensure that the project can continue to function on a daily basis without service interruptions or delay. These activities include the maintenance needed to keep the transit vehicles in peak operating condition, as well as emergency repairs necessary if a vehicle becomes inoperable. Storage is necessary for the vehicles when they are not in operation and are being repaired, or for replacement vehicles that become temporarily inoperable .

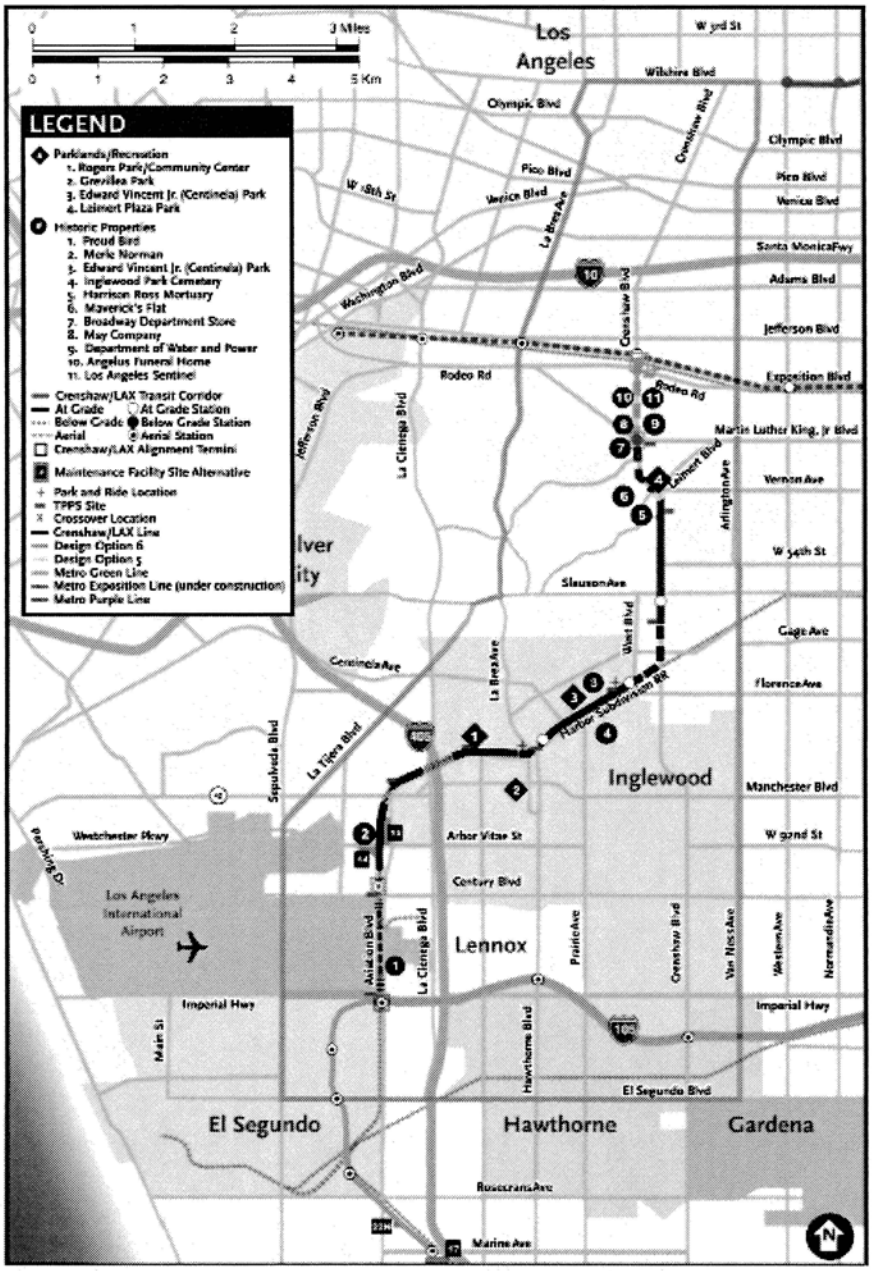
at the April 2011 Board of Directors meeting.

ES.7 Section 4(f) Evaluation

Section 4(f) protects publicly-owned land of parks, recreational areas, and wildlife refuges. Section 4(f) also protects historic sites of National, State, or Local significance located on public or private land. The Section 4(f) evaluation includes a description of the proposed action, a list of eligible properties for the National Register of Historic places, and an evaluation of individual parklands or historical resources potentially impacted by the Project. The evaluation of each resource includes information on the location and of the property impacted, impacts of the project on the property, measures to minimize harm, and coordination with the agency having jurisdiction over the resource.

The project would not result in the direct use of any parklands or recreational areas. Three of the four parklands are evaluated for potential constructive use based on the nature of the use and their proximity to the alignment. The Project would not result in the direct use of any Nationally-Eligible property. There are no wildlife or waterfowl refuges in the Project area.

The Alternate Southwest Portal at the Crenshaw/King Station would result in a de minimis use to one Section 4(f) resource, the Broadway building (Walmart) at the Baldwin Hills Crenshaw Plaza. Pursuant to 23 CFR Part 774.3, the FTA has preliminary determined that the use of the property, including any measure(s) to minimize harm (such as any avoidance, minimization, mitigation, or enhancement measures) committed to by the applicant, will have a de minimis impact, as defined in §774.17, on the property.



Section 4(f) resources within proximity to the Crenshaw/LAX Transit Corridor alignment.

ES.8 Community Outreach

This FEIS/FEIR has been prepared to meet the requirements of NEPA and CEQA. As required by these laws, the environmental review process must be

completed before the proposed project can be approved by Metro and the FTA. The goal of both legislative acts is to ensure that local and federal decision-makers are aware of the environmental consequences of a project before making a decision whether to proceed.

One of the first steps in the environmental review process is to publish a Notice of Intent (NOI) to prepare an EIS in the Federal Register. This notice was published on October 2, 2007 (Vol 72, No 190) and provided a brief description of the proposed project and invited comment on issues that would be addressed in the environmental document. A Notice of Preparation (NOP) of an EIR, the CEQA equivalent of the NOI, was also prepared and circulated by the State of California on September 28, 2007. In addition to these notices, various other means were used to invite public comment on the project. Three public scoping workshops were held and letters of invitation were mailed to addresses within a 1/4-mile radius of the Crenshaw/LAX Transit Corridor alignment. Articles and advertisements were published in a number of local newspapers including several non-English announcements and electronic mailings (e-mail blasts) were sent to various stakeholders. Metro also distributed bus pamphlets and placed postings in community and council district newsletters. The 30-day public scoping comment period was extended until November 20, 2007, and all 365 comments that were received on the project were documented and reviewed in the preparation of this document.

Metro initiated a second round of public comments with the release of the DEIS/DEIR. During the 45-day public review period for the DEIS/DEIR, the document was placed in local public libraries and other repository sites, and made available on the Metro website (www.metro.net/crenshaw). Information about public hearings and other ongoing project activities was available via the project hotline at (213) 922-2736. For a detailed description of the environmental review process, and related public involvement opportunities, please refer to Chapters 2.0 Alternatives Considered and 7.0 Community Participation of this FEIS/FEIR.

Public hearing testimony and written comments on the DEIS/DEIR were compiled during the public review period. In the Fall of 2009, the Metro Board considered public comments as part of its selection process for the LPA for the Crenshaw/LAX Transit Corridor. In addition to the foregoing outreach, Metro initiated additional public outreach for a Supplemental Draft Environmental Impact Statement/Recirculated Draft Environmental Impact Report (SDEIS/RDEIR) that was required for the evaluation of new maintenance facility sites. This process is further described in ES. 11 Locally Preferred Alternative Selection Process. Metro also conducted community briefings and presentations with more than 40 different groups in the Crenshaw/LAX Transit Corridor. Introductory briefings were conducted with each of the jurisdictions located within the project corridor. City, county, state and congressional representatives and their staff were invited to participate in working groups during the develpoment of the project. Legislative briefings were conducted with the Cities of Inglewood and Los Angeles. Monthly technical advisory committee meetings were held, in which key stakeholders from the cities' planning, utilities and transportation departments were presented with project updates and input was solicited on advanced design concepts. Metro maintained a contact list of stakeholders located throughout the project area and those located adjacent to the potential maintenance facility sites or who could be directly affected by implementation of the project. Stakeholders were notified of public station planning workshops, focused on urban and streetscape design concepts and station area planning for the proposed stations along the project corridor. Workshop participants were involved in group discussions and were given the opportunity to provide feedback to the project team. In addition to the station planning workshops, stakeholders were invited to participate in a public workshop which initiated the additional analysis for new alternative maintenance

Numerous community meetings have been held as part of the Alternatives evaluation and project formulation process.

facility sites. Responses to public comments received during the circulation period have been incorporated into the FEIS/FEIR. Metro and the FTA cannot initiate the proposed project until the FEIS/FEIR is certified with all necessary mitigation measures and a Mitigation Monitoring Program is adopted. Following certification of the FEIR by the Metro Board, the FTA will consider the FEIS and issue a public Record of Decision (ROD) to complete the final step in the environmental review of the project.

Table ES.2. Estimated Cost for Project Elements

Project Design Varations	Estimated Cost
LPA	$1,589,154,000
Optional Partially-Covered LAX Trench	$(40,964,000)
Optional Vernon Station (Design Option 5)	$106,306,000
Optional Manchester Station (Aerial)	$66,500,000
Optional Cut-and-Cover Crossing at Centinela Ave (Design Option 3)	$20,599,000
Minimum Operable Segment-Metro Green Line to King Station (MOS-King)	$1,331,634,000
Minimum Operable Segment-Exposition Station to Century Station (MOS-Century)	$1,466,304,000
Maintenance Facility (cost for Crenshaw/LAX Project)	$138,413,730
Project Definition (includes Partially-Covered LAX Trench Design Option	$1,548,140,000

ES.9 Cost and Performance

The cost of a transportation investment falls into two categories: capital costs, and operating and maintenance (O&M) costs. Capital costs are the start-up costs for the project, including the costs of guideway construction, vehicles, and any system facilities necessary before the project can begin to operate. O&M costs are the costs associated with the day-to-day running of the new transportation system. Costs, such as labor, vehicle maintenance, and overall facility maintenance fall into this category. This section summarizes both types of costs and presents the proposed capital financing plan, and evaluates Metro's ability to afford the alternatives under consideration. The estimated cost in 2010 dollars for the LPA (which includes a Fully-Covered LAX Trench) is $ 1,589,154,000, compared to $1,331,634,000 for the MOS from the Metro Green Line to King Station and $1,466,304,000 for the MOS from Exposition Boulevard to Century Station. The estimated cost in 2010 dollars for the Project Definition, which includes the Partially-Covered LAX Trench Option, is $1,548,190,000. The additional costs for the LPA design options range from $20,594,000 to $106,306,000.

Ridership

Project ridership in year 2030 for the LPA is 12,625 daily boardings, as shown in Table ES.3. The incorporation of the Crenshaw/Vernon Station into the LPA would increase ridership by adding an additional station at Vernon Avenue which would expand the service along the alignment and provide direct access to Leimert Park Village. Neither the cut-and-cover Grade Separation at Centinela Avenue Design Option nor the Exposition Below-Grade Alignment Design Option would have an effect on overall ridership.

ES.10 Issues Resolved

Based on the outcome of the alternatives analysis and screening process and technical transit planning considerations, in addition to input received during the comment period, a series of issues (listed below) at the time

Table ES.3. Projected Ridership and Vehicle Miles Traveled (VMT) - 2030

Alternative	Daily Boardings	Study Area VMT	Regional VMT
LPA	12,625	5,126,000	454,402,000
No Build	0	5,128,000	454,428,000
DIFFERENCE	+ 12,625	(2,000)	(26,000)

The selection of the Locally Preferred Alternative (LPA) by the Metro Board considered a wide variety of variables including the performance, ridership, costs, benefits, environmental impacts, and pubic input.

ISSUES RESOLVED

of the circulation of the DEIS/DEIR were identified. These issues have since been addressed and resolved as the project moved forward through the environmental review process.

Community Acceptance of the TSM and BRT Alternatives as a Credible Mobility Improvement Over Existing Metro Rapid Bus Service as the Long Term Investment

Crenshaw Boulevard currently features Metro Rapid Bus service that supplements local bus service along the corridor. The TSM and BRT Alternatives described in the DEIS/DEIR distinguish small incremental travel time improvements over the existing service. Existing bus service and future options are subject to traffic delays as a portion of these services will have to operate in mixed traffic. The Metro Board has determined that these options are not viable long-term solutions to mobility needs in the Crenshaw/LAX Transit Corridor. The Metro Board of Directors considered engineering and environmental documentation, as well as public comments and concerns to determine that the LRT Alternative is the LPA.

Community Meeting.

Crenshaw/LAX Transit Corridor Connection to the Metro Purple Line/ Metro Purple Line Extension

The Alternatives Analysis process conducted for the Crenshaw/LAX Transit Corridor screened out a LRT connection to the Metro Purple Line due to cost effectiveness considerations. The connection would have to be entirely underground due to the narrow right-of-way on Crenshaw Boulevard, making the option cost prohibitive. If a connection is to be achieved between a Crenshaw/ LAX Transit Corridor LRT Alternative and the Metro Purple Line, a Metro feasibility study has found that an LRT connection towards the west, such as the Wilshire Boulevard/La Brea Avenue intersection rather than Crenshaw/ Wilshire Boulevards intersection would be the most attractive option. The Metro Board determined that the LPA would be designed in order to facilitate a future connection to the Metro Purple Line, which would include a below-grade connection to Exposition Boulevard. The connection of the LPA to the Metro Purple Line is a separate project and is outside the scope of this FEIS/FEIR.

Crenshaw/LAX Transit Corridor Light Rail Alternative Connection to the Exposition Light Rail

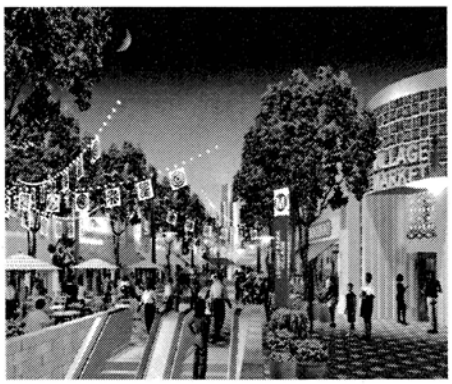
Due to unmitigable traffic impacts, physical consraints, and required right-of-way acquisition, the LPA's at-grade configuration from 39th Street to Exposition Station was determined to be infeasible. The below-grade connection

Exposition Line Connection at the Crenshaw/ Exposition Boulevards intersection.

to the Exposition/Crenshaw Station is incorporated into the LPA subject to its financial feasibility.

As defined in the LPA, the ultimate northern terminus (Exposition Station), had an at-grade configuration as the base condition as well as a below-grade design option (Design Option 6) which both underwent further analysis during the ACE phase. All analyzed at-grade configurations were deemed to be infeasible due to a combination of physical constraints, significant environmental impacts, and costs. Consultations with staff from the CPUC (which oversees approval to operate over at-grade crossings), the Community Redevelopment Agency of Los Angeles (which oversees approved development projects in the area), and the Los Angeles Department of Transportation indicate that an at-grade approach would not be acceptable to these agencies. The extent of the impacts for at-grade approach to the Exposition Line also resulted in a higher cost estimate than previous estimates. In addition, there was a substantial amount of support for a below-grade alignment along this segment. It may be necessary to consider either a temporary interim

ISSUES RESOLVED



Potential changes to Leimert Park Village that may be induced by a nearby light rail station have emerged as a local concern.

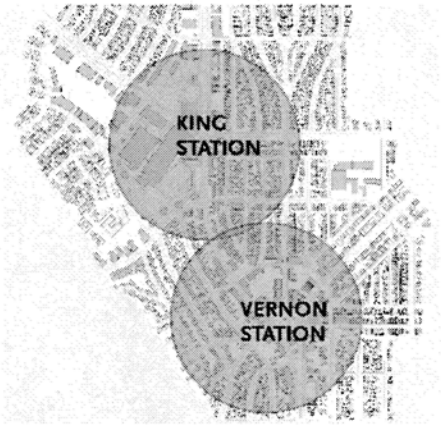
northern terminus of the Crenshaw/LAX line at the King Station (MOS-King) or a temporary southern terminus at the Century Station (MOS-Century). MOS-King would connect with the Metro Green Line at the southern end but would have potentially degraded service to the Exposition Line at the northern end. MOS-Century would connect with the Metro Exposition Line at the northern end but would have potentially degraded service at the southern end.

Light Rail Station Area Development Potential Consistent with Community Goals and Objectives

One key aspect in obtaining federal funding for transit improvements is whether local communities encourage transit-supporting or transit-oriented land uses. Similarly, California, with impetus from Senate Bill 375, has also focused on transit-supporting land uses as a means to reduce greenhouse gas emissions. Transit-supporting land uses often result in an increase in development density and intensity. The Metro Board must weigh Federal and State mandates against community concerns regarding over-development or changes in the character of corridor communities. Although all proposed station areas are subject to this concern, Leimert Park Village residents in particular have expressed concern about increased development. Station area planning workshops were held to identify the types of development that would be supported by the local community, as well as those that would be consistent with land use policies of the applicable jurisdictions. The results of these workshops have been considered and incorporated into the design of the LPA.

Light Rail Station Location(s) Between Martin Luther King Jr. Boulevard and Vernon Avenue

Related to the issue of transit-supporting land use and induced growth is the pending location of the LRT station between Martin Luther King Jr. Boulevard and Vernon Avenue. The LPA indicates two below-grade LRT stations; a station at Martin Luther King Jr. Boulevard and an optional station at Vernon Avenue, adjacent to Leimert Park. These prospective station locations are approximately 1/2-mile apart. An additional station would increase LRT travel times. As proposed with the Design



Station Proximity.

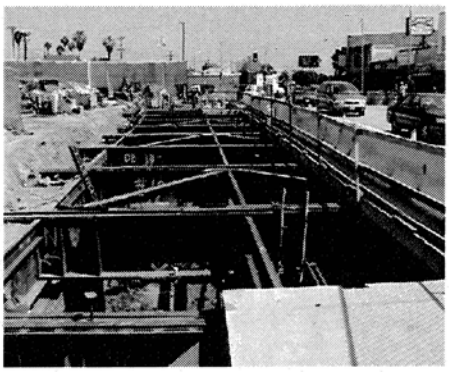
Option, one station would serve the Baldwin Hills Crenshaw Plaza shopping center and the other would serve Leimert Park Village. Community comment indicated support for only stations at the main intersections at Martin Luther King Jr. Boulevard and/or Vernon Avenue and no station in between. The Metro Board has considered whether two stations are necessary and whether the added expense of a Leimert Park Station (near Vernon Avenue) is warranted. Since the alignment is underground at this location, the cost of an additional station is significant and exceeded the project budget. As a result the station was carried forward as an optional station, should funding become available at a later date.

What is a grade separation? A crossing of a roadway and a railroad at different elevations, such as a bridge structure carrying the highway over the railroad or vice versa. A grade separation can also be created by placing railroad or transit line in an undercrossing or tunnel to separate it from a roadway or another rail line. Grade separations reduce pedestrian safety related impacts and eliminate impacts to traffic that may be caused by an intersection between the railroad and a roadway.

ISSUES RESOLVED

Light Rail Underground Construction Method Between 39th Street and 48th Street

Two methods of underground construction may be used: cut-and-cover and tunnel boring machines. The cut-and-cover method requires excavation of the underground trench, and then temporarily covering the trench with wooden planks or concrete or metal panels while the subway is constructed beneath. In the section of Crenshaw Boulevard between 39th Street and 48th Street, this construction technique would likely have adverse effects on traffic flow and to the accessibility for local businesses. The tunnel-boring technique would be less disruptive to the community, but requires stations to be located deeper than with the cut-and-cover method. This technique involves an underground machine that creates the subway structure without disrupting the surface. The construction method is envisioned to be determined by the design-build contractor. It is important to note that even if tunnel boring is selected, the segment from Victoria to 60th Street, the Crensahw/Martin Luther King Station and the optional Crenshaw/Vernon Station would continue to be constructed with the cut-and-cover technique. The segments of the alignment between Exposition Boulevard and 39th Street and 39th Street to 48th Street were analyzed as cut-and-cover constructino as a worst case scenario.



Cut and Cover Construction Goldline Eastside Extension

Light Rail Northern Portal Location and Baldwin Hills Crenshaw Plaza Access

Because the at-grade alignment between Exposition Bouelvard and 39th Street was determined to be infeasible, there is no longer a transition portal at 39th Street between the at-grade and below-grade alignments. King Station would be located at the southeast corner of Crenshaw and Martin Luther King Jr. Boulevard, however, an additional portal located at the southwest corner of Crenshaw and Martin Luther King Jr. Boulevard is being carried forward for consideration.

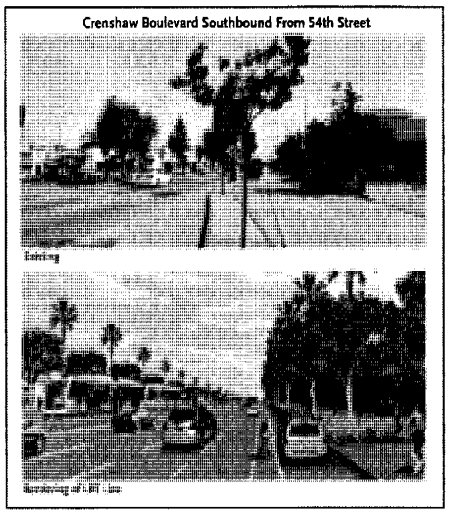
Treatment of Frontage Roads and Parking From Coliseum to Martin Luther King Jr. Boulevard and from 48th Street to Slauson Avenue

In a number of segments along Crenshaw Boulevard, north of Slauson Avenue, the street features one-way frontage roads that are separated from the main traffic lanes of Crenshaw Boulevard by a raised median. To maintain the current number of traffic lanes and to accommodate LRT in semi-exclusive rights-of-way, the frontage roads would be reconfigured or eliminated. The at-grade segment between 48th Street and 60th Street would require the removal of these frontage roads, however, the sidewalks would be widened and a bikepath would be created. This change has implications for the loss of curb parking along Crenshaw Boulevard and alteration in street landscaping. Access to curb parking would remain, however, parking adjacent to the divider median between Crenshaw Boulevard and the adjacent frontage roads would be removed.

Mature Trees In Crenshaw Median. The LRT would remove this landscaping and provide additional landscaping along a widened sidewalk.

Streetscape and Urban Design Treatments to Mitigate the Loss of Mature Median Trees Between 48th Street and 54th Street.

Since the 1960s (after the termination of the streetcar service on Crenshaw Boulevard), the median of Crenshaw Boulevard has been landscaped from 48th Street to 54th Street. Along this section of the Crenshaw Boulevard median are intervals of mature trees that provide visual relief from the wide Crenshaw Boulevard right-of-way and contribute to aesthetic features of Crenshaw Boulevard as a scenic highway designated by the City of Los Angeles for the section north of Slauson Avenue. LRT improvements



in this section of Crenshaw Boulevard would require the removal of these trees. Mitigation has been incorporated into the design of the LPA to replace the median trees. A landscape maintenance program will be developed in order to determine appropriate treatments.

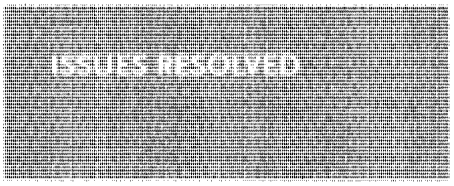
Pedestrian Safety Improvements at Nearby Schools

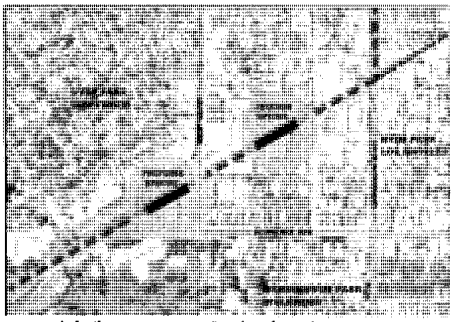
A number of private and public schools are either adjacent to or near Crenshaw Boulevard. There is also a private school near the Harbor Subdivision and Centinela Avenue crossing. Based on comments siting community concern for pedestrian safety, numerous pedestrian safety measures have been incorporated into the design of the at-grade crossings along Crenshaw Boulevard. These include, but are not limited to, fencing, warning signs, raised median, and adequate pedestrian queuing areas. Metro also has an on-going safety program that is given to local area schools. Additional mitigation measures are provided in Section 4.14, Safety and Security of this FEIS/FEIR to ensure pedestrian safety is achieved.

West Boulevard Station Location

Under the LPA, a station is located west of West Boulevard in the City of Inglewood. Community input received from residents in the Hyde Park community favor moving the station eastward toward Crenshaw Boulevard to provide a better connection with transit services on Crenshaw Boulevard and on Florence Avenue potentially providing improved access from communities to the south along Crenshaw Boulevard, such as Morningside Park. Such a location may provide for revitalization along a corridor between Crenshaw Boulevard and West Boulevard. Some community residents in the City of Inglewood favor the continued location of the station west of West Boulevard, where there may also be transit-oriented development opportunities on vacant parking lots and other under-utilized parcels. Design coordination meetings were held to evaluate the two station options and it was

Schools adjacent to the LRT raise the awareness regarding pedestrian safety and measures that must be in place to ensure safe LRT operations and pedestrian paths.





Potential Florence/West Station locations.

determined that the location of a station adjacent to West Boulevard would be most appropriate and could be perceived as a catalyst to change along West Boulevard that has remained dormant for many years.

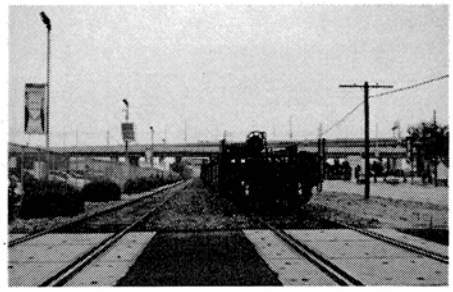
Connection to Hollywood Park Redevelopment

As discussed above, Metro received comments during meetings in the City of Inglewood that the alignment should be re-directed to serve the City of Inglewood's focus and investment in the Hollywood Park area. Metro reviewed ridership and cost data and concluded that the proposed LPA alignment along the Harbor Subdivision that does not directly connect to the Hollywood Park Redevelopment area remains the most viable and cost-effective option. The LPA alignment serves downtown Inglewood employment with a proposed station near La Brea Avenue. It was determined that the connection from Hollywood Park to the LPA would be achieved through the enhancement of local transit connections and coordination with local developers regarding the provision of shuttle service.

Hollywood Park Redevelopment. Within the City of Inglewood, the Hollywood Park area is undergoing a major change with housing and retail developments expected to replace the race track. Transit connections to this emerging area is a major local concern.

Burlington Northern Santa Fe Use of the Harbor Subdivision Railroad

One of the most significant constraints to transit use of the Harbor Subdivision is the issue of whether Burlington Northern Santa Fe (BNSF) will maintain railroad operations within the right-of-way. Maintaining BNSF operations in the Harbor Subdivision would require the relocation of the railroad tracks to allow for LRT operations. The continued use by BNSF also adds to construction cost, as well as a new element to grade crossings, where crossing signals would need to serve both LRT vehicles and railroad operations. Metro has had discussions with BNSF to determine whether the abandonment (during construction and/or permanently) of the Crenshaw/LAX Transit Corridor portion of the Harbor Subdivision (Crenshaw Boulevard to Imperial Highway) is possible. These discussions are ongoing and the issue is yet-to-be resolved. It is currently assumed in the FEIS/FEIR that the "third track" is preserved.



Harbor Subdivision. Continued freight use of the Harbor Subdivision poses many constraints to the development of LRT transit service within the railroad right-of-way.

Grade Separation at Centinela Avenue

The application of Metro's Grade Crossing Policy is presented in the conclusions of the FEIS/FEIR. At this stage in the analysis, the assessment concludes that no grade separation is needed at Centinela Avenue and the Harbor Subdivision adjacent to Florence Boulevard. Comments received through the community outreach process indicated community concerns regarding access to Edward Vincent Jr. Park (Centinela Park), a nearby private school and church that may be addressed through a grade separation. The grade of Centinela Avenue affects the operation of vehicles through the intersection. The FEIS/FEIR contains a design option for a grade separation at Centinela Avenue to address these concerns. Such grade separation may require more extensive construction in the short term and may create some impacts to the palm trees adjacent to the additional railroad right-of-way. It was determined that there were no significant traffic impacts associated with an at-grade crossing at Centinela Avenue, and a grade separation is not warranted. The incorporation of a grade separation at Centinela Avenue will be subject to the final determination of the California Public Utilities Commission (CPUC).

View of Centinela Avenue at Florence Ave/Harbor Subdivision. Traffic movements along with pedestrian flows to a nearby Vincent Park, church and school are major local concerns. The crossing is at the top of a slight incline.

Specific Effects on Landmark Palm Trees Near Centinela Avenue and Mitigation Options

One of the most noticeable visual elements along the Harbor Subdivision in the City of Inglewood is the dual row of palm trees. The inner row of palms mark the southern boundary of Edward Vincent Park. The guideway requirements were thought to require the removal of some portion of the northern most row of palm trees. Metro held focused community urban design and station area meetings in Inglewood to address this issue and design measures to mitigate the visual impact. The design of the LPA will be

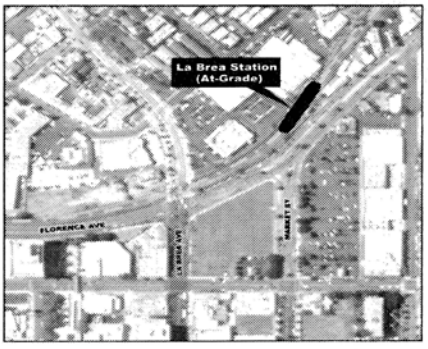
The BNSF Railway is an American freight railroad company headquartered in Fort Worth, Texas, and is one of the largest transcontinental freight networks in North America.

Landmark Palms along Florence Avenue, near Edward Vincent Jr. Park.

constructed to maintain the majority of these landmark trees.

La Brea Avenue Crossing

The LPA defined an elevated aerial structure and station on the west side of La Brea for the Florence/La Brea Station. During advanced conceptual engineering, preliminary geotechnical investigations indicated an earthquake fault crossing at this location. To address this seismic condition, a below grade crossing was proposed. This refinement provide for greater safety and an easier recovery in case of an earthquake. Additional "fault finding" work was undertaken to confirm the location of the fault so that the station can be placed in a safer location. The station was ultimately placed to the east and north of the intersection of Market Street and Florence Avenue in an at-grade configuration which is located in a depression at a lower elevation then Florence Avenue. In addition, the change from elevated to below grade crossing at La Brea Avenue results in at-grade crossings at Ivy and Eucalyptus Streets. The LPA had grade-separated crossings at Ivy and Eucalyptus Streets only to provide a transition from the high elevated alignment at La Brea Avenue. These crossings did not require grade separation on their own. These two at-grade crossings have been discussed with CPUC staff. This new trench alignment is less expensive than the base design.



The La Brea Station would be an at-grade station located east of Market Street.

Grade Separation at Manchester

The application of Metro's Grade Crossing Policy to the Crenshaw/LAX Transit Corridor Project indicates that a grade separation was necessary for the Manchester Boulevard intersection with the Harbor Subdivision.

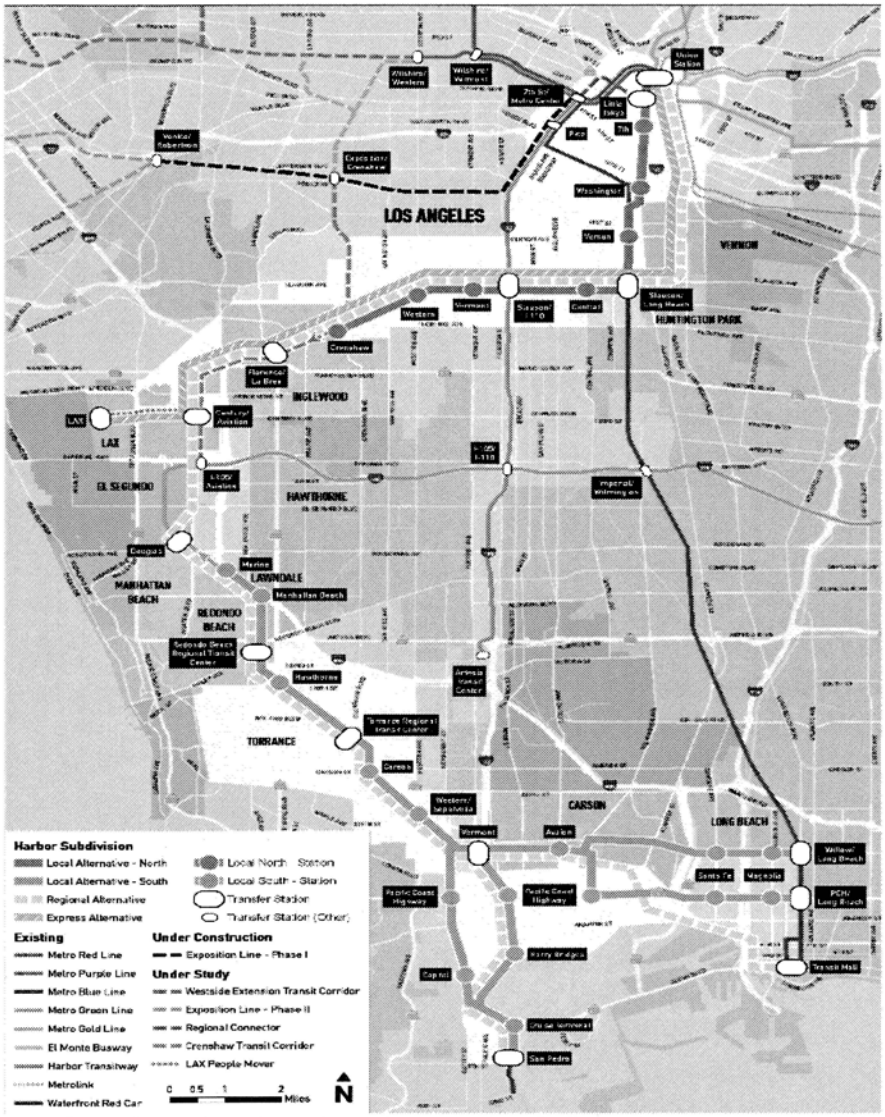
Role of the Aviation / Manchester Station

Located at the edge of the Westchester district rather than its center, the proposed Aviation / Manchester has one of the lower potentials for ridership growth among the stations along the proposed transit investment. The immediate area lacks a cohesion as it includes a mix of commercial and industrial uses at the border between the Cities of Los Angeles and Inglewood. Curves of the alignment and the potential for an

Grade Crossing at Manchester.

elevated crossing make the location of this station at Manchester difficult. Nonetheless, this location would be the most convenient location for residents of Westchester to access the Crenshaw/LAX Transit Corridor. If there is a station at this location, its siting and configuration would need to balance competing modes of access, including pedestrian access from the residential neighborhood immediately to the north, transit access along Manchester and Florence, and automobile / park-and-ride access from arterials such as Manchester Avenue/ Boulevard, Aviation Boulevard, and La Cienega Boulevard. Designs explored station configurations that straddled Manchester Avenue/Boulevard. Costs were developed for this design option. Also, it was determined that the aerial

Century and Aviation. This location is the gateway to LAX. Metro anticipates that an Automated People Mover system to be constructed operated by the airport will ultimately provide a convenient connection to the airport terminals.



The Harbor Subdivision Alternatives Analysis explores many alternatives between downtown Los Angeles and the harbor area via South Los Angeles, LAX, and the South Bay. The Crenshaw Corridor may affect or enable future projects along the Harbor Subdivision.

guideway could be re-configured in the future to accommodate a station, albeit at some expense. It was determined that ridership would not be high enough to justify a station at Aviation Boulevard and Manchester Boulevard, and that an aerial station on the Manchester over-crossing would be more likely to enhance connectivity with bus lines.

Metro Harbor Subdivision Alternatives Analysis Study

The long term use of the Harbor Subdivision railroad right-of-way has been studied by Metro. Decisions related to the Crenshaw/LAX Transit Corridor Project will have an effect on future planning for the entire Harbor Subdivision. The

ISSUES RESOLVED

Metro Board, in its deliberation on the Crenshaw/LAX Transit Corridor Project, considered opportunities and limitations that may be imposed on connections to the South Bay and more broadly the entire railroad corridor from downtown Los Angeles to the harbor area. Future planning for the Harbor Subdivision is concentrated in the south project area and planning of the line will not preclude future connections which would enhance future connectivity to the South Bay.

Connection Between Crenshaw/LAX Transit Corridor Project and the Los Angeles International Airport

The lack of a convenient connection to LAX from Metro's rail transit system has been under discussion for many years. The nearest rail transit stop to LAX is the Aviation/Imperial Green Line station (approximately 1.5 miles from the LAX terminals). The Crenshaw/LAX Transit Corridor Project creates the opportunity to bring a transit connection closer to LAX. The FEIS/FEIR proposes a LRT station at Century Boulevard and Aviation Boulevard. Metro's coordination with LAX indicates that an "automated people mover" from the terminal area may be planned to connect to this area at some time in the future. Metro is currently studying an additional connection from the Metro Green Line into the central terminal area as part of a separate project. The Metro Board, as part of the consideration of the LPA, must consider the certainty and time frame of construction of this important connection. The Metro Board is coordinating with

LAWA to ensure a seamless connection between the LPA and the automated people mover. An aerial station at Century Boulevard and Aviation Boulevard has been incorporated into the LPA to facilitate this connection.

Provision of a Maintenance Facility

The LPA requires a new maintenance facility to service the expanded rail vehicle fleets. Adequate size sites are difficult to find. Two candidate sites were initially identified in the DEIS/DEIR. The Metro Board eliminated these sites during the selection of the LPA.

A new maintenance facility site search was conducted and four potential sites were selected adjacent to the Harbor Subdivision. The four potential sites are located in industrial areas; two of which are adjacent to southern end of the LPA alignment between Manchester Avenue and Century Boulevard, and two of which are located further down the Harbor Subdivision, in the City of Redondo Beach. The preferred maintenance facility site is Site 14, located in an industrial area in the City of Los Angeles. The site is south of Arbor Vitae Street and west of Aviation Boulevard.

Summary of Impacts

Table ES.4 on the following page summarizes the potential impacts of the No-Build, the LPA, MOS 1 and 2, the Design Options, and the maintenance facility. Table ES.5 summarizes the impacts and the mitigation measures for the LPA, MOSs and Design Options. Table ES.6 summarizes the impacts and the mitigation measures for the maintenance facility.

The information presented in these tables is a summary of the analysis contained in this FEIS/FEIR in Chapter 3.0 through 6.0.

Table ES.4. Summary of Impacts

Project Goal/Criteria/Measure	No-Build Alternative	LPA	Maintenance Site #14 - Arbor Vitae/ Bellanca	MOS King - Metro Green Line to King Station	MOS Century - Exposition Station to Century Station	Cut-and-Cover Crossing at Centinela	Optional Below-Grade Station at Vernon	Optional Manchester Station	Alternate Southwest Portal at King Station	Partially-Covered LAX Trench Option
Environmental Effects										
Traffic	○	○*	○	○*	○*	○	○	○	○	○*
Regional Land Use	○	○	○	○	○	○	○	○	○	○
Local Land Use and Development	●	○	○	○	○	○	○	○	○	○
Division of Established Community	○	○	○	○	○	○	○	○	○	○
Consistency with Local Plans/Policies	●	○	○	○	○	○	○	○	○	○
Displacements and Relocation	○	◉	●◗	◉	◉	◉	◉	◉	◉	◉
Community Cohesion	○	○	○	○	○	○	○	○	○	○
Visual	○	◉	○	◉	◉	◉	○	○	◉	◉
Air Quality (Operational)	○	○	○	○	○	○	○	○	○	○
Noise and Vibration	○	◉	○	◉	◉	◉	◉	◉	◉	◉
Ecosystems and Biological Resources	○	◉	◉	◉	◉	◉	◉	◉	◉	◉
Geotechnical	◉	◉	◉	◉	◉	◉	◉	◉	◉	◉
Water	○	○	○	○	○	○	○	○	○	○
Energy	○	○	○	○	○	○	○	○	○	○
Historic, Archaeological, Paleontological	○	◉	○	◉	◉	◉	◉	◉	◉	◉
Parklands and Community Facilities	○	◉	○	○	○	○	○	○	○	◉
Economic	○	○	●◗	○	○	○	○	○	○	○
Safety and Security	○	◉	◉	◉	◉	◉	◉	◉	◉	◉
Construction (without Air Quality)	○	◉	◉	◉	◉	◉	◉	◉	◉	◉
Construction (with Air Quality)	○	◉◗	●◗	◉◗	◉◗	◉◗	◉◗	◉◗	◉◗	◉◗
Growth Inducing	○	○	○	○	○	○	○	○	○	○
Cumulative	○	○	○	○	○	○	○	○	○	○
Environmental Justice	●	◉	○	◉	◉	◉	◉	◉	◉	◉

○ Less Than Adverse Effect, or No Adverse Effect
◉ Less Than Adverse Effect with Implementation of Mitigation Measure
● Potentially Adverse Effect or an Adverse Effect
◗ Significant Impact Under CEQA

* Potentially Significant Impacts per criteria of the Los Angeles Department of Transportation at one intersection, depending upon the ultimately selected signal timing.

Table ES.5. Mitigation Measures for the LPA

Environmental Criteria	
Traffic	**Impact:** There is one location (Crenshaw Boulevard and 54th Street) that is impacted at signal cycle lengths at or less than 140 seconds. There are no changes in street geometry that would reduce impacts.The parking analysis presented above indicates that the LPA would not result in inadequate parking. Impacts associated with spillover parking to the adjacent streets would be minimal. However, parking restrictions and pricing strategies along the adjacent streets are recommended to discourage long-term parking by transit patrons. With implementation of mitigation, no adverse effects are anticipated.
	T1 Metro shall coordinate with the local jurisdictions to designate and identify haul routes for trucks and to establish hours of operation. The selected routes should minimize noise, vibration, and other impacts. **T2** Metro shall prepare a traffic management plan to facilitate the flow of traffic in and around the construction zone. This traffic management plan shall identify a community liaison and shall include the following measures: • Schedule as much of construction-related travel as possible (i.e., deliveries, hauling, and worker trips) during the off-peak hours; • Develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through traffic in adjacent residential areas; • Where feasible, temporarily re-stripe roadway to maximize the vehicular capacity at those locations affected by construction closures; • Where feasible, temporarily remove on-street parking to maximize the vehicular capacity at those locations affected by construction closures; • Where feasible, traffic control officers should be at major intersections during peak hours to minimize delays related to construction activities; • Develop and implement an outreach program to inform the general public about the construction process and planned roadway closures; • Develop and implement a program with business owners to minimize impacts to businesses during construction activity, including but not limited, to signage programs. **T3** Metro shall include in the traffic management plan measures that minimize any potential adverse effects to pedestrian movement in the corridor and to maximize pedestrian safety to the extent feasible. **T4** Metro shall coordinate with local school districts to disclose potential impacts to school bus routes. **T5** Project contractors shall provide alternate off-street parking for their employees during the construction period, in order to minimize the loss of parking to adjacent commercial districts. **T6** Project contractors shall prohibit parking for their employees in adjacent residential neighborhoods, in order to minimize the impacts to nearby residents.

Table ES.5. Mitigation Measures for the LPA (continued)

Environmental Criteria	
Land Use and Development	No impact, no mitigation required.
Displacement and Relocation	**Impact:** The LPA would require the acquisition of up to 97 total parcels, including 59 parcels that would be acquired in full, 31 parcels would be acquired in part, four parcels that would require permanent underground easements, and three parcels that would be used as temporary construction laydown areas (for staging equipment and materials). Two single-family residential properties would be acquired in full to accommodate the at-grade LRT guideway. With implementation of mitigation, no adverse effects are anticipated.
	DR1 Metro shall provide relocation assistance and compensation, pursuant to the Uniform Relocation Assistance and Real Property Acquisition Policies Act and the California Relocation Act, to those who are displaced or whose property is acquired as a result of the Crenshaw/LAX Transit Corridor Project.
Community Cohesion	No impact, no mitigation required.
Visual Quality	**Impact:** The loss of landscaping and vegetation would result in an adverse effect to visual quality to residences along La Colina Drive and the along Crenshaw Boulevard from 60th to 48th Street. With implementation of mitigation, no adverse effects are
	V1 To minimize visual clutter, integrate system components, and reduce the potential for conflicts between the transit system and adjacent communities, design of the system stations and components shall follow the recommendations and principles developed in the project urban design explorations. These principles include, but are not limited to: 1) preserve and enhance the unique cultural identity of each station area and its surrounding community by implementing art and landscaping; and 2) promote a sense of place, safety, and walkability by providing street trees, walkways or sidewalks, lighting, awnings, public art, and/or street furniture. Prior to final design, community input shall also be used to help achieve these guidelines. **V2** At locations where existing land uses or vegetation is removed and neighboring uses are exposed to new views of the transit system, additional landscaping shall be provided within the right-of-way or in remnant acquisition parcels to create a buffer between the uses, but not necessarily to completely screen uses. Community input from adjacent residences or sensitive land uses shall be incorporated to the greatest extent feasible on the landscaping design elements to be incorporated. **V3** Mature trees that are removed during construction of the Crenshaw/LAX Transit Corridor Project shall be relocated or replaced with a tree of similar species, or if inappropriate for climate conditions, a species that is low-water use and compliant with the applicable City's landscape ordinance. Replacement should occur in consultation with the Los Angeles Bureau of Street Services Street Tree Division and with the City of Inglewood Department of Public Works.

Table ES.5. Mitigation Measures for the LPA (continued)

Environmental Criteria		
Visual Quality	**V4**	Where practical and appropriate, additional landscaping and enhanced design features will be used to minimize the visual image of the TPSS sites and other ancillary facilities.
	V5	For the Centinela Avenue cut and cover crossing design option, screening that is consistent with the existing area and Edward Vincent Jr. Park shall be installed on the north side of the trench to the extent feasible to reduce the adverse effects on the south-facing view of the trench.
	V6	Should the alternate southwest portal at the King Station be selected, the structure for the portal will be designed to compliment the Streamline Moderne style of the Broadway Department Store consistent with the Secretary of Interior standards.
Air Quality	No impact, no mitigation required.	
Noise and Vibration	**Impact:**	The LPA would exceed the vibration criteria at 16 locations (Table 4-20). With implementation of mitigation, no adverse effects are anticipated. Warning signal noise would exceed the significance criteria at 57th Street and West Boulevard grade crossing. With implementation of mitigation, no adverse effects are anticipated. Moderate passby noise impacts along La Colina Drive. No feasible mitigation.
	N1	Warning device noise levels shall not exceed 103 dBA at 50 feet, subject to approval by the California Public Utilities Commission.
	N2	Further site-specific testing shall be performed during the Final Design where potential for adverse vibration and ground-borne effects has been identified. Where adverse vibration and ground-borne effects are still predicted, the vibration and ground-borne energy transmitted into the ground shall be decreased using design features such as, but not limited to high-resilience fasteners, ballast mats, or floating slab trackbed. Vibration-and ground-borne reducing design specifications for the track sections shall be determined in consultation with a qualified vibration scientist or engineer during the design phase. The features shall reduce the vibration levels below the FTA thresholds identified in Table 4-21 and Table 4-22.
Ecosystems/Biological Resources	**Impact:**	The LPA would require the removal or disturbance of mature trees along Crenshaw Boulevard. Removal or disturbance of vegetation during the nesting season could affect the habitat and bird species that are present. With implementation of mitigation, no adverse effects are anticipated.
	EB1	Two biological surveys shall be conducted, one 15 days prior and a second 72 hours prior to construction that would remove or disturb suitable nesting habitat. The surveys shall be performed by a biologist with experience conducting breeding bird surveys. The biologist shall prepare survey reports documenting the presence or absence of protected native bird in the habitat to be removed and other such habitat within 300 feet of the construction work area (within 500 feet for raptors). If a protected native bird is found, surveys will be continued in order to locate nests. If an active nest is located, construction within 300 feet of the nest (500 feet for raptor nests) will be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.
	EB2	If construction of the project requires pruning of native tree species, the pruning shall be performed in a manner that does not cause permanent damage or adversely affect the health of the trees. If construction of the project requires the removal of a native tree

Table ES.5. Mitigation Measures for the LPA (continued)

Environmental Criteria		
Ecosystems/Biological Resources		species, the affected tree species shall be relocated or replaced in consultation with appropriate jurisdiction.
Geotechnical/Subsurface/Seismic/ Hazardous Materials	**Impact:**	Potential for ground deformation to have an adverse effect for the LPA. With implementation of mitigation, no adverse effects are anticipated. The LPA is susceptible to liquefaction in two areas. The first area mapped as being susceptible to liquefaction is south of the I-10 Freeway, along the eastern slopes of the Baldwin Hills. The second area is the portion of the LPA along the Harbor Subdivision. Therefore, there would be a potential for liquefaction in these areas. With implementation of mitigation, no adverse effects are anticipated.
	GEO1	A soil mitigation plan shall be prepared after final construction plans are prepared showing the lateral and vertical extent of soil excavation during construction. The soil mitigation plan shall establish soil reuse criteria, establish a sampling plan for stockpiled materials, describe the disposition of materials that do not satisfy the reuse criteria, and specify guidelines for imported materials. The soil mitigation plan shall include a provision that during grading or excavation activities, soil shall be screened for contamination by visual observations and field screening for volatile organic compounds with a photo ionization detector (PID). Soil samples that are suspected of contamination based on field observations and PID readings shall be analyzed for suspected chemicals by a California certified laboratory. If contaminated soil is found, it shall be removed, transported to an approved disposal location, and remediated or disposed of according to guidance identified in proven technologies and remedies of site cleanup prescribed by the Department of Toxic Substances Control.
	GEO2	All hazardous materials, drums, trash, and debris shall be removed and disposed of in accordance with regulatory guidelines set forth by the Department of Toxic Substances Control in Title 22 Division 4.5 of the California Code of Regulations.
	GEO3	A health and safety plan shall be developed for persons with potential exposure to the constituents of concern identified in the preliminary Geotechnical Report contained in Appendix H.
	GEO4	Historical and present site usage along the many areas of the proposed alignment included businesses that stored hazardous materials and/or waste and used USTs, from at least the 1920s to the present. It is possible that areas with soil and/or groundwater impacts may be present that were not identified in this report, or were considered a low potential to adversely impact the subject property. In general, observations should be made during future development activities for features of concern or areas of possible contamination such as, but not limited to, the presence of underground facilities, buried debris, waste drums, tanks, soil staining or odorous soils. Further investigation and analysis may be necessary, should such materials be encountered.
	GEO5	Best Management Practices (BMPs), identified in Appendix F,required as part of the NPDES permit and application of SCAQMD Rule 403, shall be implemented for the proposed project to not only reduce potential soil erosion, but also to maintain soil stability and integrity during grading, excavation, below grade construction, and installation of foundations for aerial structures, and maintenance and operations facilities. BMPs would comply with applicable Uniform Building Codes and

Table ES.5. Mitigation Measures for the LPA (continued)

Environmental Criteria		
Geotechnical/Subsurface/Seismic/ Hazardous Materials		include, but are not limited to, scheduling excavation and grading activities during dry weather, covering stockpiles of excavated soils with tarps or plastic sheeting, and debris traps on drains.
	GEO6	The design of the project shall adhere to the design specifications of the geotechnical study for maintaining structural integrity under static and seismic loading and operational demands.
Water Resources	**Impact:**	The below-grade segment for the LPA, which is approximately 50 feet below the ground surface, is located within a liquefaction zone that spans along Crenshaw Boulevard from the I-10 Freeway in the north to Vernon Avenue in the south. Areas of liquefaction are known to have high water tables which add to the instability of the soil. Groundwater levels at Exposition Boulevard are as high as 16 feet below ground surface and gradually decline to more than 75 feet at Vernon Avenue. Dewatering activity would likely be required along this segment. With implementation of mitigation, no adverse effects are anticipated.
	WQ1	During project construction and operation, remediation should be required at maintenance facilities and vehicle storage areas, where a potential exists for grease and oil contamination to flow into storm drains. Various types of ditch structures, including grease traps, sediment traps, detention basins, and/or temporary dikes, may be used to control possible pollutants. These facilities shall be constructed pursuant to guidance published in Section 402 of the Clean Water Act (CWA) and shall follow the most current guidance within the NPDES permit program.
	WQ2	The flood capacity of existing drainage or water conveyance features within the project study corridor shall not be reduced in a way that causes ponding or flooding during storm events. A drainage control plan shall be developed during project design to ensure that drainage is properly conveyed from the study area and does not induce ponding on adjacent properties.
	WQ3	A dewatering permit shall be required if groundwater is encountered during construction. The proposed project is located in an urbanized area where potential groundwater contamination may exist. If contaminated groundwater is encountered during construction, the contractor shall stop work in the vicinity of the suspect find, cordon off the area, and contact the appropriate hazardous waste coordinator and maintenance hazardous spill coordinator at Metro and immediately notify the Certified Unified Program Agencies (City of Los Angeles Fire Department, County of Los Angeles Fire Department, and Los Angeles Regional Water Quality Control Board or RWQCB) responsible for hazardous materials or waste incidents. Coordination with the Los Angeles RWQCB shall be initiated immediately to develop an investigation plan and remediation plan for expedited protection of public health and environment. Contaminated groundwater is prohibited from being discharged to the storm drain system. The contractor shall properly treat or dispose of any hazardous or toxic materials, according to local, state, and federal regulations).
	WQ4	The study area currently drains indirectly to Ballona Creek and Dominguez Creek through the Municipal Separate Storm Sewer System (MS4). Treatment control BMPs shall be incorporated into the project design. The project shall consider placing the treatment BMPs in series or in a complimentary system to increase the control of pollutants to the maximum extent practicable. The systems shall be

Table ES.5. Mitigation Measures for the LPA (continued)

Environmental Criteria	
Water Resources	designed to efficiently and effectively handle and treat dry and wet weather flows to the maximum extent practicable. A Standard Urban Stormwater Mitigation Plan (SUSMP) and appropriate drainage control plan shall be implemented to select and place appropriate permanent treatment BMPs. **WQ5** During construction of the project, on-site integrated management strategies that employ green infrastructure strategies to capture runoff and remove pollutants shall be used. Green infrastructure strategies combine a variety of physical, chemical, and biological processes that focus on conveying runoff to bioretention areas, swales, or vegetated open spaces.
Energy	No impact, no mitigation required.
Historic, Archaeological, and Paleontological Resources	**Impact:** Discovery of unknown archaeological or paleontological resources is possible during excavation activities. With implementation of mitigation, no adverse effects are anticipated.
	CR1 Treatment of Undiscovered Archaeological Resources Construction personnel shall be informed of the potential for encountering significant archaeological and paleontological resources along Crenshaw Boulevard in the vicinity of the Crenshaw/King Station, and instructed in the identification of fossils and other potential resources. All construction personnel shall be informed of the need to stop work on the project site until a qualified archaeologist or paleontologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Monitors with Native American qualifications shall be used at a minimum for construction within a ½ mile of the Crenshaw/King Station. If human remains are encountered during construction, all work shall cease in the area of potential affect and the Los Angeles County Coroner's Office shall be contacted pursuant to procedures set forth in Public Resources Code Section 5097 et seq. and Health and Safety Code in Sections 7050.5, 7051, and 7054 with respect to treatment and removal, Native American involvement, burial treatment, and re-burial, if necessary. A detailed would be prepared prior to implementation of this project, similar in scope to the CRMMP that was prepared for Metro's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementation of a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected. If cultural resources are discovered or if previously identified resources are affected in an unanticipated manner, the Monitoring Plan would also ensure that such resources receive mitigation to reduce the impact to less-than-significant levels. This plan would include, but not be limited to, the following elements: • Worker training • Archaeological monitoring • The scientific evaluation and mitigation of archaeological discoveries • Native American participation, as needed

Table ES.5. Mitigation Measures for the LPA (continued)

Environmental Criteria	
Historic, Archaeological, and Paleontological Resources	• Appropriate treatment of human remains, if applicable • Reporting of monitoring and mitigation results **CR2** Paleontological Monitoring A qualified paleontologist shall produce a Paleontological Monitoring and Mitigation Plan (PMMP) for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. All efforts to avoid delays in project schedules shall be made. All project-related ground disturbances that could potentially affect previously undisturbed Quaternary older alluvial deposits shall be monitored by a qualified paleontological monitor under the supervision of a qualified paleontologist on a full-time basis because these geologic units are determined to have a high paleontological sensitivity. Very shallow surficial excavations (less than 5 feet) within areas of previous disturbance or areas mapped as Quaternary younger alluvial deposits or Artificial fill shall be monitored on a part-time basis to ensure that underlying sensitive units (i.e. older alluvium) are not adversely affected. The location of subsurface sensitive sediments shall be determined by the qualified paleontologist upon review of project grading plans. Paleontological monitors shall be equipped with the necessary tools for the rapid removal of fossils and retrieval of associated data to prevent construction delays. This equipment shall include handheld global positioning system (GPS) receivers, digital cameras and cell phones, as well as a tool kit containing specimen containers and matrix sampling bags, field labels, field tools (awls, hammers, chisels, shovels, etc.) and plaster kits. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any collected fossils shall be transported to a paleontological laboratory for processing where they will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis and reposited in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County). The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed, at a minimum with Metro and the repository. The final report shall include, but not be limited to, a discussion of the results of the mitigation and monitoring program, an evaluation and analysis of the fossils collected (including an assessment of their significance, age and geologic context), an itemized inventory of fossils collected, a confidential appendix of locality and specimen data with locality maps and photographs, an appendix of curation agreements and other appropriate communications, and a copy of the project-specific paleontological monitoring and mitigation plan.

Table ES.5. Mitigation Measures for the LPA (continued)

Environmental Criteria	
Parklands and Community Facilities	**Impact:** Potential effect to flow of pedestrians near Faithful Central Bible Church and La Brea Station. With implementation of mitigation, no adverse effect would occur.
	PCF-1 The project shall incorporate Metro Design Criteria standards for sidewalks to ensure the safe flow of pedestrians. Metro shall coordinate with the City of Inglewood Public
Economic and Fiscal Impacts	No impact, no mitigation required.
Safety and Security	No impact, mitigation included to ensure impacts remain less than adverse..
	SS1 All stations and parking facilities shall be equipped with monitoring equipment and/or be monitored by Metro security personnel on a regular basis.
	SS2 Metro shall implement a security plan for LRT operations that shall include both in-car and station surveillance by Metro security or other local jurisdiction security personnel and establish well lit pedestrian station and parking areas that minimize shadows and provide visibility for security personnel to monitor activity.
	SS3 All stations shall be lit to a standard of no less than two footcandles to minimize shadows and ensure that all pedestrian pathways leading to/from sidewalks and parking facilities shall be well illuminated.
	SS4 Metro shall coordinate and consult with the LAPD, the LA County Sheriff's Department, the Inglewood Police Department, and the LAX Police to develop safety and security plans for the alignment, parking facilities, and station areas which satisfy the requirements necessary for the appropriate policing jurisdiction to effectively patrol the area.
	SS5 The station design shall be undertaken to avoid obstructions to visibility or observation and discrete locations favorable to crime; pedestrian access to at-grade, below-grade, and above-grade station entrances/exits shall be accessible at ground-level with clear sight lines.
	SS6 Metro shall implement appropriate measures to ensure pedestrian crossing safety at all locations with adjacent schools, churches, and high pedestrian areas as determined by the CPUC.
	SS7 Metro shall conduct a Hazard Analysis before the start of Final Design, using current safety analysis as a reference. The Hazard Analysis shall determine a design basis for warning devices as required by the California Public Utilities Commission.
	SS8 Vehicular and pedestrian warning measures, such as signage, shall be provided along the length of the platforms of the LRT Stations. Gates shall be provided at pedestrian crossings of the LRT and/or BNSF tracks within the Harbor Subdivision. These markings will be provided to alert motorists and pedestrians to potential conflict in the area.
	SS9 To discourage crossing the alignment and enhance safety, such as near the Faithful Central Bible Church, Metro shall provide fencing along either side of the alignment, between the parking lot and church buildings and ensure adequate pedestrian safety devices at designated crossings.

Table ES.5. Mitigation Measures for the LPA (continued)

Environmental Criteria		
Construction Impacts	**Impact:**	Temporary construction lighting may potentially affect residential areas by exposing residents to glare from unshielded light sources or by increasing ambient nighttime light levels. With implementation of mitigation, no adverse effects would occur. Visual quality may be altered from the stockpiling of materials at construction staging areas. With implementation of mitigation, no adverse effects would occur. The LPA would generate fugitive dust and equipment emissions from excavation activity and NOX emissions associated with the transport of excavated material. With implementation of mitigation, no adverse effects would occur. Under NEPA, Significant under CEQA. Construction noise levels would exceed existing ambient noise levels by at least 5 dBA at nearby land uses. With implementation of mitigation, no adverse effects would occur. Potential for encountering hazardous materials during grading and excavation within the Harbor Subdivision. It is possible that contaminated soil and/or groundwater may be encountered in the areas of the proposed at-grade, below-grade, and aerial alignments along the entire section. With implementation of mitigation, no adverse effects would occur. Disruption from cut-and-cover construction activities would be more extensive, the duration of reduced number of roadway travel lanes, road closures, traffic diversion, and modified access to business properties, and loss of on-street parking would be greater. These effects would further decrease business visibility and access to businesses by suppliers and customers, and would result in an adverse effect on corridor businesses and commercial property owners. With implementation of mitigation, no adverse effects would occur.
	CON1	Visually obtrusive erosion control devices, such as silt fences, plastic ground cover, and straw bales should be removed as soon as the area is stabilized.
	CON2	Stockpile areas should be located in less visibly sensitive areas and, whenever possible, not be visible from the road or to residents and businesses.
	CON3	During nighttime construction activities, lighting shall be aimed at the downward and away from residential and other sensitive uses adjacent to the alignment and stations.
	CON4	Water or a stabilizing agent shall be applied to exposed surfaces in sufficient quantity to prevent generation of dust plumes.
	CON5	Track-out shall not extend 25 feet or more from an active operation and track-out shall be removed at the conclusion of each workday.
	CON6	Contractors shall be required to utilize at least one of the measures set forth in South Coast Air Quality Management District Rule 403 section (d)(5) to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site.

Table ES.5. Mitigation Measures for the LPA (cotinued)

Environmental Criteria		
Construction Impacts	**CON7**	All haul trucks hauling soil, sand, and other loose materials shall maintain at least 6 inches of freeboard in accordance with California Vehicle Code Section 23114.
	CON8	All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
	CON9	Traffic speeds on unpaved roads shall be limited to 15 mph.
	CON10	Operations on unpaved surfaces shall be suspended when winds exceed 25 mph.
	CON11	Heavy equipment operations shall be suspended during first and second stage smog alerts.
	CON12	On-site stockpiles of debris or rusty materials shall be covered at all times when not being used. On-site stockpiles of dirt shall be or watered at least two times per day or covered at all times when not being used.
	CON13	Contractors shall maintain equipment and vehicle engines in good condition and in proper tune per manufacturers' specifications.
	CON14	Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators, as feasible.
	CON15	Heavy-duty trucks shall be prohibited from idling in excess of five minutes, both on- and off-site.
	CON16	Construction parking shall be configured to minimize traffic interference.
	CON17	Construction activity that affects traffic flow on the arterial system shall be limited to off-peak hours, as feasible.
	CON18	Construction staging and vehicle parking, including workers' vehicles, shall be prohibited on streets adjacent to sensitive receptors such as schools, daycare centers, senior facilities, and hospitals.
	CON19	The construction process shall utilize an on-site rock crushing facility with water control to suppress dust, when feasible.
	CON20	Portable generators shall be low-emitting and use ultra low sulfur diesel (<15 parts per million) or gasoline.
	CON21	Construction equipment shall use a combination of low sulfur diesel (<15 parts per million) and exhaust emission controls.
	CON22	The construction process shall use equipment having the minimum practical engine size (i.e., lowest appropriate horsepower rating for the intended job).
	CON23	Contractors shall be prohibited from tampering with construction equipment to increase horsepower or defeat emission control devices.

Table ES.5. Mitigation Measures for the LPA (continued)

Environmental Criteria		
Construction Impacts	**CON24**	Metro shall designate a person to ensure the implementation of air quality mitigation measures through direct inspections, records reviews, and complaint investigations.
	CON25	The construction contractor shall develop a Noise and Vibration Control Plan demonstrating how to achieve the more restrictive of the Metro Design Criteria noise limits and the noise limits of the city noise control ordinance. The Plan should also show how to achieve FTA vibration limits. The Plan shall include measurements of existing conditions, a list of the major pieces of construction equipment that will be used, and predictions of the noise and vibration levels at the closest noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities). The Noise and Vibration Control Plan will need to be approved by Metro prior to initiating construction. Where the construction cannot be prerformed in accordance with the requirements of Metro, the contractor shall investigate alternative construction measures that would result in lower noise and vibration levels. The contractor shall conduct monitoring to demonstrate compliance with contract noise limits. In addition, the contractor shall coordinate with the View Park Preparatory Accelerated and St. John the Evangelist School administrators to avoid disruptive activities during school hours.
	CON26	The construction contractor shall utilize a combination of the following options of best management practices for noise abatement to comply with the Metro Design Criteria: • The contractor shall utilize specialty equipment equipped with enclosed engines and/or high-performance mufflers as commercially available. • The contractor shall locate equipment and staging areas as far from noise-sensitive receptors as possible. • The contractor shall limit unnecessary idling of equipment. • The contractor shall install temporary noise barriers as determined by the Noise Control Plan. • The contractor shall limit unnecessary idling of equipment. • The contractor shall install temporary noise barriers as determined by the Noise Control Plan. • The contractor shall reroute construction-related truck traffic away from residential streets to the extent permitted by the relevant municipality. • The contractor shall avoid impact pile driving near noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities) where possible. Where geological conditions permit their use, drilled piles or a vibratory pile driver is generally quieter.
	CON27	Soil Mitigation Plan – A soil mitigation plan should be prepared after final construction plans are prepared showing the lateral and vertical extent of soil excavation during construction. The soil mitigation plan should establish soil reuse criteria, establish a sampling plan for stockpiled materials, describe the disposition of materials that do not satisfy the reuse criteria, and specify guidelines for imported materials. The soil mitigation plan should include a provision that during grading or excavation activities, soil should be screened for contamination by visual observations and field screening for volatile organic compounds with a PID. Soil samples that are suspected of contamination based on field observations and PID readings shall be analyzed for suspected chemicals by a California certified laboratory. If hazardous soil is found, it shall be removed, transported to an

Table ES.5. Mitigation Measures for the LPA (continued)

Environmental Criteria	
Construction Impacts	approved disposal location, and remediated or disposed according to state and federal laws. Other contaminated but nonhazardous soil may be reused on site applications such as bridge embankments or underneath paved areas provided the public is protected from coming into contact with the contaminated soils and the specific use is agreed to by the California Department of Toxic Substances Control (DTSC). **CON28** Nearby business owners and commercial property owners shall be notified of the schedule for specific planned construction activities, changes in traffic flow, and required short-term modifications to property access. **CON29** General notices shall be provided to local government, transit agencies, major institutions, and other organizations of the schedule for planned construction activities. **CON30** Methods shall be developed by which business owners can convey their concerns about construction activities and the effectiveness of mitigation measures during the construction period so activities can be modified to reduce adverse effects. **CON31** Advance notice shall be provided to affected property owners if utilities would be disrupted for short periods of time and scheduled major utility shut-offs during low-use periods of the day. **CON32** Construction activities shall be planned to minimize effects on community gatherings, special celebrations, or other similar events. **CON33** Public information campaigns shall be conducted to encourage patronage of corridor businesses during the construction period. **CON34** Metro shall ensure that all businesses and service providers are provided with adequate access during construction. Where there is a significant LEP population, signage shall be provided in various languages (as appropriate).
Growth-Inducing Impacts	No impact, no mitigation required.
Cumulative Impact	No impact, no mitigation required.
Environmental Justice	No impact, no mitiation required.

Table ES.6. Mitigation Measures for the Maintenance Facility

Environmental Criteria	
Traffic	None Required
Land Use and Development	None Required
Displacements and Relocation of Existing Uses	**S-DR1** Metro shall provide relocation assistance and compensation, per the Uniform Relocation Assistance and Real Property Acquisition Policies Act and the California Relocation Act, to those who are displaced or whose property is acquired as a result of a maintenance facility for the Crenshaw/LAX Light Transit Corridor Project. **S-DR2** Metro shall set up a business relocation process to oversee the relocation needs of the businesses that would be displaced as a result of a maintenance facility for the Crenshaw/LAX Transit Corridor Project. In addition, Metro shall attempt to minimize disruption to overall production of businesses that are connected with airport activities by relocating in as close proximity to LAX as possible. **S-DR3** Metro shall work with Los Angeles World Airports (LAWA) to ensure that potential displacement and relocation of rental car businesses are compatible with the long term implementation of the LAX Master Plan consolidated rental car center.
Community and Neighborhood Impacts	None Required
Visual Quality	None Required
Air Quality	None Required
Noise and Vibration	None Required
Ecosystems/Biological Resources	None Required
Geotechnical/Subsurface/Seismic/Hazardous Materials	**S-GEO1** All hazardous materials, drums, trash, and debris shall be removed and disposed of in accordance with regulatory guidelines. **S-GEO2** A health and safety plan shall be developed for persons with potential exposure to the constituents of concern, prior to construction of the Project.. **S-GEO3** Historical and present site usage along the many areas of the proposed alignment included businesses that stored hazardous materials and/or waste and used underground storage tanks, from at least the 1920s to the present. It is possible that areas with soil and/or groundwater impacts may be present that were not identified in this report, or were considered a low potential to adversely impact the subject property. In general, observations should be made during any future development activities for features of concern or areas of possible contamination such as, but not limited to, the presence of underground facilities, buried debris, waste drums, tanks, soil staining, or odorous soils. Phase II assessments shall be conducted for the properties within the selected alternative site and any contaminated sites shall be remediated to a level suitable for industrial development.

Table ES.6. Mitigation Measures for the Maintenance Facility (continued)

Environmental Criteria		
	S-GEO4	There is a potential for lead based paint and asbestos containing building materials to be present at the maintenance facility sites. An asbestos survey and lead based paint survey shall be conducted on all sites where on-site structures would be demolished or significantly renovated.
	S-GEO5	Best Management Practices (BMPs), required as part of the National Pollutant Discharge Elimination System (NPDES) permit program and application of the South Coast Air Quality Management District (SCAQMD) Rule 403, shall be implemented for any of the selected site alternatives to not only reduce potential soil erosion, but also to maintain soil stability and integrity during grading, excavation, below-grade construction, and the installation of foundations for aerial structures, and maintenance and operations facilities. BMPs would comply with applicable Uniform Building Codes and would include, but not be limited to, scheduling excavation and grading activities during dry weather, covering stockpiles of excavated soils with tarps or plastic sheeting, and debris traps on drains.
Water Resources	**S-WQ1**	During project construction and operation, remediation should be required at maintenance facilities and vehicle storage areas, where a potential exists for grease and oil contamination to flow into storm drains. Various types of ditch structures, including grease traps, sediment traps, detention basins, and/or temporary dikes, may be used to control possible pollutants. These facilities shall be constructed pursuant to guidance published in Section 402 of the Clean Water Act (CWA) and shall follow the most current guidance within the NPDES permit program for any of the site alternatives.
	S-WQ2	The flood capacity of existing drainage or water conveyance features within the project study corridor shall not be reduced in a way that causes ponding or flooding during storm events. A drainage control plan shall be developed during project design to ensure that drainage is properly conveyed from the study area and does not induce ponding on adjacent properties.
	S-WQ3	A dewatering permit shall be required if groundwater is encountered during construction. The proposed project is located in an urbanized area where potential groundwater contamination may exist. If contaminated groundwater is encountered during construction, the contractor shall stop work in the vicinity of the suspect find, cordon off the area, and contact the appropriate hazardous waste coordinator and maintenance hazardous spill coordinator at Metro and immediately notify the Certified Unified Program Agencies (City of Los Angeles Fire Department, County of Los Angeles Fire Department, and Los Angeles Regional Water Quality Control Board or RWQCB) responsible for hazardous materials or waste incidents. Coordination with the Los Angeles RWQCB shall be initiated immediately to develop an investigation plan and remediation plan for expedited protection of public health and environment. Contaminated groundwater is prohibited from being discharged to the storm drain system. The contractor shall properly treat or dispose of any hazardous or toxic materials, according to local, state, and federal regulations).
	S-WQ4	The study area currently drains indirectly to Ballona Creek and Dominguez Creek through the Municipal Separate Storm Sewer System (MS4). Treatment control BMPs shall be incorporated into the project design. The project shall consider placing the treatment BMPs in series or in a complimentary system to increase the control of pollutants to the maximum extent practicable. The systems shall be

Table ES.6. Mitigation Measures for the Maintenance Facility (continued)

Environmental Criteria	
	designed to efficiently and effectively handle and treat dry and wet weather flows to the maximum extent practicable. A Standard Urban Stormwater Mitigation Plan (SUSMP) and appropriate drainage control plan shall be implemented to select and place appropriate permanent treatment BMPs. **S-WQ5** During construction of the project, on-site integrated management strategies that employ green infrastructure strategies to capture runoff and remove pollutants shall be used. Green infrastructure strategies combine a variety of physical, chemical, and biological processes that focus on conveying runoff to bioretention areas, swales, or vegetated open spaces.
Energy	None Required
Historic, Archaeological, and Paleontological Resources	None Required
Parklands and Community Facilities	None Required
Economic and Fiscal Impacts	**S-DR1** Metro shall provide relocation assistance and compensation, per the Uniform Relocation Assistance and Real Property Acquisition Policies Act and the California Relocation Act, to those who are displaced or whose property is acquired as a result of a maintenance facility for the Crenshaw/LAX Transit Corridor Project. **S-DR2** Metro shall set up a business relocation process to oversee the relocation needs of the businesses that would be displaced as a result of a maintenance facility for the Crenshaw/LAX Transit Corridor Project, or the D22N Expansion site. In addition, Metro shall attempt to minimize disruption to overall production of businesses that are connected with airport activities by relocating in as close proximity to LAX as possible. **S-DR3** Metro shall work with LAWA to ensure that potential displacement and relocation of rental car businesses are compatible with the long term implementation of the LAX Master Plan consolidated rental car center.
Safety and Security	**S-SS1** All stations shall be lit to a standard of no less than two footcandles to minimize shadows and ensure that all pedestrian pathways leading to/from sidewalks and parking facilities shall be well illuminated. **S-SS2** Metro shall coordinate and consult with the LAPD, the Hawthorne Police Department, the Inglewood Police Department, or the Redondo Beach Police Department to develop safety and security plans for the alignment, parking facilities, and station areas, where such facilities fall within the specific jurisdiction.
Construction Impacts	**S-CON1** Visually obtrusive erosion control devices, such as silt fences, plastic ground cover, and straw bales shall be removed as soon as the area is stabilized. **S-CON2** Stockpile areas shall be located in less visibly sensitive areas and, whenever possible, not be visible from the road or to residents and businesses. **S-CON3** For security lighting during construction, lighting shall be aimed at the downward and away from residential and other sensitive uses adjacent the maintenance site alternatives, to the extent feasible.

Table ES.6. Mitigation Measures for the Maintenance Facility (continued)

Environmental Criteria	
	S-CON4 Contractor shall maintain a clean and neat work environment at all times. **S-CON5** Water or a stabilizing agent shall be applied to exposed surfaces in sufficient quantity to prevent generation of dust plumes. **S-CON6** Track-out shall not extend 25 feet or more from an active operation and track-out shall be removed at the conclusion of each workday. **S-CON7** Contractors shall be required to utilize at least one of the measures set forth in SCAQMD Rule 403 Section (d)(5) to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site. **S-CON8** All haul trucks hauling soil, sand, and other loose materials shall maintain at least 6 inches of freeboard in accordance with California Vehicle Code Section 23114. **S-CON9** All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions). **S-CON10** Traffic speeds on unpaved roads shall be limited to 15 mph. **S-CON11** Operations on unpaved surfaces shall be suspended when winds exceed 25 mph. **S-CON12** Heavy equipment operations shall be suspended during first and second stage smog alerts. **S-CON13** On-site stockpiles of debris, dirt, or rusty materials shall be covered or watered at least two times per day. **S-CON14** Contractors shall maintain equipment and vehicle engines in good condition and in proper tune per manufacturers' specifications. **S-CON15** Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators, as feasible. **S-CON16** Heavy-duty trucks shall be prohibited from idling in excess of five minutes, both on- and off-site. **S-CON17** Construction parking shall be configured to minimize traffic interference. **S-CON18** Construction activity that affects traffic flow on the arterial system shall be limited to off-peak hours, as feasible. **S-CON19** During project construction, remediation shall be required at maintenance facilities and vehicle storage areas, where a potential exists for grease and oil contamination to flow into storm drains. Various types of ditch structures, including grease traps, sediment traps, detention basins, and/or temporary dikes shall be used to control possible pollutants. These facilities shall be constructed pursuant to guidance published in Section 402 of the Clean Water Act (CWA) and shall follow the most current guidance within the NPDES program.

Table ES.6. Mitigation Measures for the Maintenance Facility (continued)

Environmental Criteria	
	S-CON20 The maintenance site alternatives currently drain indirectly to Ballona Creek and Dominguez Channel through the MS4. Treatment control BMPs shall be incorporated into the project design. The project shall consider placing the treatment BMPs in series or in a complimentary system to increase the control of pollutants to the maximum extent practicable. The systems shall be designed to efficiently and effectively handle and treat dry and wet weather flows to the maximum extent practicable. A SUSMP and appropriate drainage control plan shall be implemented to select and place appropriate permanent treatment BMPs. **S-CON21** Nearby business owners and commercial property owners shall be notified of the schedule for specific planned construction activities, changes in traffic flow, and required short-term modifications to property access. **S-CON22** Architectural coatings shall be purchased from a compliant architectural coating manufacturer as identified by the SCAQMD. **S-CON23** Contractors shall comply with SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). The requirements for demolition activities include asbestos surveying, notification, Asbestos-containing materials (ACM) removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. **S-CON24** Noise barriers (e.g., sound attenuation blankets or solid walls) shall be placed such that the line-of-sight is blocked between sensitive receptors (e.g., residential and institutional land uses) and the project site, as feasible. **S-CON25** During the early stages of construction plan development, natural and artificial barriers, such as ground elevation changes and existing buildings, shall be considered for use as shielding against construction noise. **S-CON26** The contractor shall comply with Standard Specification 1565, FTA noise criteria and all local sound control and noise level rules, regulations, and ordinances that apply to any work performed pursuant to the contract. Each internal combustion engine used for any purpose on the job or related to the job shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated without a muffler. **S-CON27** Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than metal-tracked equipment) as much as possible. **S-CON28** The contractor shall submit a noise plan for construction activity. The plan shall be prepared by a qualified acoustical engineer and should be approved by the resident engineer before construction is initiated. The noise control plan shall include an inventory of the equipment, the estimated noise level at 50 feet for each major piece of equipment, calculations of the noise levels at impacted sensitive receptors, and noise reduction measures for sensitive receptor locations where the predicted noise levels exceed the ambient noise level by 5 dBA.
Growth-Inducing Impacts	None Required

ES.11 Response to Comments

Metro held a series of four public hearings in September/October of 2009 to provide the public with an opportunity to comment on the DEIS/DEIR which was circulated to the public for a 45-day period beginning on September 11, 2009. Approximately 1,500 CDs containing the DEIS/DEIR were mailed to stakeholders and 177 CDs containing the DEIS/DEIR were mailed to public agencies, elected officials, and community groups. Hardcopies of the DEIS/DEIR was also made available at libraries within and adjacent to the corridor. The four public hearings were located in four different areas of the alignment to provide all residents and businesses an opportunity to attend.

There were 1,234 comments received from 533 commenters during the circulation period for the DEIS/DEIR. Comments were received from federal, state, and local agencies, elected officials, community organizations, transit advocates, and from members of the general public. Additional comments were received and recorded after the circulation period closed. Comments were received via fax, mail, e-mail, phone, and at each scoping meeting. Comments were recorded in a database with the source, date, method of receipt, and issue area identified.

The majority of public comments received as a result of the community outreach program expressed support for the LRT Alternative. A significant number of comments requested a below-grade alignment along Crenshaw Boulevard between the Exposition Line and the Harbor Subdivision, especially the segment of the alignment between 48th Street and 59th Street. These comments sited traffic related impacts and pedestrian safety concerns, as well as street reconfiguration and landscaping. Public input regarding this specific segment of Crenshaw Boulevard prompted a study of a below-grade alignment through Park Mesa Heights between 48th and 60th Streets. Based on the findings of this study, it was determined that the environmental effects of an at-grade alignment through this segment were not significant enough to justify the additional expense involved with constructing and operating a below-grade alignment.

There were 198 written comments from 42 commenters and oral comments made by 53 speakers received dring the circulation period for the SDEIS/RDEIR. Comments were received via mail, e-mail, phone, and the public hearings from federal, state, and local agencies, elected officials, community organizations, transit advocates, and from members of the general public. They were recorded in a database with the source, date, method of receipt, and issue area identified. One hundred ninety-seven of the total 198 comments received on the SDEIS/RDEIR were related to the Maintenance Facilities, primarily related to noise, economics, displacement, construction, traffic and air quality. Primarily these comments were related to Site #17 - Marine/Redondo Beach and Division 22 Northern Expansion Alternatives. One comment was received related to parklands and historic and cultural resources concerning Edward Vincent J. Park.

ATTACHMENT C

NOTICE OF DETERMINATION

Notice of Determination

Appendix D

To:

☐ Office of Planning and Research

For U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Sacramento, CA 95814

☒ County Clerk

County of: Los Angeles

Address: 12400 Imperial Highway, Norwalk, CA 90650-3134

From:

Public Agency: Los Angeles County Metropolitan Transportation Authority

Address: One Gateway Plaza, MS 99-22-3, Los Angeles, CA 90012

Contact: Roderick Diaz

Phone: 213-922-3018

Lead Agency (if different from above):

Address:

Contact:

Phone:

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2007091148

Project Title: Crenshaw Transit Corridor Project (Corridor)

Project Location (include county): Cities of Los Angeles, Inglewood, Hawthorne, El Segundo and portions of unincorporated Los Angeles County

Project Description:

Please see Attachment A.

This is to advise that the _____ has approved the above described project on
☒ Lead Agency or ☐ Responsible Agency

_____ and has made the following determinations regarding the above described project:
(Date)

1. The project [☒ will ☐ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☒ was ☐ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: _____

Signature (Public Agency) _____ Title _____

Date _____ Date Received for filing at OPR _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2005

Notice of Determination

Appendix D

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_____ and has made the following determinations regarding the above described project:
(Date)

1. The project [☒ will ☐ will not] have a significant effect on the environment.
2. ☒ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☒ was ☐ was not] adopted for this project.
6. Findings [☒ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at: _____

Signature (Public Agency) _____ Title _____

Date _____ Date Received for filing at OPR _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2005

Attachment A to Notice of Determinations

Project Elements Under Consideration and Analyzed in the FEIS/FEIR

Route: From a southern terminus at the Metro Green Line, the alignment would follow the Harbor Subdivision Railroad right-of-way, adjacent to Aviation Boulevard/Florence Avenue and continue northeast to Crenshaw Boulevard where it would travel north within the middle of the Crenshaw Boulevard right-if-way to the Exposition/Crenshaw Station, adjacent to the Metro Exposition Line currently under construction.

Stations: Stations are located at: Aviation/Century (aerial), Florence/La Brea (at grade), Florence/West (at grade), Crenshaw/Slauson (at grade), Crenshaw/Martin Luther King Jr. (below grade), and Crenshaw/Exposition (below grade)

Grade Separations: Grade separations include the following
- Adjacent to the LAX south runways (below-grade trench)
- Ariel across Century Boulevard
- Aerial across Manchester Avenue
- Aerial across La Cienega Boulevard/I-405
- Below grade across La Brea Avenue
- Below grade Between Victoria Avenue and 60th Street
- Below grade between 48th Street and Exposition Boulevard

Park and Ride Facilities: Park-and-ride facilities would be located at the Florence/La Brea, Florence/West, and Crenshaw/Exposition Stations.

Maintenance Facility: A maintenance facility would be located at Arbor Vitae/Bellanca (Site #14) - This 17.6-acre site is located in the City of Los Angeles.

In addition to the LPA, the following two shorter segment variations, called Minimum Operable Segments (MOSs) and five design options to the LPA are also evaluated in the FEIS/FEIR:

MOSs: The following shorter segment variations of the LPA are evaluated:

- MOS-King - 8-mile segment extending from the Metro Green Line in the south to the Crenshaw/King Station in the north

- MOS-Century - 7.4-mile segment extending from the Aviation/Century Station in the south to the Crenshaw/Exposition Station in the north.

Design Options: The following design options are evaluated in addition to the LPA:

- Partially Covered Trench Option - replaces fully covered trench adjacent to LAX south runways

- Optional Aviation/Manchester Station - additional aerial or below grade station

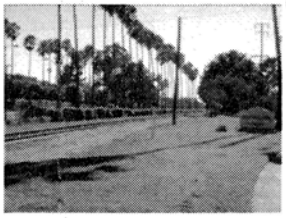
- Cut-and-cover crossing at Centinela - replaces at grade configuration

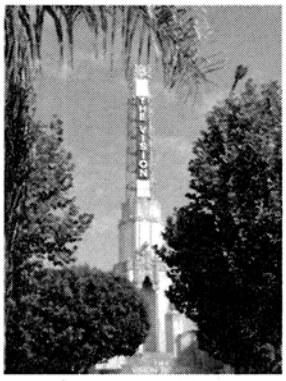
- Optional Below Grade Crenshaw/Vernon Station - additional station in Leimert Park

- Alternate Southwest Portal at Crenshaw/King Station Option – replaces portal on southeast corner of the Crenshaw/Boulevard/Martin Luther King Jr. Boulevard intersection

ATTACHMENT D

Findings of Fact and Statement of Overriding Considerations





CRENSHAW/LAX TRANSIT CORRIDOR PROJECT

Project No. PS-4330-1968

Finding of Fact and Statement of Overriding Considerations

Prepared for:

Metro

Prepared by:

Parsons Brinckerhoff
444 South Flower Street
Suite 3700
Los Angeles, California 90071

September 2011

Finding of Fact and Statement of Overriding Considerations Pursuant to Sections 15091 and 15093 of the State CEQA Guidelines and Section 21081 of the Public Resources Code

Crenshaw/LAX Transit Corridor Project PS-4330-1968

Prepared for:

Metro

Los Angeles County
Metropolitan Transportation Authority

Prepared by:
Parsons Brinckerhoff

September 2011

Table of Contents

FINDING OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS

CRENSHAW/LAX TRANSIT CORRIDOR PROJECT

September 2011

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FINDING OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS

1 INTRODUCTION

The Los Angeles County Metropolitan Transit Authority (Metro) followed a prescribed process to identify the alternatives and issues to be analyzed, including seeking input from the public, corridor stakeholders, and other affected parties. An alternatives analysis was completed that was based on prior transportation studies within the Crenshaw Corridor. An analysis of alternatives for the project began in April 2007 when the Bus Rapid Transit and Light Rail Transit alternatives were selected by the Metro Board for environmental review and further analysis. Six full corridor alternatives were identified for screening in the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/DIER). For a more detailed description of the alternative evaluation process, refer to Chapter nine of this document. The alternatives provide a reasonable range of possible alternatives, which are potentially feasible-and to some degree meet the project goals and objectives described in Chapter 1, Purpose and Need, of the Final Environmental Impact Statement/Final Environmental Impact Report (FEIS/FEIR).

The FEIS/FEIR for the Crenshaw/LAX Transit Corridor identified the Locally Preferred Alternative (LPA) and five design options. The proposed project is based upon a revised definition of the LPA and the incorporation of three design options. The environmental analysis in the FEIS/FEIR presents a complete analysis of the revised LPA, an associated maintenance facility, two potential Minimum Operable Segments (MOSs), and five design options. The Board may adopt a Project Definition that includes a combination of the revised LPA and any of the other elements (MOSs and design options). The Federal Record of Decision will be based upon the adopted Project Definition.

Implementation of the proposed project will result in certain significant environmental impacts. However, the Los Angeles County Metropolitan Transportation Authority Board (Metro Board) finds that the inclusion of certain Mitigation Measures as part of project approval will reduce most of those potential significant effects to a less-than-significant level. For those impacts that remain significant and unavoidable, even with mitigation, the Metro Board finds that specific economic, legal, social technological or other benefits of the project outweigh the unavoidable adverse environmental effects. As required by the California Environmental Quality Act (CEQA), the Metro Board, in adopting these Findings of Fact and Statement of Overriding Considerations ("findings"), also adopts a Mitigation Monitoring and Reporting Plan for the Revised LPA. The Metro Board finds that the Mitigation Monitoring and Reporting Plan, which is incorporated by reference and made a part of these findings as Attachment B to the Metro Board Letter, meets the requirements of Public Resources Code Section 21081.6 by providing for the implementation and monitoring of measures to mitigate potentially significant effects of the Revised LPA.

In accordance with CEQA and the CEQA Guidelines, the Metro Board adopts these findings as part of the approval of the project. Pursuant to Public Resources Code Section 21082.1(c)(3), the Metro Board also finds that the FEIS/FEIR reflects the Metro

Board's independent judgment as the lead agency for the Crenshaw/LAX Transit Corridor Project.

2 ORGANIZATION

- Section A.3: Contains a brief description of the project goals, and objectives.
- Section A.4: Contains the statutory requirements of the findings and a record of proceedings.
- Section A.5: Identifies the potentially significant effects which were determined to be mitigated to a less-than-significant level.
- Section A.6: Identifies the significant impacts that cannot be mitigated to a less-than-significant level even though all feasible Mitigation Measures have been identified and incorporated.
- Section A.7: Identifies the project's potential environmental effects that were determined not to be significant or less than significant, and, therefore, no mitigation is required.
- Section A.8: Cumulative impacts regarding the project are discussed.
- Section A.9: Describes the alternatives analyzed in the evaluation of the project as well as findings on Mitigation Measures.
- Section A.10: Includes the Metro Board's Statement of Overriding Considerations.

3 PROJECT DESCRIPTION, GOALS, AND OBJECTIVES

The proposed project is based upon a revised definition of the LPA and the incorporation of selected design options.

- **Route.** From a southern terminus at the Metro Green Line, the alignment would follow the Harbor Subdivision Railroad right-of-way, adjacent to Aviation Boulevard/Florence Avenue and continue northeast to Crenshaw Boulevard where it would travel north within the middle of the Crenshaw Boulevard right-of-way to the Exposition/Crenshaw Station, adjacent to the Metro Exposition Line currently under construction.
- **Stations.** Stations are located at: Aviation/Century (aerial), Florence/La Brea (at grade), Florence/West (at grade), Crenshaw/Slauson (at grade), Crenshaw/Martin Luther King Jr. (below grade), and Crenshaw/Exposition(below grade)
- **Grade Separations.** Grade separations include the following:
  - Adjacent to the LAX south runways (partially-covered below-grade trench)
  - Aerial across Century Boulevard
  - Aerial across Manchester Avenue
  - Aerial across La Cienega Boulevard/I-405

- Below grade across La Brea Avenue
- Below grade Between Victoria Avenue and 60th Street
- Below grade between 48th Street and Exposition Boulevard

- **Park and Ride Facilities.** Park-and-ride facilities would be located at the Florence/La Brea, Florence/West, and Crenshaw/Exposition Stations.
- **Maintenance Facility.** A maintenance facility would be located at Arbor Vitae/Bellanca (Site #14) – This 17.6-acre site is located in the City of Los Angeles

In addition to the LPA, the following two shorter segment variations, called Minimum Operable Segments (MOSs) and five design options to the LPA are also evaluated in the FEIS/FEIR:

- **MOSs.** The following shorter segment variations of the LPA are evaluated:
- **MOS-King** – 8-mile segment extending from the Metro Green Line in the south to the Crenshaw/King Station in the north
- **MOS-Century** - 7.4-mile segment extending from the Aviation/Century Station in the south to the Crenshaw/Exposition Station in the north
- **Design Options.** The following design options are evaluated in addition to the LPA:
  - Partially-Covered LAX Trench Option - replaces fully covered trench adjacent to LAX south runways
  - Optional Aviation/Manchester Station -additional aerial or at-grade station
  - Cut-and-cover crossing at Centinela - replaces at grade configuration
  - Optional Below Grade Crenshaw/Vernon Station - additional station in Leimert Park
  - Alternate Southwest Portal at Crenshaw/King Station Option – replaces portal on southeast corner of the Crenshaw/Boulevard/Martin Luther King Jr. Boulevard intersection

The Crenshaw/LAX Transit Corridor (corridor) is a heavily traveled north-south oriented corridor in Los Angeles County, California. Since 1967, the inadequacies of connectivity and mobility within the corridor have been the subject of numerous Metro transportation and transit studies. These studies concluded that transportation within and from the corridor was constrained, congested, and urgently in need of system improvements.

Implementation of an effective north-south transportation network within the corridor is vital to alleviate current and projected connectivity and mobility problems affecting corridor residents and businesses by providing essential linkages from residential areas to commercial, activity, employment, and institutional centers within and adjacent to the corridor. The major themes and underlying needs supporting transit improvements in the corridor include the following:

- Peak Hour Congestion within the Corridor
- Transit Accessibility and Availability

- Land Use Integration and Economic Development
- Growing Demand for Transit Service
- Benefits for the Environment

The proposed project's objective is to satisfy the need for enhanced transportation and transit services in the corridor.

4 STATUTORY REQUIREMENTS

CEQA (Public Resources Code Section 21081), and particularly the CEQA Guidelines (the Guidelines) (14 Cal. Code Regulations, Section 15091) require that:

> *"No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:*
>
> *a. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.*
>
> *b. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.*
>
> *c. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR."*

In short, CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to avoid or mitigate significant environmental impacts that would otherwise occur with implementation of the project. Project mitigation or alternatives are not required, however, where they are infeasible or where the responsibility for modifying the project lies with another agency. (CEQA Guidelines, Section 15091 (a), (b).

For those significant effects that cannot be mitigated to a less-than-significant level, the public agency is required to find that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment (see, Pub. Res. Code Section 21081(b)). The Guidelines state in Section 15093 that:

"If the specific economic, legal, social, technological, or other benefits of a proposed] project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable.'"

Record of Proceedings

For purposes of CEQA and the findings set forth herein, the record of proceedings for the Metro Board's decision on the LRT Build Alternative consists of: (a) matters of common knowledge to the Metro Board, including, but not limited to, federal, state and local laws and regulations and (b) the following documents which are in the custody of the Los Angeles County Metropolitan Transportation Authority, One Gateway Plaza, Records Management, MS 99-PL-5, Los Angeles, CA 90012:

- Notice of Preparation and other public notices issued by the Project Applicant in conjunction with the proposed project;
- The DEIS/DEIR, dated September 2009 ;
- All testimony, documentary evidence, and all correspondence submitted in response to the notice of preparation or the notice of intent or during scoping or by agencies or members of the public during the public comment period on the DEIS/DEIR and responses to those comments (Appendix K of the FEIS/FEIR);
- The FEIS/FEIR dated August 2011 including all appendices thereto and those documents that were incorporated therein by reference;
- The Mitigation Monitoring and Reporting Program (Attachment B of the Metro Board Letter);
- All findings, statements of overriding consideration, and resolutions adopted by the Metro Board in connection with the proposed project, and all documents cited or referred to therein;
- All final technical reports and addenda, studies, memoranda, maps, correspondence, and all planning documents prepared by the Metro Board, Project Applicant, or the consultants to each, relating to the project;
- All documents submitted to the Metro Board by agencies or members of the public in connection with development of the proposed project; and
- All actions of the Metro Board with respect to the Crenshaw/LAX Transit Corridor
- Any other materials required to be in the record of proceedings by Public Resources Code section 21167..6, subdivision (e).

5 ENVIRONMENTAL IMPACTS FOUND LESS THAN SIGNIFICANT WITH IMPLEMENTATION OF MITIGATION MEASURES

Below are the determinations of the Metro Board regarding the environmental effects, significant impacts, and corresponding Mitigation Measures of the Crenshaw/LAX Transit Corridor Project organized by topic area. These determinations or findings address the effects of the LPA, five design options, and two MOSs (refer to Section A.3 in this document for descriptions of these elements) and the maintenance facility. The additional design options require findings and environmental clearance to ensure that as

potential future funds become available these options may be considered for implementation individually or on combination.

This section is arranged by topic area per the FEIS/FEIR. Unless otherwise stated, the narrative of the impact applies to the LPA (alignment and stations), design options and MOSs for the LPA and the maintenance facility. Impacts listed that apply to specific options of the LPA, options that are not a part of the LPA, or the maintenance facility will be identified as such by name. Each impact discussion is followed by numbered Mitigation Measures LPA component, then by option (if applicable). Mitigation Measures for the maintenance facility were circulated as part of the Supplemental Environmental Impact Statement/Recirculated Draft Environmental Impact Report and are preceded by the letter "S". Determination of findings by the Metro Board follows the list of Mitigation Measures for each impact described.

5.1. Traffic

Significant construction effects would occur if changes to the physical environment are particularly disruptive or have specific health and safety considerations.

Impact.

- Construction traffic effects would be disruptive and significant from the following changes to the physical environment:
  - Lane reductions
  - Turn prohibitions
  - Off-peak intermittent closures
  - Parking reductions
  - Possible long term closures
  - Periodic closures – side streets

Reference. FEIS/FEIR 3.2.8. pgs 3-56- 3-63

Mitigation Measures

T1 Metro shall coordinate with the local jurisdictions to designate and identify haul routes for trucks and to establish hours of operation. The selected routes should minimize noise, vibration, and other impacts.

T2 Metro shall prepare a traffic management plan to facilitate the flow of traffic in and around the construction zone. This traffic management plan shall identify a community liaison and include the following measures:

- Schedule as much of construction-related travel as possible (i.e., deliveries, hauling, and worker trips) during the off-peak hours;
- Develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through traffic in adjacent residential areas;
- Where feasible, temporarily re-stripe roadway to maximize the vehicular capacity at those locations affected by construction closures;

- Where feasible, temporarily remove on-street parking to maximize the vehicular capacity at those locations affected by construction closures;
- Where feasible, traffic control officers should be at major intersections during peak hours to minimize delays related to construction activities;
- Develop and implement an outreach program to inform the general public about the construction process and planned roadway closures;
- Develop and implement a program with business owners to minimize impacts to businesses during construction activity, including but not limited, to signage programs.

T3 Metro shall include in the traffic management plan measures that minimize any potential adverse effects to pedestrian movement in the corridor and to maximize pedestrian safety to the extent feasible.

T4 Metro shall coordinate with local school districts to disclose potential impacts to school bus routes.

T5 Project contractors shall provide alternate off-street parking for their employees during the construction period, in order to minimize the loss of parking to adjacent commercial districts.

T6 Project contractors shall prohibit parking for their employees in adjacent residential neighborhoods, in order to minimize the impacts to nearby residents.

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

Although construction of the LPA would require the loss of on-street parking and reduction in travel lanes, in most instances these are temporary conditions during the construction phase. A loss of on-street parking would occur along Crenshaw Boulevard from 48th to 60th Street. The majority of businesses along this segment have dedicated off-street parking and would be primarily affected by intermittent access. The businesses without off-street parking would be affected by intermittent access and the loss of on-street parking. The operational phase of the LPA would result in the restoration of these parking and travel lanes at select locations.

Mitigation Measures **T1** through **T6** would provide appropriate haul routes which would minimize the amount of heavy truck activity during peak and nighttime periods, would provide a community liaison to handle community concerns regarding traffic, maintain pedestrian circulation and safety, and minimize the loss of parking and access to businesses and residents. Implementation of these mitigation measures would provide a comprehensive array of construction management and abatement measures that would reduce the significant impacts of construction activity for adjacent commercial districts and residential neighborhoods to less than significant. Because these effects are associated with the construction phases and are short-term in nature, no permanent significant impacts are anticipated.

5.2. Displacement and Relocation of Existing Uses

Displacement and relocation impacts would be considered significant if the Crenshaw/LAX Transit Corridor Project would:

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and/or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impact. The LPA (alignment and stations) would require the acquisition of up to 97 total parcels, including 59 parcels that would be acquired in full, 31 parcels would be acquired in part, four parcels that would require permanent underground easements, and three parcels that would be used as temporary construction laydown areas (for staging equipment and materials). The LPA would result in acquisitions ranging from 130 square feet to over 74,000 square feet. Two single-family residential properties would be acquired in full to accommodate the at-grade LRT guideway. The displacement of two residential properties would not constitute the displacement of a substantial number of housing which necessitate the construction of replacement housing elsewhere. Therefore, a less-than-significant impact would occur.

Reference. FEIS/FEIR 4.2.2.1 pg 4-24. 4-55

Mitigation Measures

DR1 Metro shall provide relocation assistance and compensation, per the Uniform Relocation Assistance and Real Property Acquisition Policies Act and the California Relocation Act, to those who are displaced or whose property is acquired as a result of the Crenshaw/LAX Transit Corridor Project.

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

Mitigation Measure **DR1** as presented above has been adopted as part of the project and will be enforced by Metro as described in the Mitigation and Monitoring Program (MMRP). The Uniform Relocation Act was created to provide displaced businesses and property owners fair compensation for displaced businesses and/or property owners. Implementation of Mitigation Measure **DR1** would ensure that property acquisition, relocation assistance, and compensation would be provided and effects would remain less-than-significant. The Metro Board finds that providing compensation and relocation assistance would further mitigate the effects of property acquisition and impacts from displacement and relocation would remain less than significant.

5.3. Visual Quality

The Crenshaw/LAX Transit Corridor Project would result in a significant impact to visual resources if it would:

- Adversely affect a scenic resource;
- Substantially damage a scenic resource, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

- Substantially degrade the existing visual character or quality of the site and its surroundings; and/or
- Create a new source of light or glare which would adversely affect day or nighttime views in the area.

Impact

Views and vistas associated with the LPA are not anticipated to have an impact because the alignment would generally be in the existing roadway or railroad rights-of-way, would be at-grade or below grade along Crenshaw Boulevard. A portion of the alignment is within a portion of a locally-designated scenic roadway for Crenshaw Boulevard, running from the I-10 Freeway to Slauson Avenue. This section is not designated as a State-Scenic Highway. The alignment would be located within the median of Crenshaw Boulevard through this portion of the roadway. Removal of the large, mature trees within the roadway median and reconfiguration of the frontage roads could adversely affect the character of the scenic resource without the implementation of mitigation measures.

- The loss of landscaping and vegetation would result in a significant impact to visual quality to residences along La Colina Drive.

- Removal of the large, mature trees within the roadway median and reconfiguration of the frontage roads along Crenshaw Boulevard from 60th to 48th Street would affect the character of the streetscape, which currently has a park-like or grand-boulevard character. Replacing the landscaped median with a street-grade transit system would affect the character of the setting. The loss of landscaping and vegetation would result in a significant impact to visual quality.

- For the Below-Grade Crossing at Centinela design option, it is expected that the cut and fill along the southern hillside would be visible from locations to the north and within Edward Vincent Jr. Park. This would be a discernible change and would result in a significant visual effect. In addition, this design option would require removal of more landmark palm trees south of the Harbor Subdivision, adjacent to the Florence Avenue/Centinela Avenue intersection than the LPA. This would be considered a significant visual change. Lastly, the trench design would remove screening landscaping west of Centinela Avenue, adjacent to La Colina Drive. These visual changes would also be considered to be significant.

- The design option for a station portal at the southwest corner of the Crenshaw/Martin Luther King Jr. Boulevard intersection would be located along landscaped frontage adjacent to the historic Broadway Department Store building (currently Wal-Mart). This would result in an impact if it did not compliment the visual features of the historic building.

- Construction of the project could temporarily affect the visual character of the area.

Construction of the LPA may require nighttime lighting which would result in a significant impact to adjacent sensitive receptors. Light and glare associated with the operation of the LPA is not anticipated to have an impact because the alignment would generally be in the existing roadway or railroad rights-of-way, which currently produce transport-related light and glare. In addition, the light intensity from trains is expected to be comparable to existing

buildings and vehicles along the alignment. Therefore, the operation project would not result in a new source of light and glare and a less-than-significant impact would occur.

Reference. FEIS/FEIR 4.4.4.2 pg 4-72 - 4-91

Mitigation Measures

V1 To minimize visual clutter, integrate system components, and reduce the potential for conflicts between the transit system and adjacent communities, design of the system stations and components shall follow the recommendations and principles developed in the project urban design explorations. These principles include, but are not limited to: 1) preserve and enhance the unique cultural identity of each station area and its surrounding community by implementing art and landscaping; and 2) promote a sense of place, safety, and walkability by providing street trees, walkways or sidewalks, lighting, awnings, public art, and/or street furniture. Prior to final design, community input shall also be used to help achieve these guidelines.

V2 At locations where existing land uses or vegetation is removed and neighboring uses are exposed to new views of the transit system, additional landscaping shall be provided within the right-of-way or in remnant acquisition parcels to create a buffer between the uses, but not necessarily to completely screen uses. Community input from adjacent residences or sensitive land uses shall be incorporated to the greatest extent feasible on the landscaping design elements to be incorporated.

V3 Mature trees that are removed during construction of the Crenshaw/LAX Transit Corridor Project shall be relocated or replaced with a tree of similar species, or if inappropriate for climate conditions, a species that is low-water use and compliant with the applicable City's landscape ordinance. Replacement shall occur in consultation with the Los Angeles Bureau of Street Services Street Tree Division and with the City of Inglewood Department of Public Works.

V4 Where practical and appropriate, additional landscaping and enhanced design features will be used to minimize the visual image of the TPSS sites and other ancillary facilities.

V5 For the Centinela Avenue cut and cover crossing design option, screening that is consistent with the existing area and Edward Vincent Jr. Park shall be installed on the north side of the trench to the extent feasible to reduce the adverse effects on the south-facing view of the trench.

V6 Should the alternate southwest portal at the King Station be selected, the structure for the portal will be designed to compliment the Streamline Moderne style of the Broadway Department Store consistent with the Secretary of Interior standards.

CON1 Visually obtrusive erosion control devices, such as silt fences, plastic ground cover, and straw bales should be removed as soon as the area is stabilized.

CON2 Stockpile areas should be located in less visibly sensitive areas and, whenever possible, not be visible from the road or to residents and businesses.

CON3 During nighttime construction activities, lighting shall be aimed at the downward and away from residential and other sensitive uses adjacent to the alignment and stations.

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

Implementation of Mitigation Measures **V2** would reduce the effects of vegetation removal. The vegetative buffer that exists between the residences along La Colina Drive and the Harbor Subdivision would be replaced, restoring the visual quality. Implementation of Mitigation Measures **V1** and **V3** would reduce the effects from the loss of median trees and street reconfiguration. The median trees would be replaced or relocated with a tree of similar species. The reconfiguration of the frontage roads would result in the creation of new wider sidewalks which would be more accommodating to pedestrians and which would enhance the accessibility of adjacent businesses. The replacement of trees and road reconfiguration would result in no adverse effects to views and vistas of a scenic resource. Implementation of Mitigation Measures **V1** and **V4** would ensure that land acquisition required for station areas and ancillary facilities would be designed and landscaped to fit within the character of surrounding uses. Therefore, the Metro Board finds that less-than-significant impacts to visual quality would occur for the LPA.

Implementation of Mitigation Measures **V1** and **V5** would reduce the effects of additional vegetation removal and land acquisition required for the Below-Grade Crossing at Centinela. The vegetation would be replaced and screening would be provided to maintain a consistent visual character with the existing area. Therefore, impacts would be reduced to less-than-significant for the Below-Grade Crossing at Centinela.

Implementation of Mitigation Measure **V6** would ensure that the portal structure for the Southwest Portal at Crenshaw/King Station would be designed so as not to obstruct or contrast with the features of the historic Broadway building and would not remove or obstruct existing uses. The portal design would not conflict with the visual quality of the Broadway building and impacts would be reduced to less-than-significant for this design option.

Mitigation Measures**V1** through **V6** have been adopted as part of the project and will be enforced by Metro. These measures will reduce the visual effects associated with the various components of the LPA.

Implementation of Mitigation Measures **CON1** and **CON2** would minimize the visibility of stockpile areas and erosion control devices and result in a less-than-significant impact to visual character. Implementation of Mitigation Measures **CON3** would reduce the impacts of construction lighting used during construction on adjacent sensitive receptors to less than significant.

For the reasons stated above, and in the FEIS/FEIR, the Metro Board finds that impacts related to visual quality would be mitigated to a less-than-significant level.

5.4. Noise and Vibration

The *FTA Noise and Vibration Criteria Assessment* state that a project would have a significant impact on noise and vibration if:

- Operational noise levels exceed the FTA noise impact criteria shown in Table F-3 of the *Assessment.*
- Operational vibration levels exceed the FTA vibration impact criteria listed in Tables F-4 and F-5 of the *Assessment.*

The project would have a significant impact on construction noise and vibration if:

- Noise and vibration levels exceed the standards set forth in the Los Angeles Municipal Code.

Impact

- Warning signal noise would exceed the significance criteria at 57th Street and West Boulevard grade crossing. The LPA would exceed the vibration criteria at 16 locations (Table 4-20 of the FEIS/FEIR). Moderate passby noise impacts would occur at 15 residential buildings (14 along La Colina Drive and one residence along East Beach Avenue). A moderate impact would also occur at the Briercrest Inglewood Healthcare Center.
- Construction noise levels would exceed existing ambient noise levels by at least 5 dBA at nearby land uses.
- Construction vibration levels would result in a significant impact.
- Similar to the LPA, the Below-Grade Crossing at Centinela would result in significant vibration impacts to the Briercrest Inglewood Healthcare Center and a residential land use located along La Colina Drive.
- The Below-Grade Crossing at Centinela would result in significant ground-borne noise impacts at these same receptors.

Reference. FEIS/FEIR 4.6.2.2 pg 4-106 – 4-129

Mitigation Measures

N1 Warning device noise levels shall not exceed 103 dBA at 50 feet, subject to approval by the California Public Utilities Commission.

N2 Further site-specific testing shall be performed during the Final Design where potential for adverse vibration and ground-borne effects has been identified. Where adverse vibration and ground-borne effects are still predicted, the vibration energy transmitted into the ground shall be decreased using design features such as, but not limited to high-resilience fasteners, ballast mats, or floating slab trackbed. Vibration- and ground-borne-reducing design specifications for the track sections shall be determined in consultation with a qualified vibration scientist or engineer during the design phase. The features shall reduce the vibration levels below the FTA thresholds identified in Table 4-21 and Table 4-22.

CON25 The construction contractor shall develop a Noise and Vibration Control Plan demonstrating how to achieve the more restrictive of the Metro Design Criteria noise limits and the noise limits of the city noise control ordinance. The Plan should also show how to achieve FTA vibration limits. The Plan shall include measurements of existing conditions, a list of the major pieces of construction equipment that will be used, and predictions of the noise and vibration levels at the closest noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities). The Noise and Vibration Control Plan will need to be approved by Metro prior to initiating construction. Where the construction cannot be performed in accordance with the requirements of Metro, the contractor shall investigate alternative construction measures that would result in lower noise and vibration levels. The contractor shall conduct monitoring to demonstrate compliance with contract noise limits. In addition, the contractor shall coordinate with the View Park Preparatory Accelerated and St John the Evangelist school administrators to avoid disruptive activities during school hours.

CON26 The construction contractor shall utilize a combination of the following options of best management practices for noise abatement to comply with the Metro Design Criteria:

- The contractor shall utilize specialty equipment equipped with enclosed engines and/or high-performance mufflers as commercially available.
- The contractor shall locate equipment and staging areas as far from noise-sensitive receptors as possible.
- The contractor shall limit unnecessary idling of equipment.
- The contractor shall install temporary noise barriers as determined by the Noise Control Plan.
- The contractor shall limit unnecessary idling of equipment.
- The contractor shall install temporary noise barriers as determined by the Noise Control Plan.
- The contractor shall reroute construction-related truck traffic away from residential streets to the extent permitted by the relevant municipality.
- The contractor shall avoid impact pile driving near noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities) where possible. Where geological conditions permit their use, drilled piles or a vibratory pile driver is generally quieter.

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

Mitigation Measures **N1** and **N2** have been adopted as part of the project. These measures will be enforced by Metro as described in the MMRP. Mitigation Measure **N1** would reduce warning signal noise levels at sensitive receptors by 6 dBA. Warning signal noise at the 57th Street grade crossing would be reduced to 62.1 dBA, which would be less than the 63 dBA FTA impact threshold for this location. Warning signal noise at the

West Boulevard grade crossing would also be reduced to 62.1 dBA, which would be less than the 64 dBA FTA impact threshold for this location. Mitigation Measure **N1** would eliminate the unmitigated warning signal adverse impacts. Therefore, the Metro Board finds that a less-than-significant impact would occur after mitigation.

Mitigation Measure **N2** would reduce ground-borne vibration and noise levels up to 15 VdB. The specific locations where vibration mitigations are expected to be required are listed in Table 4-23 of the FEIS/FEIR. The mitigation measure will reduce ground-borne vibration and noise between 2 and 15 VdB. Mitigation Measure **N2** would eliminate the unmitigated ground-borne vibration and noise significant impacts under both the LPA and the Below-Grade Crossing at Centinela. Therefore, the Metro Board finds that a less-than-significant impact would occur after mitigation.

Metro does not mitigate moderate noise impacts and FTA requires mitigation of moderate noise impacts where feasible and cost-effective. The one feasible mitigation measure to reduce the moderate passby impacts near La Colina would be the inclusion of a sound wall adjacent to La Colina Drive. This mitigation measure would reduce significantly reduce sight lines at the Centinela at-grade crossing and increase the potential safety risk to both vehicles and pedestrians. Therefore, this mitigation measure was not required.

Construction-related noise and vibration impacts would be temporary, but result in a significant impact. Implementation of Mitigation Measures **CON25** and **CON26** would require the construction contractor to identify ambient noise and vibration levels, develop a plan to minimize the effects of construction noise and vibration on sensitive receptors, and ensure that the equipment used would be monitored and in compliance with the acceptable noise and vibration limits of the applicable jurisdictions.

For the reasons stated above, the Metro Board finds that impacts related to noise and vibration would be reduced to less than significant.

5.5. Ecosystems/Biological Resources

The *CEQA Guidelines* state that a project would normally have a significant impact on biological resources if it could:

- Result in the loss of individuals, or the reduction of existing habitat, of a state or federal listed endangered, threatened, rare, protected, or candidate species, or a Species of Special Concern or federally listed critical habitat;
- Result in the loss of individuals or the reduction of existing habitat of a locally designated species or a reduction in a locally designated natural habitat or plant community;
- Interfere with wildlife movement/migration corridors that may diminish the chances for long-term survival of a sensitive species;
- Result in the alteration of an existing wetland habitat; and/or
- Interfere with habitat such that normal species behaviors are disturbed (e.g., from the introduction of noise, light) to a degree that may diminish the chances for long-term survival of a sensitive species.

In addition, Section 15065 the CEQA Guidelines establishes the mandatory finding of significance related to ecosystems/biological resources if the project:

- Has the potential to: substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels,; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory.

Impact

- The LPA would require the removal or disturbance of mature trees along Crenshaw Boulevard. Removal or disturbance of vegetation during the nesting season could potentially affect the habitat and bird species that are present.

Operation of the LPA would be along a defined corridor within a highly urbanized area. There are no wildlife corridors or wetlands that exist within the LPA. There are currently no sensitive species or habitat located directly within the project area. Due to lack of suitable habitat, none of the sensitive species listed by the CNDDB are anticipated to occur. Therefore, no additional significant impacts related to biological resources would occur. Mitigation measures have been included to ensure that impacts to biological resources remain less than significant.

Reference. FEIS/FEIR 4.7 pg 4-134 – 4-136

Mitigation Measures

EB1 Two biological surveys shall be conducted, one 15 days prior and a second 72 hours prior to construction that would remove or disturb suitable nesting habitat. The surveys shall be performed by a biologist with experience conducting breeding bird surveys. The biologist shall prepare survey reports documenting the presence or absence of protected native bird in the habitat to be removed and other such habitat within 300 feet of the construction work area (within 500 feet for raptors). If a protected native bird is found, surveys will be continued in order to locate nests. If an active nest is located, construction within 300 feet of the nest (500 feet for raptor nests) will be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting.

EB2 If construction of the project requires pruning of native tree species, the pruning shall be performed in a manner that does not cause permanent damage or adversely affect the health of the trees. If construction of the project requires the removal of a native tree species, the affected tree species shall be relocated or replaced in consultation with appropriate jurisdiction.

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

Mitigation Measures EB1 and EB2 as presented above have been adopted as part of the project. Mitigation measure **EB1** would be implemented to ensure that impacts to the disturbance of nesting bird habitats are less than significant. In addition, if trees to be

removed include native trees, compliance with the City of Los Angeles Native Tree Ordinance would be required. Although the ordinance does not require a permit for the pruning of protected trees, if the project requires pruning of native tree species, mitigation measure **EB2** would be implemented to ensure that impacts from pruning would remain less than significant. These measures will be enforced by Metro as described in the MMRP. For the reasons stated above, the Metro Board finds that impacts related to the loss of vegetation and nesting birds would be reduced to less than significant.

5.6. Geotechnical/Subsurface/Seismic/Hazards/Hazardous Materials

Under CEQA, the proposed project would have a significant impact if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issues by the State Geologist for the area or based on other substantial evidence of a known fault
  - Strong seismic ground shaking
  - Seismic-related ground failure, including liquefaction
  - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property;
- Have soils capable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;
- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant 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 materials, substances, or waste within one-quarter mile of an existing or proposed school
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result , would it create a significant hazard to the public or the environment
- For a project 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, would the project result in a safety hazard for people residing or working in the project area

- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and/or
- 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 adjacent to urbanized areas or where residences are intermixed with wildlands.
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam; and/or
- Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow.

Impact

- The project has the potential to result in ground deformation. This would be a significant impact.
- The project is also susceptible to liquefaction in two areas. The first area mapped as being susceptible to liquefaction is south of the I-10 Freeway, along the eastern slopes of the Baldwin Hills. The second area is along the Harbor Subdivision. Therefore, there would be a potential for liquefaction in these areas.
- There would also be an impact from the potential to encounter lead-based paint and asbestos during demolition of the structures on the maintenance facility site.

Reference. FEIS/FEIR 4.8.2 pg 4-145 – 4-153

Mitigation Measures

GEO1 A soil mitigation plan shall be prepared after final construction plans are prepared showing the lateral and vertical extent of soil excavation during construction. The soil mitigation plan shall establish soil reuse criteria, establish a sampling plan for stockpiled materials, describe the disposition of materials that do not satisfy the reuse criteria, and specify guidelines for imported materials. The soil mitigation plan shall include a provision that during grading or excavation activities, soil shall be screened for contamination by visual observations and field screening for volatile organic compounds with a photo ionization detector (PID). Soil samples that are suspected of contamination based on field observations and PID readings shall be analyzed for suspected chemicals by a California certified laboratory. If contaminated soil is found, it shall be removed, transported to an approved disposal location, and remediated or disposed according to guidance

identified in proven technologies and remedies of site cleanup prescribed by the Department of Toxic Substance Control.

GEO2 All hazardous materials, drums, trash, and debris shall be removed and disposed of in accordance with regulatory guidelines set forth by the Department of Toxic Substances Control in Title 22 Division 4.5 of the California Code of Regulations. Waste would be disposed of by a licensed hazardous waste transporter at an authorized and licensed disposal facility or recycling facility utilizing properly completed Uniform Hazardous Waste Manifest forms. A Department of Health Services certified laboratory should sample waste to determine the appropriate disposal facility.

GEO3 A health and safety plan shall be developed for sensitive receptors with potential exposure to the constituents of concern identified in the preliminary Geotechnical Report contained in Appendix H.

GEO4 Historical and present site usage along the many areas of the proposed alignment included businesses that stored hazardous materials and/or waste and used USTs, from at least the 1920s to the present. It is possible that areas with soil and/or groundwater impacts may be present that were not identified in this report, or were considered a low potential to adversely impact the subject property. In general, observations should be made during future development activities for features of concern or areas of possible contamination such as, but not limited to, the presence of underground facilities, buried debris, waste drums, tanks, soil staining or odorous soils. Further investigation and analysis may be necessary, should such materials be encountered.

GEO5 Best Management Practices (BMPs), identified in Appendix F, required as part of the NPDES permit and application of SCAQMD Rule 403, shall be implemented for the proposed project to not only reduce potential soil erosion, but also to maintain soil stability and integrity during grading, excavation, below grade construction, and installation of foundations for aerial structures, and maintenance and operations facilities. BMPs would comply with applicable Uniform Building Codes and include, but are not limited to, scheduling excavation and grading activities during dry weather, covering stockpiles of excavated soils with tarps or plastic sheeting, and debris traps on drains.

GEO6 The design of the project shall adhere to the design specifications of the geotechnical study for maintaining structural integrity under static and seismic loading and operational demands.

CON27 Soil Mitigation Plan – A soil mitigation plan should be prepared after final construction plans are prepared showing the lateral and vertical extent of soil excavation during construction. The soil mitigation plan should establish soil reuse criteria, establish a sampling plan for stockpiled materials, describe the disposition of materials that do not satisfy the reuse criteria, and specify guidelines for imported materials. The soil mitigation plan should include a provision that during grading or excavation activities, soil should be screened for contamination by visual observations and field screening for volatile organic compounds with a PID. Soil samples that are suspected of contamination based on field observations and PID readings shall be analyzed for suspected chemicals by a California certified

laboratory. If hazardous soil is found, it shall be removed, transported to an approved disposal location, and remediated or disposed according to state and federal laws. Other contaminated but nonhazardous soil may be reused on site applications such as bridge embankments or underneath paved areas provided the public is protected from coming into contact with the contaminated soils and the specific use is agreed to by the California Department of Toxic Substances Control (DTSC).

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

The LPA and MOSs are not located in areas mapped as susceptible of landslides. The alignment is relatively flat and the potential for landslides along the alignment would be remote. Therefore, no adverse effects related to landslides are anticipated. The LPA and MOSs are not located within any 100 or 500 year flood zones and, therefore, no modifications to any established floodplains would result from the implementation of the proposed project. The alignment is located in an area already developed with impervious surfaces as wells as well-developed drainage infrastructure and would not increase the risk of flooding. Therefore, no adverse effects related to flooding are anticipated. The LPA and MOSs are not located in an area susceptible to inundation from seiches and tsunamis. The nearest section of the alignment is located approximately three 3.5 miles from the Santa Monica Bay and is not located within a tsunami zone. The potential for a risk of tsunami is remote and the LPA would not increase the risk of occurrence or the number of people that would potentially be exposed to a tsunami. In addition, there are no reservoirs nearby, which would result in risk from seiches. Therefore, no adverse effects related to seiches and tsunamis are anticipated.

There are numerous schools, day care facilities, as well as the Los Angeles International Airport located with 0.25 mile of the corridor. The potential for exposure to contaminated materials would be limited to the confines of the project right-of-way. The mitigation measures provide for the proper disposal of contaminated substances and thus ensure the safety of individuals at nearby schools and the airport.

The project would not prohibit emergency responsiveness and may potentially increase response time and evacuation efforts should it be necessary provide a way to efficiently move people in the case of emergency evacuation situations. Therefore, a less-than-significant impact is anticipated related to an emergency response plan.

The study area is located within an entirely developed area and there are no wildlands in the vicinity that could increase exposure to fires. Therefore, a less-than-significant impact is anticipated related to wildfires.

The primary concern for the LPA or MOSs would be the potential for encountering hazardous materials or subsurface gases during grading and excavation within the Harbor Subdivision. However, based on the exploratory borings, the discovery of elevated volumes of hazardous materials or subsurface gases such as methane is not anticipated and no adverse effects would occur. It is possible that contaminated soil and/or groundwater may be encountered in the areas of the proposed at-grade, below-grade, and aerial alignments along the entire section.

Implementation of the Mitigation Measures **GEO1** through **GEO6** would ensure that the all structures for the project would be designed according to the soil integrity along the alignment and would reduce the impacts related to liquefaction, settlement and ground shaking during the construction and operational phases of the project to less-than-significant levels.

A hazardous substances investigation was conducted during the advanced conceptual engineering for the project. Sixty five soil samples were collected along the alignment and tested for hazardous materials (metals, volatile organic compounds, petroleum hydrocarbons). One area near the Harbor Subdivision and Crenshaw Boulevard was found to contain an elevated level of Arsenic at approximately 10 feet. However, the level of Arsenic (28mg/kg) is still considered non-hazardous because it is below ten times the screening threshold limit (50mg/kg). Construction activity would be conducted in accordance with all federal and State regulatory requirements that are intended to prevent or manage hazards. Therefore, the LPA and MOSs would not result in adverse effects related to hazardous materials. The mitigation measures that follow provide the recommended methods for safely approaching potential hazardous materials encountered during the course of the project. Construction activity would be conducted in accordance with all federal and State regulatory requirements that are intended to prevent or manage hazards. Mitigation Measure **CON27** provides the recommended methods for safely approaching potential hazardous materials encountered during the course of the project and ensure that impacts to hazardous materials remain less than significant.

For the reasons stated above, Metro finds the project would not affect emergency response times or wildlands and impacts related to risk from landslides, flooding, tsunamis, inundation would remain less than significant. Metro also finds that impacts related to ground deformation, liquefaction and hazardous would be reduced to less than significant.

Additional Mitigation Measure For Maintenance Facility

S-GEO4 There is a potential for lead based paint and asbestos containing building materials to be present at the maintenance facility sites. An asbestos survey and lead based paint survey shall be conducted on all sites where on-site structures would be demolished or significantly renovated.

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

Mitigation Measures GEO1 through GEO6, as well as SGE04 have been adopted as part of the project. These measures will be enforced by Metro as described in the MMRP. During the advanced conceptual engineering for the project, the aerial crossing over La Brea Avenue was changed to a below-grade crossing to minimize the potential risk from ground deformation from seismic activity. The Florence/La Brea Station was also moved east near Market Street in accordance with regulations with designated Alquist-Priolo Zones which prohibit facilities that involve the congregation of people from being located directly adjacent to a fault.

Implementation of Mitigation Measures **GEO1** through **GEO6** would provide the appropriate methods for safely approaching the potentially hazardous situations from ground

deformation and liquefaction and reducing this potential impact to less-than-significant levels. It is assumed that the project would be implemented in accordance with all federal and State requirements and permits during the construction process. Due to the great body of experience and techniques for remediation, it is anticipated that impacts would be less than significant.

Mitigation Measures **GEO1** through **GEO6** would also apply for the maintenance facility. Implementation of Mitigation Measure **S-GEO4** for the maintenance facility would require a lead based survey to determine whether any of the existing buildings contain lead-based paint. Buildings found to contain lead-based paint would be required by law to use workmanship practices that will assist in minimizing the exposure of workers and residents to lead-based paint hazards.

For the reasons stated above, Metro finds impacts related to ground deformation, liquefaction and hazardous materials specific to the maintenance facility would be reduced to less than significant.

5.7. Water Resources

According to the CEQA, the Crenshaw/LAX Transit Corridor Project would result in a significant impact to water resources if it would:

- Not have sufficient water supplies available to serve the project;
- Conflict with applicable legal requirements related to hydrology or water quality, including a violation of state water quality standards or waste discharge requirements;
- Substantially degrade groundwater quality or interfere with groundwater recharge, or deplete groundwater resources in a manner that would cause water-related hazards, such as subsidence;
- Alter the existing drainage pattern of the site or area in a manner that would cause substantial flooding, erosion, or siltation;
- Create or contribute to runoff that would exceed the drainage and flood control capacity of existing or planned storm water drainage systems; and/or
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows, or otherwise expose people and/or property to water-related hazards, such as flooding.

Impact

- The LPA could result in a source of polluted runoff that could affect water quality.
- The LPA would require excavation below the surface level and could affect groundwater quality.

The LPA could require a small amount of water supply at station areas, if facilities, such as restrooms and drinking fountains were present, and for landscaping. The water usage would not exceed existing usage and sufficient supply would be available to serve the project. Therefore, less-than significant impacts to water supplies would occur. Based on the existing groundwater levels and project design depths, the LPA would not substantially deplete groundwater supplies or interfere with recharge. The LPA would include removal of

landscaping and an increase in impervious surfaces. The increase of impervious surfaces due to the construction of the proposed project would not alter the drainage or increase the amount of runoff significantly. The project would not contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems. Therefore, the LPA would result in less-than-significant impacts to depletion of groundwater supplies, and increased runoff which would affect the alteration of drainage patterns or exceed the capacity of drainage systems.

Reference. FEIS/FEIR 4.9.2 pg 4-157 – 4-163

Mitigation Measures

WQ1 During project construction and operation, remediation should be required at maintenance facilities and vehicle storage areas, where a potential exists for grease and oil contamination to flow into storm drains. Various types of ditch structures, including grease traps, sediment traps, detention basins, and/or temporary dikes, may be used to control possible pollutants. These facilities shall be constructed pursuant to guidance published in Section 402 of the Clean Water Act (CWA) and shall follow the most current guidance within the NPDES permit program.

WQ2 The flood capacity of existing drainage or water conveyance features within the project study corridor shall not be reduced in a way that causes ponding or flooding during storm events. A drainage control plan shall be developed during project design to ensure that drainage is properly conveyed from the study area and does not induce ponding on adjacent properties.

WQ3 A dewatering permit shall be required if groundwater is encountered during construction. The proposed project is located in an urbanized area where potential groundwater contamination may exist. If contaminated groundwater is encountered during construction, the contractor shall stop work in the vicinity of the suspect find, cordon off the area, and contact the appropriate hazardous waste coordinator and maintenance hazardous spill coordinator at Metro and immediately notify the Certified Unified Program Agencies (City of Los Angeles Fire Department, County of Los Angeles Fire Department, and Los Angeles Regional Water Quality Control Board or RWQCB) responsible for hazardous materials or waste incidents. Coordination with the Los Angeles RWQCB shall be initiated immediately to develop an investigation plan and remediation plan for expedited protection of public health and environment. Contaminated groundwater is prohibited from being discharged to the storm drain system. The contractor shall properly treat or dispose of any hazardous or toxic materials, according to local, state, and federal regulations). Potential treatment methods include, but are not limited to, extraction, treatment and reinjection, bioremediation, recirculating wall technology, deep well treatment, vapor extraction, and natural attenuation. The appropriate method of treatment and monitoring would be subject to the responsible agency determined in the Mitigation Monitoring Reporting Program.

WQ4 The study area currently drains indirectly to Ballona Creek and Dominguez Creek through the Municipal Separate Storm Sewer System (MS4). Treatment control BMPs shall be incorporated into the project design. The project shall consider placing the treatment BMPs in series or in a complimentary system to increase the

control of pollutants to the maximum extent practicable. The systems shall be designed to efficiently and effectively handle and treat dry and wet weather flows to the maximum extent practicable. A Standard Urban Stormwater Mitigation Plan (SUSMP) and appropriate drainage control plan shall be implemented to select and place appropriate permanent treatment BMPs.

WQ5 During construction of the project, on-site integrated management strategies that employ green infrastructure strategies to capture runoff and remove pollutants shall be used. Green infrastructure strategies combine a variety of physical, chemical, and biological processes that focus on conveying runoff to bioretention areas, swales, or vegetated open spaces.

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

Mitigation Measures **WQ1** through **WQ5** have been adopted as part of the project. These measures will be enforced by Metro as described in the MMRP. Compliance with permitting requirements and implementation of Mitigation Measures **WQ1** through **WQ5** would ensure that no significant long term impacts to drainage patterns or surface water or groundwater quality. The study corridor is in an urbanized area in which much of the runoff does not seep into the ground. Runoff and drainage from the site would be treated and directed so that it would not contaminate existing water quality. The below-grade segment in this area along Crenshaw Boulevard is approximately 50 feet below the ground surface and is located within a liquefaction zone that spans along Crenshaw Boulevard from the I-10 Freeway in the north to Vernon Avenue in the south. Groundwater levels at Exposition Boulevard are as high as 16 feet below ground surface and gradually decline to more than 75 feet at Vernon Avenue. Dewatering activity would likely be required along this segment. Implementation of Mitigation Measure **WQ3** would ensure that dewatering activity would not contaminate the groundwater encountered during excavation. For the reasons stated above, the Metro Board finds impacts related to runoff and groundwater quality would be reduced to less than significant.

5.8. Historic/Archaeological/Paleontological Resources

Section 15064.5 of the CEQA Guidelines sets forth the criteria and procedures for determining significant historical resources, and the potential effects of a project on such resources. CEQA also categorizes paleontological resources as cultural resources and requires an impact evaluation to such resources. Impacts to paleontological resources fall under CEQA only and are not considered historic properties to be evaluated under NEPA or the Section 106 process.

Impact

- The LPA has the potential to affect archaeological or paleontological sites where excavation or grading is needed for below grade configuration, footings for the aerial configuration, or foundations for traction power substations, other buildings or station platforms. No known cultural, archaeological or paleontological resources listed in or eligible for listing in the National Register of Historic Places or California Register would be affected by the project. Discovery of unknown archaeological or paleontological resources is possible during excavation activities and would result in a significant impact if destroyed.

Reference. FEIS/FEIR 4.11.2 pg 4-185 – 4-199

Mitigation Measures

CR1 Treatment of Undiscovered Archaeological Resources

Construction personnel shall be informed of the potential for encountering significant archaeological and paleontological resources along Crenshaw Boulevard in the vicinity of the Crenshaw/King Station, and instructed in the identification of fossils and other potential resources. All construction personnel shall be informed of the need to stop work on the project site until a qualified archaeologist or paleontologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Monitors with Native American qualifications shall be used at a minimum for construction within a ½ mile of the Crenshaw/King Station. If human remains are encountered during construction, all work shall cease in the area of potential affect and the Los Angeles County Coroner's Office shall be contacted pursuant to procedures set forth in Public Resources Code Section 5097 et seq. and Health and Safety Code in Sections 7050.5, 7051, and 7054 with respect to treatment and removal, Native American involvement, burial treatment, and re-burial, if necessary.

A detailed Cultural Resources Monitoring and Mitigation Plan (CRMMP) would be prepared prior to implementation of this project, similar in scope to the CRMMP that was prepared for Metro's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementation of a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected. If cultural resources are discovered or if previously identified resources are affected in an unanticipated manner, the Monitoring Plan would also ensure that such resources receive mitigation to reduce the impact to less-than-significant levels. This plan would include, but not be limited to, the following elements, which are described in further detail in the Cultural Effects Report in Appendix G:

- Worker training
- Archaeological monitoring
- The scientific evaluation and mitigation of archaeological discoveries
- Native American participation, as needed
- Appropriate treatment of human remains, if applicable
- Reporting of monitoring and mitigation results

CR2 Paleontological Monitoring

A qualified paleontologist shall produce a Paleontological Monitoring and Mitigation Plan (PMMP) for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring shall include

inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor shall have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. All efforts to avoid delays in project schedules shall be made.

All project-related ground disturbances that could potentially affect previously undisturbed Quaternary older alluvial deposits shall be monitored by a qualified paleontological monitor under the supervision of a qualified paleontologist on a full-time basis because these geologic units are determined to have a high paleontological sensitivity. Very shallow surficial excavations (less than 5 feet) within areas of previous disturbance or areas mapped as Quaternary younger alluvial deposits or Artificial fill shall be monitored on a part-time basis to ensure that underlying sensitive units (i.e. older alluvium) are not adversely affected. The location of subsurface sensitive sediments shall be determined by the qualified paleontologist upon review of project grading plans.

Paleontological monitors shall be equipped with the necessary tools for the rapid removal of fossils and retrieval of associated data to prevent construction delays. This equipment shall include handheld global positioning system (GPS) receivers, digital cameras and cell phones, as well as a tool kit containing specimen containers and matrix sampling bags, field labels, field tools (awls, hammers, chisels, shovels, etc.) and plaster kits. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis.

Any collected fossils shall be transported to a paleontological laboratory for processing where they will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis and reposited in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County).

The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed, at a minimum with Metro and the repository. The final report shall include, but not be limited to, a discussion of the results of the mitigation and monitoring program, an evaluation and analysis of the fossils collected (including an assessment of their significance, age and geologic context), an itemized inventory of fossils collected, a confidential appendix of locality and specimen data with locality maps and photographs, an appendix of curation agreements and other appropriate communications, and a copy of the project-specific paleontological monitoring and mitigation plan.

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

Mitigation Measures **CR1** and **CR2** have been adopted as part of the project. These measures will be enforced by Metro as described in the MMRP. Mitigation Measure **CR1**, described above, would provide monitoring of excavation activity in areas in the unlikely event that a potential archaeological resource could be discovered. In addition to the monitoring and identification process, the mitigation measure provides the mechanism for the treatment of a potential discovery which includes worker training and instructions to stop

construction activity until a potential resource can be evaluated for its significance. Implementation of Mitigation Measure **CR2** would provide a similar identification and treatment process for the unlikely discovery of a paleontological resource. For the reasons stated above, the Metro Board finds that impacts related to archaeological and paleontological resources would be reduced to less than significant.

5.9. Community Facilities

The *CEQA Thresholds* state that a project would normally have a significant impact on public facilities if it could:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection;
- For a project 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, would the project result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working within the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- 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;
- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection;
- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools;
- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities.

Impact

- There are two locations along the LPA alignment where existing sidewalks may restrict the flow of access to community facilities. The first is adjacent to Faithful Central Bible church, where pedestrians who attend services have to walk along a narrow sidewalk (six feet) along Eucalyptus Avenue and cross the LPA tracks to reach

the secondary parking lot and associated church facilities that are located on the north side of the Harbor Subdivision. The second location where the existing sidewalks (also six feet) are not wide occurs along Florence Avenue adjacent to the Florence/La Brea Station. Transit riders would be funneled onto this narrow sidewalk along Florence as they proceed to cross either at Locust Avenue, Market Street, or La Brea. A potential significant impact to the flow of pedestrians would occur near Faithful Central Bible Church and the La Brea Station.

The proposed LPA would have the beneficial impact of situating public transit adjacent to parks, and thereby, potentially increasing the public's ability to visit them. The LPA is located within 0.25-mile of numerous public service facilities (3) and community facilities (72). Of these, one public service facility and 39 community facilities are within approximately 0.05 miles of the alignment. Thirty-three of the community facilities and public services are within 0.25-mile of a proposed station location and would benefit from enhanced access to public transit. The public service facilities (police and fire) near the alignment are located near grade separated crossings of the alignment (Century Boulevard and La Brea Avenue) so that the LPA would not result in an adverse effect on response times. The LPA would be within the existing street system and along the existing Harbor Subdivision and would not affect vehicle or pedestrian access to all other community facilities. Sidewalks impacted (i.e., sidewalks just south of the Crenshaw/Exposition Station, on the east side of the street) as part of the project will be reconstructed and reconfigured, thereby continuing to provide access for pedestrians. Although the LPA would potentially make these parklands and community facilities more accessible, this accessibility would not create a demand of such magnitude that would lead to substantial deterioration of facilities, nor would they would need to be expanded or have new facilities constructed. Therefore, the LPA would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. The LPA would not increase the use of existing neighborhood and regional parks or other community facilities such that substantial physical deterioration of the facility would occur or be accelerated. Finally, the LPA does not include recreational facilities or require the construction or expansion of recreational facilities, which might have a physical effect on the environment.

Reference. FEIS/FEIR 4.12.2 pg 4-185 – 4-199

Mitigation Measures

PCF-1 The project shall incorporate Metro Design Criteria standards for sidewalks to ensure the safe flow of pedestrians.

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

Mitigation Measure **PCF-1** as presented above has been adopted as part of the project. Implementation of Mitigation Measure **PCF-1** would ensure that the sidewalks adjacent to these two areas would be designed to accommodate the higher flow of pedestrian activity. The design criteria standards include, but are not limited to providing wider sidewalks and providing fencing to ensure that pedestrians remain within the safety of

the sidewalks. The incorporation of the design standards would occur in coordination with the City of Inglewood Public Works Department, who has jurisdiction in these two areas. For the reasons stated above, the Metro Board finds that impacts related to community facilities would be reduced to less than significant.

5.10. Economic and Fiscal Effects

Economic effects of a project shall not be treated as significant effects on the environment; however, an environmental analysis may use economic effects to determine that a physical change is significant.

Impact. The LPA would not result likely long-term physical effects on adjacent businesses and business districts and a less-than-significant impact would occur. Mitigation measures are included to ensure that impacts remain less than significant.

Reference. FEIS/FEIR 4.13.2 pgs 4-241-4-247

Mitigation Measures

CON28 Nearby business owners and commercial property owners shall be notified of the schedule for specific planned construction activities, changes in traffic flow, and required short-term modifications to property access.

CON29 General notices shall be provided to local government, transit agencies, major institutions, and other organizations of the schedule for planned construction activities.

CON30 Methods shall be developed by which business owners can convey their concerns about construction activities and the effectiveness of mitigation measures during the construction period so activities can be modified to reduce adverse effects.

CON31 Advance notice shall be provided to affected property owners if utilities would be disrupted for short periods of time and scheduled major utility shut-offs during low-use periods of the day.

CON32 Construction activities shall be planned to minimize effects on community gatherings, special celebrations, or other similar events.

CON33 Public information campaigns shall be conducted to encourage patronage of corridor businesses during the construction period.

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

The project is anticipated to generate two thousand direct construction jobs over a five year period. In addition, implementation of Mitigation Measures **CON28** through **CON33** would provide for construction planning to reduce impacts from the inconvenience and/or disruption to the flow of customers, employees, and materials and supplies to and from corridor businesses. The provision of these mitigation measures would provide information to property owners and businesses and provide an outlet for them to communicate their concerns and ensure that impacts remain less than

significant. The economic and fiscal effects discussed address regional economic activity, long-term operations, employment, government revenues, and likely long-term effects on adjacent businesses and business districts. Only the later effect would result from physical changes in the environment – primarily the acquisition of property, displacement of building structures, and potentially the construction of the rail tracks for the LRT line. The project would provide transit infrastructure in a transit dependent community, providing for the future sustainability of the area. No urban decay would result from implementation of the project. In addition, the project is anticipated to generate two thousand direct construction jobs over a five year period. Therefore, the Metro Board finds impacts related to economic and fiscal effects would be less than significant.

5.11. Safety and Security

Project effects on safety and security would be considered significant if they:

- Cause or create the potential for substantial adverse safety conditions or substantially limit the delivery of community safety services, such as police, fire, or emergency services; and/or
- Cause or create the potential for substantial adverse security conditions, including: incidents, offenses, and crimes.

Impact. The LPA's potential safety and security impacts would not lead to physical adverse changes in the environment. Therefore, less-than-significant impacts associated with safety and security would occur. Mitigation measures are included to ensure that impacts remain less than significant.

Reference. FEIS/FEIR 4.14 pg 4-251 – 4-262

Mitigation Measures

SS1 All stations and parking facilities shall be equipped with monitoring equipment and/or be monitored by Metro security personnel on a regular basis.

SS2 Metro shall implement a security plan for LRT operations that shall include both in-car and station surveillance by Metro security or other local jurisdiction security personnel and establish well lit pedestrian station and parking areas that minimize shadows and provide visibility for security personnel to monitor activity.

SS3 All stations shall be lit to a standard of no less than two footcandles to minimize shadows and ensure that all pedestrian pathways leading to/from sidewalks and parking facilities shall be well illuminated.

SS4 Metro shall coordinate and consult with the LAPD, the LA County Sheriff's Department, the Inglewood Police Department, and the LAX Police to develop safety and security plans for the alignment, parking facilities, and station areas which satisfy the requirements necessary for the appropriate policing jurisdiction to effectively patrol the area.

SS5 The station design shall be undertaken to avoid obstructions to visibility or observation and discrete locations favorable to crime; pedestrian access to at-grade,

below-grade, and above-grade station entrances/exits shall be accessible at ground-level with clear sight lines.

SS6 Metro shall implement appropriate measures to ensure pedestrian crossing safety at all locations with adjacent schools, churches, and high pedestrian areas as determined by the CPUC.

SS7 Metro shall conduct a Hazard Analysis before the start of Final Design, using current safety analysis as a reference. The Hazard Analysis shall determine a design basis for warning devices as required by the California Public Utilities Commission.

SS8 Vehicular and pedestrian warning measures, such as signage, shall be provided along the length of the platforms of the LRT Stations. Gates shall be provided at pedestrian crossings of the LRT and/or BNSF tracks within the Harbor Subdivision. These markings will be provided to alert motorists and pedestrians to potential conflict in the area.

SS9 To discourage crossing the alignment and enhance safety, such as near the Faithful Central Bible Church, Metro shall provide fencing along either side of the alignment, between the parking lot and church buildings and ensure adequate pedestrian safety devices at designated crossings.

Finding. Mitigation Measures **SS1** through **SS9**, as presented above, have been adopted as part of the project. These measures will be enforced by Metro as described in the MMRP. Mitigation Measures **SS1** through **SS5** would provide appropriate design, visibility, lighting, and implementation of a security plan that would allow for the efficient monitoring and patrol of station areas and provide the appropriate level of security for rail patrons.

Safety, around the trackway would be ensured through implementation of appropriate warning devices based on comprehensive hazard analysis and field diagnostic reviews with the affected parties as part of the legally required CPUC grade crossing application process. Pedestrian counts have been conducted along Crenshaw Boulevard near schools and signage and warning devices have been incorporated into the project to ensure the safety of pedestrians. Either the speed of the train would not exceed posted speed limits when it is running at-grade in the center of the street and crossing would occur with traffic signals, or the train speed would exceed 35 mph and barriers would impede access to the tracks. At designated crossings, pedestrian and motorist gates and visual and audible warning devices would be provided. For the reasons stated above, the Metro Board finds that impacts related to safety and security would remain less than significant.

5.12. Environmental Justice

There are no CEQA thresholds related to Environmental Justice.

Impact. With implementation of the LPA, design options, and MOSs, populations sensitive to environmental justice concerns will have greater access to regional activity centers and employment opportunities. The project would have a beneficial impact with improved access to transit.

Reference. FEIS/FEIR 4.18.2 pgs 4-331-4-339

Mitigation Measures

CON34 Metro shall ensure that all businesses and service providers are provided with adequate access during construction. Where there is a significant LEP population, signage shall be provided in various languages (as appropriate).

Finding. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effect.

The LPA provides for a new mass transit line in the Crenshaw/LAX Transit Corridor to provide transit service to a predominantly minority and low-income area. Because the project would occur within a predominantly minority and low-income area, all the impacts caused by the proposed project would occur to primarily minority and low-income groups.

The displacement effects occur uniformly along the alignment and do not disproportionately affect a minority or low-income population. The choice of properties to displace is based on the alignment and the engineering needs of the station areas and rights-of-way. Community input regarding environmental justice and equity received by Metro since the inception of the Crenshaw/LAX Transit Corridor Project has consistently emphasized the topic of safety and security of the transit technologies being considered for the corridor. Safety of the at-grade LRT sections is a key community concern. Safety considerations have played a key role in the design of the LPA and Metro has implemented a wide array of safety features for vehicles and pedestrians which are described in Section 4.14, Safety and Security of the FEIS/FEIR. To systematically address the issue of grade separating transit service, Metro developed a Grade Crossing Policy for Light Rail Transit in 2003. Since its adoption by the Metro Board, this policy has been in use as a planning and engineering assistance tool and it requires that rail and highway crossings be analyzed in a sequence of steps at increasing levels of detail. This policy is applied to all Metro project corridors regardless of the socioeconomic status or race/ethnicity of adjacent neighborhoods.[1]

Within the Crenshaw/LAX Transit Corridor, the LPA alignment reflects the results of the application of the grade crossing policy. The grade separations included in the LPA alignment were based on the analysis that light rail could operate at-grade safely in these portions of the alignment. Key to the consideration of environmental justice is whether bias or arbitrary action has influenced the location of these LPA at-grade segments that are of concern to the community. Metro uniformly applies its Grade Crossing Policy to all corridors within its jurisdiction. Transit corridors with similar rail frequency headways, crossing traffic volumes, and adjacent pedestrian-generating land uses are treated in the same manner. LRT corridors currently being constructed and considered by Metro, including Exposition Phases I and II, the Metro Gold Line Eastside Extension Phase II, and the Gold Line Foothill Extensions, each include at-grade sections that adjoin neighborhoods of various socioeconomic statuses. Ultimately, the California Public Utilities Commission (CPUC) is the final determinant of grade separated locations, as well as the vehicle and pedestrian safety features placed at each grade crossing, based on a public hearing and an evidentiary process. With these processes and

[1]Metro, *MTA Grade Crossing Policy for Light Rail Transit*, 2003.

procedures in place, there would not be a willful and disproportionate safety effect on minority and low-income communities within the Crenshaw/LAX Transit Corridor. In addition, Metro has responded to community concerns regarding safety of at grade sections by including grade separated design options in key sections of the corridor with the exception of the segment on Crenshaw Boulevard from 48th Street to 60th Street where LRT operations have been determined to operate safely without the need of a grade separation. This is due to the width of the Crenshaw Boulevard at this point, traffic signal proposed operation modifications, and proposed street geometry changes. Therefore, no disproportionate adverse impacts on minority or low income communities are anticipated.

Although the project would provide long-term mobility improvements and access for minority and low-income populations, the construction effects may have environmental justice implications from difficulty of access to local businesses and services. Mitigation Measure **CON34** would address the difficulty of access to local businesses and services and provide signage to ensure access to residents and businesses is maintained to the greatest extent feasible.

Therefore, the Metro Board finds that the potential impacts discussed are less-than-significant.

6 ENVIRONMENTAL IMPACTS FOUND SIGNIFICANT AFTER IMPLEMENTATION OF MITIGATION MEASURES

The FEIS/FEIR identified the following significant or potentially significant construct-phase-related impacts, as described below that cannot be mitigated to a less-than-significant level, despite the implementation of mitigation measures or selection of alternatives to reduce these impacts. These mitigations will be adopted as part of the project and after implementation, where impacts remain significant, Metro finds that changes or alterations have been required in, or incorporated into, the project which mitigate the significant effects on the environment. As stated in CEQA Guidelines Section 15091, the Metro Board also finds where measures to mitigate the significant effects are infeasible, that "Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible mitigation measures or project alternatives" identified in the FEIS/FEIR. The Metro Board further finds that the project has been designed in a manner that reduces impacts to the maximum extent reasonably feasible, and that the specific economic, legal, social and technological benefits of the project are identified in Section 10, Statement of Overriding Considerations, of these findings.

6.1. LPA (Alignment and Stations), Design Options and MOSs

The intersection LOS analysis assumes that an intersection would be adversely affected by traffic volume changes if the project alternative will cause an increase in average vehicle delay according to the following thresholds that were developed in consultation with local jurisdictions:

- Final LOS C – an adverse impact has occurred if the delay is increased by 10 or more seconds

- Final LOS D – an adverse impact has occurred if the delay is increased by 7.5 or more seconds
- Final LOS E/F – an adverse impact has occurred if the delay is increased by 5 or more seconds

Traffic

Impact. There is one location (Crenshaw Boulevard and 54th Street) that is impacted at signal cycle lengths at or less than 140 seconds. The analysis shows that the project would cause the LOS to degrade from C to D with an increase in delay of over 7.5 seconds. There are no changes in street geometry that would reduce impacts. Increasing the signal cycle length to 150 seconds would eliminate the impact. The determination of the type of traffic signal control operation or a fixed cycle length, however, is an issue broader than the effects at a single intersection and has system implications for the grid of intersections north and south as well as east and west of this location. Within this system constraint, the intersection operations will be optimized to the extent feasible through a cooperative effort between Metro and LADOT as the project progresses toward implementation, and is operated thereafter. Depending upon the ultimate traffic signal control operation, the impacts at this intersection may be considered significant according to LADOT criteria. There are no feasible mitigation measures which would eliminate this impact for cycle lengths of less than 150 seconds. Therefore, the Metro Board finds that the Crenshaw Boulevard/54th Street intersection would result in a significant impact related to traffic for cycle lengths of less than 150 seconds.

Reference. FEIS/FEIR 3.2. 3 pg 3-37 – 3-47

Mitigation Measures. None feasible.

Finding. There are no physical improvements that can be made to the Crenshaw Boulevard/54th Street intersection to reduce the impact to less than significant at less than the 150 second cycle length. Operational changes to the signal cycle length would reduce the impact at this intersection, but such a change would have significant system-wide effects on traffic. Therefore, no feasible mitigation measures are available to reduce the significant traffic impact to less than significant. Therefore, the traffic impact is considered significant and unavoidable.

Construction – Air Quality

Construction activities would result in a significant air quality impact if:

- The Crenshaw/LAX Transit Corridor Project would generate regional emissions that exceed the South Coast Air Quality Management District thresholds shown in Table 4-54 of the FEIS/FIER;
- The Crenshaw/LAX Transit Corridor Project would generate localized emissions that exceed the South Coast Air Quality Management District thresholds established in the Localized Significance Threshold Guidelines (July 2008);

Impact. Regional construction emissions would exceed the NO_X significance threshold and localized emissions would exceed the NO_X, $PM_{2.5}$, and PM_{10} significance thresholds.

Reference. FEIS/FEIR 4.15.2-3 pg 4-279 – 4-302

Mitigation Measures

CON4 Water or a stabilizing agent shall be applied to exposed surfaces in sufficient quantity to prevent generation of dust plumes.

CON5 Track-out shall not extend 25 feet or more from an active operation and track-out shall be removed at the conclusion of each workday.

CON6 Contractors shall be required to utilize at least one of the measures set forth in South Coast Air Quality Management District Rule 403 section (d)(5) to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site.

CON7 All haul trucks hauling soil, sand, and other loose materials shall maintain at least 6 inches of freeboard in accordance with California Vehicle Code Section 23114.

CON8 All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).

CON9 Traffic speeds on unpaved roads shall be limited to 15 mph.

CON10 Operations on unpaved surfaces shall be suspended when winds exceed 25 mph.

CON11 Heavy equipment operations shall be suspended during first and second stage smog alerts.

CON12 On-site stockpiles of debris, dirt, or rusty materials shall be covered at all times when not being used. On-site stockpiles of dirt shall be watered at least two times per day or covered at all times when not being used.

CON13 Contractors shall maintain equipment and vehicle engines in good condition and in proper tune per manufacturers' specifications.

CON14 Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators, as feasible.

CON15 Heavy-duty trucks shall be prohibited from idling in excess of five minutes, both on- and off-site.

CON16 Construction parking shall be configured to minimize traffic interference.

CON17 Construction activity that affects traffic flow on the arterial system shall be limited to off-peak hours, as feasible.

CON18 Construction staging and vehicle parking, including workers' vehicles, shall be prohibited on streets adjacent to sensitive receptors such as schools, daycare centers, senior facilities, and hospitals.

CON19 The construction process shall utilize an on-site rock crushing facility with water control to suppress dust, when feasible.

CON20 Portable generators shall be low-emitting and use ultra low sulfur diesel (<15 parts per million) or gasoline.

CON21 Construction equipment shall use a combination of low sulfur diesel (<15 parts per million) and exhaust emission controls.

CON22 The construction process shall use equipment having the minimum practical engine size (i.e., lowest appropriate horsepower rating for the intended job).

CON23 Contractors shall be prohibited from tampering with construction equipment to increase horsepower or defeat emission control devices.

CON24 Metro shall designate a person to ensure the implementation of air quality mitigation measures through direct inspections, records reviews, and complaint investigations.

Finding. Implementation of Mitigation Measures **CON4** through **CON24** would reduce the effects of construction on air quality. However, regional and localized emissions would continue to exceed the SCAQMD significance thresholds. Therefore, the proposed project would result in a significant impact related to construction air emissions. This impact, although, significant, is considered to be a temporary impact that will occur during the pre-construction and construction phase activities. Therefore, the Metro Board finds that construction activity would result in a significant impact related to air quality regional and localized emissions.

6.2. Maintenance Facility (Where impacts are different to those discussed together with the LPA)

Displacement and Relocation

Displacement and relocation impacts would be considered significant if the Crenshaw/LAX Transit Corridor Project would:

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and/or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Impact. A significant impact would occur related to displacement and relocation for the preferred maintenance site alternative.

Reference. FEIS/FEIR 5.3.2 pg 5-13 –5-17

Mitigation Measures. See Mitigation Measure **DR1** described previously

Additional Mitigation Measures for Maintenance Facility

S-DR2 Metro shall set up a business relocation process to oversee the relocation needs of the businesses that would be displaced as a result of a maintenance facility for the Crenshaw/LAX Transit Corridor. In addition, Metro shall attempt to minimize disruption to overall production of businesses that are connected with airport activities by relocating in as close proximity to LAX as possible.

S-DR3 Metro shall work with LAWA to ensure that potential displacement and relocation of rental car businesses are compatible with the long term implementation of the LAX Master Plan consolidated rental car center.

Finding. The preferred maintenance site alternative would require 12 full parcel acquisitions to accommodate a maintenance facility on this site. These parcels include industrial land uses. Many of the owners and tenants on this site have long term leases, were seeking to sublet property, or had either planned or completed recent improvements to their properties. A trading company on the site also has a one of a kind refrigeration system that would not be able to be relocated. There are two car rental facilities, one of which has acquired adjacent property for added capacity. The displacement of businesses within this site could result in loss of approximately 390 employees.

The preferred maintenance site alternative would not result in the displacement of any housing or populations. No significant direct impacts to residential displacement are anticipated with this alternative. However, the displacement of businesses may result in the loss of 390 employees which could necessitate replacement housing if not relocated in the vicinity; and therefore a potential significant indirect impact would occur without the implementation of mitigation measures.

The preferred maintenance site alternative is in close proximity to LAX and the success of many of these affected businesses depends on their proximity to the airport. The airport vicinity is highly urbanized and developed and as a result, relocation sites with proximity to the airport are scarce. Relocating all of the owners and tenants on the preferred maintenance site alternative, according to their individual needs, especially with proximity to the airport and available land, would be challenging. While adherence to the provisions of the Uniform Act and coordination with LAWA regarding the LAX Master Plan (Mitigation Measures **DR1** (identified above) and **S-DR2** and **S-DR3**) would provide displaced property owners and businesses compensation and assistance to relocate to an alternate location. The successful relocation of these businesses to make them operable in a competitive state would reduce the impact to less than significant. There is no certainty that all displaced businesses can be relocated in areas that ensure that there is no adverse effect on their competitive position. Therefore, the potential for indirect significant impacts from the displacement of businesses would remain after implementation of mitigation if they are relocated at a substantial distance from LAX. Under these circumstances, the Metro Board finds that a significant impact would remain.

Economic and Fiscal

A significant impact would occur for the preferred maintenance site alternative if a physical change occurred as a result of economic activity or if a physical change created a significant effect on economic conditions.

Impact. A significant impact would occur related to economic and fiscal effects for the preferred maintenance site alternative.

Reference. FEIS/FEIR 5.14.2 pg 5-72 –5-73

Mitigation Measures. This maintenance site alternative is located in an area within two miles of LAX. The activities at LAX, including business travel, tourist travel and goods movement each contribute to LAX's importance as a key element of the Southern California economy. Acquisition of property necessary for the maintenance facility would result in the displacement of a substantial number of employees working in a variety of businesses, each with their own unique relocation needs. The total estimated employment for this site is approximately 390 jobs. The displacement of this number of jobs and loss of property tax revenue would result in an adverse effect to the regional economy. The ability to relocate these owners and tenants would be pivotal in determining the extent of the impact to the regional economy. The successful relocation of all property owners and tenants would result in a less-than-significant impact. However, as discussed under displacement above, there is no certainty that all displaced businesses can be relocated in areas that ensure that there is no adverse effect on their competitive position. Nor is there certainty that the time frames for the Crenshaw/LAX Transit Project and implementation of the *LAX Master Plan* will be totally in sync to facilitate a seamless relocation of affected businesses in comparable facilities. The operation of a maintenance facility would result in a physical change that would affect job loss on the regional economy and the loss of government revenues if the displaced businesses do not relocate to comparable sites in the vicinity. Therefore, a significant economic and fiscal effect would remain after implementation of mitigation. Under these circumstances, the Metro Board finds that a significant impact would remain.

Construction – Air Quality

Impact. Regional and localized PM10 emissions would exceed the SCAMD significance thresholds. Therefore, a significant localized particulate matter impact would occur during construction of the maintenance facility.

Reference. FEIS/FEIR 5.16.4.3 pg 5-86–5-88

Mitigation Measures. See Mitigation Measures **CON4** through **CON24** described previously.

Findings. Regional and localized emissions would be generated by construction equipment, haul trucks, worker commute trips, earthwork activity, and architectural coating activity. Mitigation Measures **CON4** through **CON24** described above will be implemented to reduce air quality impacts to the greatest extent feasible. However, the Metro Board finds that regional construction emissions would result in a significant PM_{10} impact for the maintenance facility.

Construction – Noise.
The project would have a significant impact on construction noise and vibration if:

- Noise and vibration levels exceed the standards set forth in the Los Angeles Municipal Code.

Impact. A significant noise impact would occur during construction of the maintenance facility.

Reference. FEIS/FEIR 5.16.4.4 pg 5-87–5-89

Mitigation Measures. See Mitigation Measures **CON25** and **CON26** described previously.

Additional Mitigation Measures for Maintenance Facility

S-CON24 Noise barriers (e.g., sound attenuation blankets or solid walls) shall be placed such that the line-of-sight is blocked between sensitive receptors (e.g., residential and institutional land uses) and the project site, as feasible.

S-CON25 During the early stages of construction plan development, natural and artificial barriers, such as ground elevation changes and existing buildings, shall be considered for use as shielding against construction noise.

S-CON26 The contractor shall comply with Standard Specification 1565, FTA noise criteria. Each internal combustion engine used for any purpose on the job or related to the job shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated without a muffler.

S-CON27 Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than metal-tracked equipment) as much as possible.

S-CON28 The contractor shall submit a noise plan for construction activity associated with the preferred maintenance site alternative. The plan shall be prepared by a qualified acoustical engineer and should be approved by the resident engineer before construction is initiated. The noise control plan shall include an inventory of the equipment, the estimated noise level at 50 feet for each major piece of equipment, calculations of the noise levels at impacted sensitive receptors, and noise reduction measures for sensitive receptor locations where the predicted noise levels exceed the ambient noise level by 5 dBA. Impacted receptors include, but may not be limited to, residences to the west of the preferred maintenance site alternative.

Findings. Construction activity would exceed the 5-dBA significance threshold at multiple sensitive receptors. Mitigation Measures **CON25** and **CON26** described above and additional Mitigation Measures **S-CON24** through **S-CON28** described below would reduce construction noise levels by at least 5 dBA at sensitive receptors. However, construction noise level associated with the construction of the maintenance facility would still be significant. Therefore, the Metro Board finds that construction activity would result in a significant impact related to noise for the maintenance facility.

7. ENVIRONMENTAL IMPACTS FOUND LESS THAN SIGNIFICANT

The Metro Board finds that, based upon substantial evidence in the record, as discussed below, the following impacts associated with the project are less than significant, and no mitigation is required. Explanations below apply to the LPA, the five design options, and the MOSs.

7.1 Parking

Impact. No significant impact to parking would occur.

Reference. FEIS/FEIR 3.2.5 pgs 3-50-3-52.

Mitigation Measures. None required.

Finding. On-street parking loss would occur primarily between Brynhurst Avenue and 63rd Street as a result of the inclusion of a rail right-of-way in the median of Crenshaw Boulevard. This on-street parking loss would occur on the inner portion of the frontage road that borders both sides of Crenshaw Boulevard. The frontage road would be eliminated to accommodate the center-running rail right-of-way. There is a total loss of 328 on-street parking spaces along Crenshaw Boulevard with a loss of 158 northbound and 170 southbound on-street parking spaces. A parking utilization survey conducted during the advanced conceptual engineering phase determined that the loss of on-street parking would not result in a parking shortage for the area. For the reasons stated above, the Metro Board finds impacts related to the loss of on-street parking would be less than significant.

The park-and-ride lots would provide a total of 330 parking spaces along the corridor to provide for demand by transit riders. This supply would meet the station area parking demand forecasted through the transit model. At other stations along the corridor where off-street parking would not be provided, spillover parking to the adjacent streets may occur, but is likely to be minimal based on parking demand at stations with park-and-ride facilities. Although the lack of parking supply may result in slightly reduced ridership, it preserves ridership associated with adjacent land uses and may also encourage transit patrons to use other modes of access such as walking, bicycling, transit and kiss-and-ride (drop-off). There is potential for shared use of existing and planned off-street parking resources should Metro and the owners of adjacent parking resources reach an agreement. However, outside of any agreements or access, owners of adjacent parking resources may provide parking controls, such as validation, to restrict transit parking. The implementation of parking controls and strategies are outside of Metro's jurisdiction. It is Metro's expectation that private owners would implement price controls to ensure that adequate parking is available for their customers. For the reasons stated above, the Metro Board finds impacts related to transit parking demand would be less than significant.

7.2 Land Use and Development

The project would result in a significant impact to communities and neighborhoods if it would result in a:

- Physical division of an established community
- Inconsistency with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project; or,
- Incompatibility with adjacent and surrounding land uses caused by degradation or disturbances that diminish the quality of a particular land use.

Impact. No significant impact to the division of an established community, inconsistency with land use policies or regulations, or incompatible land uses.

Reference. FEIS/FEIR 4.1.2 and 5.2.2 pgs 4-13-4-22 and 5-9-5-11.

Mitigation Measures. None required.

Finding. The LPA, design options and MOSs will be consistent with all applicable regional plans of agencies with jurisdiction over the project. The project will be consistent with all applicable land use plans, policies, regulations, and general plans of agencies with jurisdiction over the project. Furthermore, as a regional transit agency, Metro transit projects are not subject to local zoning and regulatory requirements. The proposed project would be located along Crenshaw Boulevard and the Harbor Subdivision, both existing transit infrastructure and the maintenance facility would be located in an industrial area containing existing industrial uses. Therefore, the project would be compatible with surrounding uses and would not prevent access within established communities or create a physical barrier which would divide an established community. Therefore, the Metro Board finds impacts related to land use would be less than significant.

7.3 Community and Neighborhoods

The project would result in a significant impact to communities and neighborhoods if it would result in a:

- Physical division of an established community

Impact. No significant impact to the division of an established community.

Reference. FEIS/FEIR 4.3.2 pgs 4-65-4-67

Mitigation Measures. None required.

Finding. The project would not result in changes to population, community cohesion and interaction, social values, quality of life, or result in isolation. The project would not create additional barriers, disruption, or displacement in the existing established communities and neighborhoods as it would operate along an existing freight railway and in the median of a major arterial. The project would not alter or block access to community assets, displace on- or off-street parking spaces, or impact economic development. Therefore, the Metro Board finds impacts related to communities and neighborhoods would be less than significant.

7.4 Air Quality

The project would result in a significant air quality impact if:

- Daily operational emissions were to exceed SCAQMD operational emissions thresholds for Volatile Organic Compounds (VOC), nitrogen oxides (NO_X), CO, (SO_X), $PM_{2.5}$, or PM_{10};
- Project-related traffic causes CO concentrations at study intersections to violate the CAAQS for either the one- or eight-hour period. The CAAQS for the one- and eight-hour periods are 20 ppm and 9.0 ppm, respectively;
- The Crenshaw/LAX Transit Corridor Project would generate significant emissions of Toxic Air Contaminants (TACs); and/or
- The Crenshaw/LAX Transit Corridor Project would create an odor nuisance.

Impact. Significant air quality impacts of the LPA and other options do not exist except in the construction phase (see discussion in Section A.6).

Reference. FEIS/FEIR 4.5.2 and 4.15.2-3 pgs 4-95-4-4-104 and 4-279 – 4-302

Mitigation Measures. None required.

Finding. With regards to regional emissions, mobile emissions are not anticipated to exceed State or federal thresholds. Roadway intersections, park-and-ride facilities, and the proposed transit centers are not anticipated to generate CO (carbon monoxide) hotspots. The LPA would not generate significant emissions of toxic air contaminants or create an odor nuisance. The LPA, design options, and MOSs comply with the U.S. Environmental Protection Agency (USEPA) transportation conformity criteria. Therefore, the Metro Board finds that these potential air quality impacts are less than significant.

7.5 Energy

The Crenshaw/LAX Transit Corridor Project would result in a significant impact if it would result in an energy impact if it would lead to wasteful, inefficient, or unnecessary consumption of energy.

Impact. The LPA would result in less energy consumption than baseline conditions and, as such, would result in a beneficial energy impact.

Reference. FEIS/FEIR 4.10.3 pgs 4-168-4-170

Mitigation Measures. None required.

Finding. The LPA would decrease transportation energy consumption compared to No Build conditions by approximately one billion British Thermal Units (BTUs) per day. This decrease would be partially offset by energy use associated with stations (479,452 BTUs per day per station) and the Maintenance and Storage Facility (88,625,726 BTUs per day). The total decrease in daily energy consumption would be approximately 736 million BTU. The project would result in less energy consumption than baseline conditions and, as such, would result in a beneficial energy impact. An optional station would result in an additional 479,452 BTUs per day of energy use. This represents less than one percent of the 736 million BTUs in energy savings obtained from changes in transportation patterns. The MOSs would result in shorter segments and would not directly connect to the Expo or Green Lines. Compared to the LPA, the shorter segments would result in 35 percent fewer passenger boardings. The total decrease in daily energy consumption would be approximately 424 million BTU. Similar to the LPA, the MOSs would result in less energy consumption than No-Build conditions and, as such, would result in a beneficial energy impact. Therefore, the Metro Board finds the LPA, design options, and MOSs to be a beneficial impact of the project.

7.6 Growth Inducing Impacts

Growth inducing impacts would be considered significant if the proposed project has the potential to induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Impact. The LPA would be located within a densely developed urban setting and would not extend into previously undeveloped areas that may induce growth inducing changes in such areas.

Reference. FEIS/FEIR 4.16.2 pgs 4-307-4-308

Mitigation Measures. None required.

Finding. The proposed project intends to meet the existing and future transit needs of the study area. The LPA and the design options may result in potential indirect growth-inducing effects may result from the micro-scale growth or development near proposed stations due to the implementation of local and State land use policies or local planning objectives, which may encourage transit-oriented development, station area planning, or housing density bonuses adjacent to transit corridors. However, this potential indirect growth is speculative at this time. According to CEQA, it must not be assumed that growth is necessarily beneficial, detrimental, or of little significance to the environment. Therefore, no significant growth-inducing impacts are anticipated.

Findings for Impacts Determined to be Less than Significant: The Metro Boards finds that the above identified impacts require no further mitigation to be considered less than significant.

8 CUMULATIVE IMPACTS

The cumulative impacts analysis in the FEIS/FEIR incorporates the regional projections from SCAG's 2008 RTP, the Metro 2009 Long Range Transportation Plan, and Measure R, a half-cent sales tax approved by the voters in November 2008. In addition, the following are known large projects that will be completed through the year 2035:

- Baldwin Hills Crenshaw Mall Expansion
- Bedford Parc/Promenade Mixed Used Development
- Buckingham Place Senior Development
- Crenshaw/Exposition Mixed Use Development
- District Square Retail Development
- Forum Site Mixed Use Development
- Home Stretch at Hollywood Park Retail Development
- Inglewood Promenade Retail Development
- Los Angeles County Office Park Development
- Market Plaza Retail Development
- Marlton Square Mixed Use Development
- Prairies Promenade Retail Development
- The Renaissance Residential Development

These plans and projects reflect transportation, population, employment, and land use data for the six-county SCAG area through the year 2035. The region wide impact analysis conducted in the 2008 RTP PEIR (SCH No. 2007061126, May 2008), serves as the basis for this analysis of cumulative impacts and is incorporated by reference, per Section 15150 of the CEQA guidelines. SCAG states that lead agencies, such as Metro, may use the region-wide impact analysis contained in the RTP PEIR as the basis of their cumulative impact analysis. The RTP PEIR contains a thorough analysis of environmental impacts resulting from implementation of various transportation projects throughout SCAG's six county region that encompasses approximately 38,000 square miles. Therefore, the RTP PEIR is used as the basis of this cumulative impact analysis and is hereby incorporated by reference per Section 15150 of CEQA guidelines.

Section "4.17 Cumulative and Indirect Impacts" of the FEIS/FEIR indicates the potential cumulative impacts in the areas described below. All remaining cumulative environmental resources were found to not be cumulatively significant.

8.1. Traffic, Circulation, and Parking

The RTP PEIR indicates that the region is expected to grow in both population and vehicle miles traveled (VMT). Development and redevelopment would result in increased traffic congestion, particularly along Crenshaw Boulevard, with the planned expansion of the Baldwin Hills Crenshaw Plaza. The SCAG RTP PEIR found significant cumulative impacts related to transportation. The LPA, design options, and MOSs would expand

regional transportation choices and are aimed at improving regional quality of life and overall mobility. The LPA, design options, and MOSs would result in a decrease in VMT due to the increased use of transit. For the reasons stated above, the Metro Board finds impacts related to cumulative traffic circulation impacts would be less than significant.

The increase in transit use reduces the reliance on automobiles and generally reduces the demand for parking on a regional basis. The study area is heavily developed and built out. Crenshaw Boulevard and other areas along the proposed corridor offer limited off-street parking. As outlined in Section 3.0 Transportation Impacts, the supply of parking provided by the LPA, design options, and MOSs would meet the demands of the transit users.

8.2. Land Use and Development

Land use and development patterns are not expected to substantially change at a regional level and when the project is considered as part of the Metro Long Range Plan, it would play an important role in expanding regional transportation choices and in improving regional quality of life and overall mobility. The project would be compatible with the study area's land uses and would provide connectivity between land uses and activity centers. Therefore, no significant cumulative impacts associated with land use are anticipated. No cumulative population growth beyond the RTP projections from the proposed project in conjunction with the projects within the RTP would be expected. The Metro Board finds that this impact would be less than significant.

8.3. Displacement and Relocation of Existing Uses

Implementation of the projects within the RTP would result in substantial right-of way acquisition and considerable displacement of homes and businesses. Implementation of the Crenshaw/LAX Transit Corridor Project would involve termination or non-renewal of leases and right-of-way acquisition, as discussed in Section 4.2 Displacement and Relocation of Existing Uses. No significant cumulative impacts to displacement and relocation were identified in the RTP PEIR. The right-of-way impacts of the project would be mitigated through the use of relocation assistance programs and be isolated to areas along the alignment. Future projects along the alignment, including the LAX Master Plan Project could result in the acquisition and displacement of homes and businesses. However, similar to the proposed project, future projects along the alignment that result in the displacement of existing use would be required to comply with applicable relocation assistance programs and no cumulative impact would occur. The Metro Board finds that this impact would be less than significant.

8.4. Community and Neighborhoods

Projects included in the RTP are intended to increase the overall accessibility and mobility of persons within the SCAG region. No significant cumulative impacts to community and neighborhoods would result from the RTP. The Crenshaw/LAX Transit Corridor Project would contribute to the beneficial impact of increased accessibility to community resources, businesses, and residences and increased regional mobility. Therefore, the proposed project would not contribute to an adverse cumulative effect to community cohesion. The Metro Board finds that this impact would be less than significant.

8.5. Visual Quality

The RTP PEIR concludes that RTP projects potentially would obstruct views of scenic resources, thus resulting in a cumulative visual quality impact. The project would require potential acquisitions, construction of elevated guideway and stations, removal of landscaped medians and roadway widening on Crenshaw Boulevard (designated scenic highway), construction of large, elevated structural components, and removal of screening vegetation between a residential neighborhood and the BNSF tracks. This would impact the visual character of these areas. Implementation of mitigation measures would reduce impacts and those impacts and these impacts would be isolated and not contribute to a cumulative visual impact. Therefore, the project would not contribute to cumulative visual quality impacts when considered in conjunction with the projects in the RTP. The Metro Board finds that this impact would be less than significant.

8.6. Air Quality

The project would help to remove vehicles from roadways and freeways, decreasing the VMT and the usage of fuels. Lower automobile VMT corresponds to a reduction of criteria pollutant emissions from the vehicles. Consistent with the RTP PEIR air quality analysis, the project would result in a net beneficial contribution effect to cumulative regional air quality resulting from the increased transit ridership and the anticipated reduction in automobile use. The project would decrease GHG emissions compared to baseline conditions and would not result in emissions of criteria pollutants that exceed the federal thresholds. Therefore, the project would not contribute to a cumulative adverse effect on air quality. The Metro Board finds that this impact would be less than significant.

8.7. Noise and Vibration

Resulting noise and vibration effects of the project have been identified from four potential sources: passby noise from LRT vehicles, warning signals and areas of special track work, and vibration effects. All significant noise impacts would be mitigated and operation of the project would not contribute to cumulative noise and vibration impacts. The Metro Board finds that this impact would be less than significant.

8.8. Ecosystems and Biological Resources

The RTP PEIR analysis indicates that cumulative impacts to biological resources could occur due to construction in undeveloped areas and growth and development on natural lands. However, there are no underdeveloped areas, and no sensitive species or habitat located directly within the project area. Compliance with the City of Los Angeles Native Tree Ordinance and implementation of mitigation measures would reduce potential impacts to biological resources to less than significant levels. The operation of the proposed project would be along a defined corridor within a highly urbanized area and would not contribute to significant cumulative biological resource impacts. The Metro Board finds that this impact would be less than significant.

8.9. Geotechnical/Seismic/Subsurface/Hazards/Hazardous Materials

Geotechnical hazards are site-specific, and there is little, if any, cumulative geological relationship between the proposed project and future projects. Potential hazards

including the Newport-Inglewood fault, liquefaction, and seismically-induced settlement have been identified for the project. Standard construction procedures for transportation projects ensure that local geotechnical conditions would be considered and addressed with mitigation measures. As with the proposed project, other future projects would be subject to the same regulations pertaining to geotechnical conditions. Therefore, the project would not contribute to cumulative impacts related to geotechnical, subsurface, and seismic conditions. The Metro Board finds that this impact would be less than significant.

Hazards and hazardous materials could be encountered during construction and operation of the project and mitigation has been identified for hazards and hazardous materials impacts would ensure that less-than-significant impacts would occur. The proposed construction activities are not likely to present a substantial cumulative impact in concert with other proposed projects, if conducted in accordance with applicable hazardous waste laws, statues and regulations in conjunction with use of sound hazardous material detection and management practices. Hazardous materials encountered during construction will be removed or treated in place, thus reducing the potential for cumulative impacts. Therefore, the project would not contribute to cumulative impacts related to hazards and hazardous materials. The Metro Board finds that this impact would be less than significant.

8.10. Water Resources

SCAG's analysis of the RTP PEIR concludes cumulative impacts to water quality would result due to projected growth induced by the RTP, and would include increased impervious surfaces, increased development in alluvial fan floodplains, and increased water demand and associated impacts, such as drawdown of groundwater aquifers. Construction and operation of the LPA, design options, and MOSs will not result in significant impacts on water resources. Compliance with NDPES standards, implementation of a SWPPP, and mitigation measures and Best Management Practices would ensure no significant short- and long-term impacts to drainage patterns, surface waters, groundwater quality, discharge of pollutants, construction-related erosion and sedimentation, or exposure of people or structures to flood-related hazards would occur. Therefore, the project would not make a cumulatively considerable contribution to significant cumulative water quality impacts. The Metro Board finds that this impact would be less than significant.

8.11. Energy

The implementation of the proposed project would help to remove vehicles from roadways and freeways, easing the increase in VMT and the usage of fuels. The project would result in less energy consumption than baseline conditions and, as such, would result in a beneficial energy impact. Therefore, the project would make a beneficial contribution to the region's cumulative energy impacts. The Metro Board finds that this impact would be less than significant.

8.12. Historic, Archaeological and Paleontological Resources

The RTP PEIR indicates that a significant cumulative impact to cultural resources would result due to a substantial increase in urbanization in the SCAG region. Certain transportation improvements in the RTP would result in significant impacts to historic,

archaeological, and paleontological resources. No significant impacts to cultural resources would result from the Crenshaw/LAX Transit Corridor Project. The project area is already heavily urbanized and the proposed project would not contribute to the adverse cumulative cultural resources impacts detailed in the RTP PEIR. The proposed project includes requirements that if buildings or structures are altered for the proposed project, modifications will be made in accordance with the Secretary of Interior's Standards such that the impacts would not be adverse and would be less than significant. The alternatives would not considerably contribute to adverse cumulative cultural resources impacts.

Regarding archaeological resources, the proposed project is located in a heavily developed urban area, and no National Register-eligible sites were identified. Therefore, the proposed project would not contribute to significant cumulative impacts in regard to archaeological resources. However, one pre-recorded site was identified eleven feet below the surface; therefore, even with the majority of the project area developed there is the potential for buried archaeological deposits beneath the developed land surface. Discovery of archaeological resources is possible during construction of the LPA, design options, and MOSs, and if a National Register-eligible archaeological resource is damaged or destroyed during construction of the LPA, design options, and MOSs, would contribute to the adverse cumulative effect on archeological resources.

Based upon the paleontological review, the majority of the project area has a high level of sensitivity for paleontological resources, especially at depths below 5 feet. The LPA, design options, and MOSs may require excavation exceeding five feet for below-grade segments, foundations for elevated guideways and at station locations. While it is unlikely, if construction of the LPA, design options, and MOSs destroys a significant paleontological resource, these alternatives would contribute to an adverse cumulative impact on paleontological resources.

The Metro Board finds that this impact would be less than significant.

8.13. Parklands and Community Facilities

The project would have the beneficial impact of situating public transit adjacent to parks, and thereby, potentially increasing accessibility to the parks. Although the proposed project would potentially make these parklands more accessible, this accessibility would not create such a demand on the parklands that they would need to be expanded or have new facilities constructed. Overall, the alternatives would contribute to beneficial cumulative impacts related to parklands due to the improved accessibility.

The project would be served by existing public service facilities and would not generate an increase in the need for new or expanded public services in the vicinity or interfere with response times of police and fire service providers. Therefore, the project would not contribute to adverse cumulative impacts related to community/public facilities. The Metro Board finds that this impact would be less than significant.

8.14. Economic and Fiscal

The amount of materials and supplies required for the proposed project, however, is relatively small compared to all construction projects that would be on-going in the region. As such, it is unlikely that the state or local governments would see a substantial

increase in sales tax revenues. The project is anticipated to generate two thousand direct construction jobs over a five year period that would provide a beneficial effect to the economy. It is expected that the regional labor force would meet the expected demand for labor for all of the alternatives. It is not expected that the labor expenditures would result in substantial net new expenditures for construction labor in the region. As such, economic and fiscal impacts would be less than significant for all project alternatives. The project is not expected to contribute to significant cumulative economic and fiscal impact. The Metro Board finds that this impact would be less than significant.

8.15. Safety and Security

There is nothing inherent in transportation improvements that would be reasonably anticipated to result in significant cumulative safety and security impacts. Community outreach has identified concern over the pedestrian safety of an at-grade alignment along Crenshaw Boulevard. Crenshaw Boulevard would contain one at-grade segment, which could have a potential cumulative effect in the area. Implementation of mitigation measures would ensure that these impacts are reduced to less-than-significant levels. In addition, implementation of the project, or other RTP projects may have a beneficial cumulative effect in this area, due to safety and security elements (personnel, technology and physical improvements) associated with these projects. Therefore, the project would not make a cumulatively considerable contribution to a significant cumulative safety or security impact. The Metro Board finds that this impact would be less than significant.

8.16. Construction

Construction impacts, by nature, would be temporary and intermittent over the construction period for the Crenshaw/LAX Transit Corridor Project. Over this time period, other developments in the vicinity may compound construction nuisances, such as air quality, noise, and traffic delays, for the community and motorists in isolated areas in and around the Crenshaw/LAX Transit Corridor. The project area is not an area growing rapidly and there are only two major development projects adjacent to the proposed project alignment that could potentially have a short-term cumulatively considerable construction impact. Exposition Phase I will have been completed by the time construction of the Crenshaw/LAX Transit Corridor Project will begin. Exposition Phase II is scheduled to be completed in 2015 and construction will be occurring at the same time. The construction of Exposition Phase II would occur more than three miles to the west and the likelihood of a direct combined effect would be low. However, there could be some subregional traffic effects for people traveling across multiple communities. In addition, there are only two large development projects within the Corridor. The Crenshaw/LAX Transit Corridor Project includes measures to minimize construction impacts and thereby, reduce the proposed project's contribution to cumulative construction impacts. The project construction management plan would reduce the impacts to the greatest extent feasible and the project would not make a cumulatively considerable contribution to a significant cumulative construction impact.

For the reasons stated above, the Metro Board finds cumulative impacts for the environmental resources described above would be less than significant.

9 ALTERNATIVES AND MITIGATION MEASURES

9.1 Prior Analysis of Alternatives

Alternatives evaluated in the Crenshaw/LAX Transit Corridor evolved over the past 40 years, as the need for transportation improvements in the corridor has been established through a series of transportation plans and studies undertaken by Metro and its predecessor agencies – the Southern California Rapid Transit District (SCRTD) and the Los Angeles County Transportation Commission (LACTC). These included the *Inner-City Transit Needs Assessment Study Final Report* (1993) and the *Crenshaw Corridor Recovery and Revitalization Environmental Impact Report* (1994).

Metro has completed three transportation studies of the corridor over the past 13 years. In 1994, the *Crenshaw-Prairie Corridor Preliminary Planning Study* clearly identified the need for high-capacity transit system improvements, with two viable transit service corridor alternatives. The related modal options were studied further in December 2000 with the publication of the *Crenshaw-Prairie Corridor Route Refinement Study.* This report identified a set of viable transportation alternatives for the corridor. In 2003, the *Crenshaw-Prairie Corridor Major Investment Study* (MIS) was completed to assist decision-makers in evaluating the most effective solution, or phasing of solutions, to the transportation challenges identified in the corridor within the context of local goals and objectives. In the process of completing these three studies, the corridor area was further defined. In the northern portion of the corridor the width of the boundaries was determined based on a logically equidistant area to the west and east of Crenshaw Boulevard. In the southern portion of the corridor, the width of the boundaries was determined by similar equidistant areas to the west and east of the route alternative alignments extending southwest from and including Crenshaw Boulevard.

At Metro's April 2007 Board meeting, the Bus Rapid Transit and Light Rail Transit alternatives were selected for environmental review and further analysis. Six full corridor alternatives were identified for screening in the DEIS/DEIR. Following preparation of the DEIS/DEIR in September 2009, the Metro Board adopted a Locally Preferred Alternative (LPA) consisting of the Light Rail Transit (LRT). Based on public comments and concerns expressed during the comment period, the Metro Board, as part of its actions on the project, removed from further consideration the two preferred maintenance facility sites (Sites B and D) that were originally evaluated in the DEIS/DEIR.

The analysis of new maintenance site alternatives and associated environmental impacts was presented in a Supplemental Draft Environmental Impact Statement/Recirculated Draft Environmental Impact Report (SDEIS/RDEIR). At its April Meeting, the Metro Board selected the Site #14 – Arbor Vitae Bellanca Site as the preferred maintenance facility site.

This LPA is reflective of the Crenshaw/LAX LRT Alternative analyzed as the Alignment Alternative 5 in the DEIS/DEIR. The FEIS presents a complete analysis of the revised LPA, an associated maintenance facility, two potential Minimum Operable Segments (MOSs), and five design options. The Board may adopt a Project Definition that includes a combination of the revised LPA and any of the other elements (MOSs and design options).

9.2 Findings for Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be identified among the selected alternatives. If the No-Build Alternative is identified as the environmentally superior alternative, the identification of the next best environmentally superior alternative must be identified. As, described in the DEIS/DEIR and the FEIS/FEIR, the No-Build Alternative has been found to have the least amount of environmental impacts and is the environmentally superior alternative.

Of the alternatives described in the DEIS/DEIR, the TSM Alternative would be identified as the next environmentally superior alternative. However, this alternative did not meet basic project objectives and is, therefore, considered infeasible. The LRT Alternative evaluated in the DEIS/DEIR was identified as environmentally superior to the BRT Alternative and achieved more project objectives. Therefore, this alternative was identified as the LPA to be evaluated in greater detail in the FEIS/FEIR.

9.3 No-Build Alternative

This No-Build alternative is required by Section 15126.6 of the CEQA Guidelines and consists of existing and committed elements of the region's transportation plan, excluding the proposed fixed guideway transit (bus and light rail transit) investments for the study corridor. The No-Build Alternative included: (1) all existing highway and transit services and facilities; (2) the current Metro *2001 Long Range Transportation Plan* committed highway and transit projects that are environmentally cleared or under construction (including Exposition Phase I); and (3) the Southern California Association of Governments' *2008 Regional Transportation Plan* (RTP) committed highway and transit projects. Projects that are unfunded in the Metro *2001 Long Range Transportation Plan* are not included in the No-Build Alternative. There are additional projects which have not yet completed their environmental study or are unfunded as of fall 2008 (e.g., Exposition Phase II, Westside Extension, and the Regional Connector) that are not included in the No-Build Alternative.

Findings for No-Build Alternative

The Metro Board finds that specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the No-Build Alternative identified in the FEIS/FEIR (CEQA Guidelines 15091(a)(3)). Although the No-Build Alternative would involve fewer environmental impacts, it would not provide the desired levels of mobility and accessibility for the lower-income, transit-dependent and community that it would serve. It would not provide adequate access to the broader range of employment, shopping, educational, and cultural opportunities and, therefore, would not be consistent with the goals and objectives for the Crenshaw/LAX Transit Corridor as developed through the extensive studies and public participation in the corridor.

9.4 TSM Alternative

The TSM Alternative enhances the No-Build Alternative by expanding the Metro Rapid bus services operating in the Crenshaw Transit Corridor. Intersection improvements such as improved signal timing and allowing buses better signal priority would constitute systems costs for the TSM alternative.

Findings for TSM Alternative

The Metro Board finds that specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the TSM Alternative identified in the DEIS/DEIR (CEQA Guidelines 15091(a)(3)). Although the TSM Alternative would involve fewer environmental impacts, it would not provide the desired levels of mobility and accessibility for the lower-income, transit-dependent and community that it would serve. It would not provide adequate access to the broader range of employment, shopping, educational, and cultural opportunities and, therefore, would not meet the basic goals and objectives for the Crenshaw/LAX Transit Corridor as developed through the extensive studies and public participation in the corridor.

9.5 BRT Alternative

The BRT Alternative provides new transit services in the Crenshaw Transit Corridor, which would travel in mixed-traffic and in exclusive curb lanes. The BRT services would use low-floor, compressed natural gas (CNG) powered (or other clean burning alternative), articulated vehicles, with multi-doors for boarding. Enhanced BRT stops and stations would be constructed for passengers to access the system.

Findings for BRT Alternative

The Alternatives Analysis identified that a light rail transit and a bus rapid transit alternative be studied for further consideration based on the evaluation criteria. The two alternatives identified for further study in the Alternatives Analysis, along with a No Build Alternative and a Transportation Systems Management Alternative underwent a comprehensive environmental review in the DEIS/DEIR. Based on the results of this evaluation and public input received, the Light Rail Alternative was identified as environmentally superior to the BRT Alternative. The LRT Alternative proved to generate the greatest travel time savings and reliability, higher ridership for comparable segments, a stronger support of community goals for economic development, and a connectivity with other elements of Metro's regional transit system (specifically, the Metro Green Line). The BRT Alternative did not yield strong travel time benefits due to mixed-flow operation and the slow speeds required of BRT vehicles at un-gated crossings along the Harbor Subdivision railroad right-of-way. Additional traffic impacts would occur from the conversion of mixed flow lanes in narrow sections of Crenshaw Boulevard.

9.6 Findings for LPA

The LRT Alternative evaluated in the DEIS/DEIR was identified as environmentally superior to the BRT Alternative and achieved more project objectives. Therefore, this alternative was identified as the LPA to be evaluated in greater detail in the FEIS/FEIR. As part of the FEIS/FEIR preparation process, Metro considered design options and MOSs for the project, which are discussed below.

Neither the fully covered trench nor the Partially-Covered LAX Trench Option would result in safety risk from airport-related conflict since both are covered in front of the runways. There are no noise sensitive receptors in the vicinity of the LAX trench and no noise impacts would occur to either alternative. Both options would be below-grade and would not result in any visual impairment. Therefore, the Partially-Covered LAX Trench

Option would neither be inferior nor superior to the LPA. The optional station at Manchester would result in increased acquisition of property and construction impacts from an additional station. Mitigation measures would reduce these impacts to less than significant. This option would not be environmentally superior to the LPA. The Below-Grade Crossing at Centinela option would result in the loss of approximately 3 percent more palm trees and increased construction impacts from additional excavation and traffic detours. However, this option would be marginally environmentally superior to the at-grade configuration in the LPA because the grade separation would result in a lower potential for pedestrian-train conflict, would facilitate the flow of vehicular traffic, and the elimination of the grade separation would reduce the noise impacts from warning signals.. The optional below-grade station at Vernon would result in increased acquisition of property and construction impacts from cut-and-cover construction of a below-grade station. This option would not be environmentally superior to the LPA. The alternative southwest portal at the Crenshaw/King Station would require less acquisition that the base portal location, but would be located adjacent to the Broadway Historic building and would result in a de minimus use with an underground connection to the basement of the Broadway building. With implementation of mitigation measures, no impacts would occur to the Broadway building. However, this design option would not be environmentally superior to the LPA.

The MOSs would not be environmentally superior to LPA with the exception that these shorter route options would result in less excavation and subsequent acquisition and construction-related impacts. The impacts of the MOS-King and MOS-Century Alternatives would be essentially the same as the LPA with traffic, parking and circulation impacts being redistributed to the new terminal station locations at King and Century, respectively. The greatest station area impacts would result from the MOS-King where the ridership and parking demand would increase by 211 daily boardings and 26 parking demand spaces at the Crenshaw/King Station terminus. Under MOS-Century, the ridership would decrease by 150 daily boardings and decrease parking demand by 10 spaces at the Aviation/Century Station terminus. The other key distinction of these shorter alignment options is that they reduce the beneficial effects from the full route LPA particularly in the areas of air quality, energy resources, and regional connectivity. The full-length LPA would be environmentally superior.

9.7 Findings for Mitigation Measures

The Metro Board has considered all of the Mitigation Measures recommended in the FEIS/FEIR for the LPA and other project elements. None of the recommended measures that are within the Metro Board's jurisdiction have been rejected by the Metro Board. To the extent that these Findings conclude that various proposed Mitigation Measures outlined in the FEIS/FEIR are feasible and have not been modified, superseded or withdrawn, the Metro Board hereby binds itself to implement or, as appropriate, require implementation of these measures. These Findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when the Metro Board adopts a resolution approving the LPA (possibly including additional options). The Mitigation Measures are referenced in the Mitigation Monitoring and Reporting Plan adopted concurrently with these Findings and will be effectuated through the process of constructing and implementing the LPA.

10 STATEMENT OF OVERRIDING CONSIDERATIONS

CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a project against its unavoidable risks when determining whether to approve a project. If the specific economic, legal, social, technological or other benefits of the project outweigh the unavoidable adverse environmental effects, those effects may be considered acceptable (CEQA Guidelines Section 15093(a)). CEQA requires the agency to support, in writing, the specific reasons for considering a project acceptable when significant impacts are not avoided or substantially lessened. Those reasons must be based on substantial evidence in the FEIS/FEIR or elsewhere in the administrative records (CEQA Guidelines Section 15093(b)). In accordance with the requirements of CEQA and the CEQA Guidelines, the Metro Board finds that the Mitigation Measures identified in the FEIS/FEIR and the Mitigation Monitoring and Reporting Plan, when implemented, avoid or substantially lessen virtually all of the significant effects identified in the FEIS/FEIR. Nonetheless, certain significant impacts of the project are unavoidable even after incorporation of all feasible Mitigation Measures. These significant unavoidable impacts are summarized below.

10.1.1 LPA (Alignment and Stations), Design Options, MOSs, and Maintenance Facility

- **Impacts related to Traffic**

Intersections. The project would result in a significant impact at the Crenshaw Boulevard/54th Street intersection for signal cycle lengths less than 150 seconds (using the LADOT criteria). The analysis shows that the project would cause the LOS to degrade from C to D with an increase in delay of over 7.5 seconds. There are no feasible mitigation measures which would eliminate this impact.

- **Impacts related to Construction – Air Quality**

Regional and Localized Construction Air Quality Emissions. The project would result in significant construction air quality impacts from NO_X, $PM_{2.5}$, and PM_{10} emissions after implementation of Mitigation Measures described in Section A.6 of these Findings. Regional construction emissions would exceed the NO_X significance threshold and localized emissions would exceed the NO_X, $PM_{2.5}$, and PM_{10} significance thresholds. Implementation of mitigation measures would reduce the impacts of construction on air quality. However, regional and localized emissions would continue to exceed the SCAQMD significance thresholds. Therefore, the proposed project would result in a significant impact related to construction air emissions. This impact, although, significant, is considered to be a temporary impact that will occur during the pre-construction and construction phase activities.

10.1.2 Maintenance Facility (Where impacts are different to those discussed together with the LPA)

- **Impacts related to Displacement and Relocation**

Indirect Impact from Displacement of Businesses. The preferred maintenance site alternative would require 12 full parcel acquisitions to accommodate a maintenance facility on this site. The displacement of businesses within this site could result in loss of approximately 390 employees. Relocating all of the owners and tenants on the site, according to their individual needs, especially with proximity to the airport and available land, would be challenging. While adherence to the provisions of the Uniform Act and coordination with LAWA regarding the LAX Master Plan may lessen acquisition and relocation impacts from the maintenance facility, and the successful relocation of all property owners and tenants would result in a less-than-significant impact. However, there is no certainty that all displaced businesses can be relocated in areas that ensure that there is no significant impact on their competitive position. Nor is there certainty that the time frames for the Crenshaw/LAX Transit Project and implementation of the LAX Master Plan will be concurrent and coordinated enough to facilitate a seamless relocation of affected businesses in comparable facilities. Therefore, the feasible mitigation measures identified would not eliminate this impact with certainty. Under these circumstances, the Metro Board finds that a significant impact would remain.

- **Impacts related to Economic and Fiscal Effects**

Impact from Job Loss on the Economy. Acquisition of property necessary for the maintenance facility would result in the displacement of a substantial number of employees working in a variety of businesses, each with their own unique relocation needs. The total estimated employment for this site is approximately 390 jobs. The displacement of this number of jobs and loss of property tax revenue would result in an adverse effect to the regional economy. The ability to relocate these owners and tenants would be pivotal in determining the extent of the impact to the regional economy. The successful relocation of all property owners and tenants would result in a less-than-significant impact. However, as discussed under displacement above, there is no certainty that all displaced businesses can be relocated in areas that ensure that there is no adverse effect on their competitive position. Nor is there certainty that the time frames for the Crenshaw/LAX Transit Project and implementation of the *LAX Master Plan* will concurrent and coordinated enough to facilitate a seamless relocation of affected businesses in comparable facilities. There were no additional feasible mitigation measures other than those identified for displacement and relocation that would eliminate this impact with certainty. Under these circumstances, the Metro Board finds that a significant impact would remain.

- **Impacts related to Construction -Air Quality**

Regional and Localized PM10 emissions. Construction emissions would be generated by construction equipment, haul trucks, worker commute trips, earthwork activity, and architectural coating activity would result in a significant PM_{10} impact for the maintenance facility. Mitigation Measures **CON4** through **CON24** described above will be implemented to reduce regional air quality impacts to the greatest extent feasible but would not eliminate this impact. Under these circumstances, the

Metro Board finds that a significant impact would remain. This impact, although, significant, is considered to be a temporary impact that will occur during the pre-construction and construction phase activities.

- **Impacts related to Construction (Noise)**

Construction activity would exceed the 5-dBA significance threshold at multiple sensitive receptors. The feasible mitigation measures identified would reduce construction noise levels by at least 5 dBA at sensitive receptors but would not eliminate this impact. Under these circumstances, the Metro Board finds that a significant impact would remain. This impact, although significant, is considered to be a temporary impact that will occur during the pre-construction and construction phase activities.

The Metro Board further specifically finds that notwithstanding the disclosure of these significant impacts, there are specific overriding economic, legal, social, technological, and other reasons for approving this project. Those reasons are as follows:

Balancing Transportation Expenditures. The project would provide light rail transit service to the Crenshaw/LAX Transit Corridor communities. Implementing LRT service in the corridor would help restore the balance of regional capital transportation expenditures.

Regional Connectivity. Light rail service would also offer improved access for area residents to local destinations, employment centers, and to the regional rail and bus system. The project is expected to increase the number of daily transit trips by 3,500 compared with the current bus service offered by the No-Build Alternative and reduce travel times.

Transit Infrastructure. The project would provide a convenient and reliable transportation infrastructure to transit-dependent populations. The LRT will travel within a dedicated right-of-way that will not be affected by daily local traffic conditions.

Vehicle Miles Traveled. The project is anticipated to decrease the study area Daily Auto Vehicle Miles Traveled (VMT) by 167,384 when compared to the No-Build Alternative. This would result in long-term beneficial effects on air quality, especially as a larger proportion of electricity useage is replaced by renewable energy sources.

Construction Employment. The project is anticipated to generate two thousand direct construction jobs over a five year period. In addition, Metro is formulating a local hiring policy for the construction and operational related job opportunities for the corridor. Such a program will include resources for job development and training. Metro currently offers a series of programs designed to encourage minority and women-owned businesses to participate in the construction and operation of new transportation projects.

Compatibility with Transit-Oriented Development. The project is likely to provide new accessibility, thereby facilitating transit-oriented development (TOD) opportunities in or near station areas, particularly where there are local land use incentives and favorable market conditions. Interest in the development of land adjacent to the proposed alignment has already become evident throughout the stretch of the corridor. In a corridor where growth is primarily commercial and industrial businesses, demand would

encourage opportunities for mixed-use development that could provide needed housing and space for retail, commercial, industrial, and social service uses. In addition, landscape treatments along the light rail line could enhance the urban design of the communities within the transit corridor, making opportunities for development more attractive.

On balance, the MTA Board finds that there are specific, economic, legal, social, technological, and other considerations associated with the project that serve to override and outweigh the project's significant impacts and, thus, the significant impacts are considered acceptable.

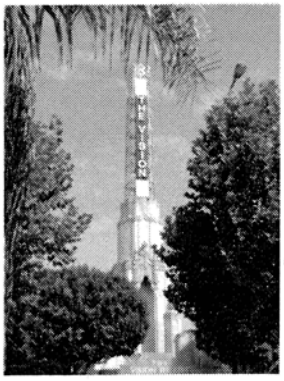
ATTACHMENT E

Mitigation Monitoring Plan

CRENSHAW/LAX TRANSIT CORRIDOR PROJECT

Project No. PS-4330-1968

Mitigation Monitoring And Reporting Program



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MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

1. Introduction

Section 21081.6 of the California Public Resources Code requires that public agencies approving a project with an Environmental Impact Report (EIR) adopt a Mitigation Monitoring and Reporting Program (MMRP) for that project. The purpose of the MMRP is to ensure that the mitigation measures identified in the EIR to mitigate the potentially significant environmental effects of the project are, in fact, properly carried out. In its findings concerning the environmental effects of a project for which an EIR was prepared, a Lead Agency must also include a finding that a MMRP has been prepared and provides a satisfactory program that would ensure avoidance or sufficient reduction of the significant effects of the proposed project. The mitigation measures included in the FEIS/FEIR will be monitored by the appropriate reviewing agency described in Table 1 of this Mitigation Monitoring and Reporting Program (MMRP).

2. Purpose

Monitoring of the implementation of adopted mitigation measures is required by Public Resources Code Section 21081.6. Therefore, this MMRP has been prepared to ensure compliance with all of the mitigation measures identified in the FEIS/FEIR which would lessen or avoid potentially significant adverse environmental impacts resulting from implementation of the proposed project. The implementation of this MMRP shall be carried out by the Metro and other agencies or entities (e.g., construction contractor) specified below or designated by Metro. Mitigation measures will be implemented during: (1) development of the design; (2) preparation of the construction contracts; (3) pre-construction (4) the construction phase; (5) pre-occupancy and (6) project operation.

3. Responsibilities and Duties

Monitoring of mitigation measures has been assigned to specific agencies and/or entities with regard to their particular areas of expertise, as specified in Table 1. Many of these monitoring actions are included in existing policies, laws, and regulations, while others require additional oversight to ensure that mitigation measures are implemented by the construction contractor or other specified parties, and that Metro monitor the implementation of these measures. Monitoring will consist of determining whether:

- Specific issues were considered in the design development phase
- Construction contracts included the specified provisions
- Specific actions occurred prior to construction
- Required measures were implemented during construction and/or after implementation of the project.

4. Monitoring and Reporting Procedures

Upon the request of the Metro, a monthly report affirming compliance with these mitigation measures shall be provided. Where needed, an independent environmental consultant may be retained to ensure mitigation compliance, timely preparation of reports, and to assist Metro or the designated individual or agency. An annual mitigation monitoring report shall be prepared for this project by Metro until compliance with the required mitigation measures is complete. The report shall be placed on file at Metro.

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Displacement and Relocation	Acquisition of 97 parcels, 59 full, 31 in part, 4 permanent underground easements, and 3 laydown areas.	▪ Metro shall provide relocation assistance and compensation pursuant to the Uniform Relocation Assistance and Real Property Acquisition Policies Act and the California Relocation Act to those who are displaced or whose property is acquired as a result of the Crenshaw/LAX Transit Corridor Project. (DR1)	Check for compliance with required mitigation measure.	Metro	1. Metro 2. Metro 3. Design
Visual and Aesthetics	The loss of landscaping and vegetation would result in a significant impact to visual quality to residences along La Colina Drive and the along Crenshaw Boulevard from 60th to 48th Street.	▪ To minimize visual clutter, integrate system components, and reduce the potential for conflicts between the transit system and adjacent communities, design of the system stations and components shall follow the recommendations and principles developed in the project urban design explorations. These principles include, but are not limited to: 1) preserve and enhance the unique cultural identity of each station area and its surrounding community by implementing art and landscaping; and 2) promote a sense of place, safety, and walkability by providing street trees, walkways or sidewalks, lighting, awnings, public art, and/or street furniture. Prior to final design, community input shall also be used to help achieve these guidelines. (V1)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ At locations where existing land uses or vegetation is removed and neighboring residential or sensitive uses are exposed to new views of the transit system, additional landscaping shall be provided within the right-of-way or in remnant acquisition parcels where practical to create a buffer between the uses, but not necessarily to completely screen uses. Community input from adjacent residences or sensitive land uses shall be incorporated to the greatest extent feasible on the landscaping design elements to be incorporated. (V2)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Mature trees that are removed during construction of the Crenshaw/LAX Transit Corridor Project shall be relocated or replaced with a tree of similar species, or if inappropriate for climate conditions, a species that is low-water use and compliant with the applicable City's landscape ordinance. Replacement should occur in consultation with the Los Angeles Bureau of Street Services Street Tree Division and with the City of Inglewood Department of Public Works. (V3)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /Los Angeles Bureau of Street Services/Inglewood Public Works 2. Metro 3. Design & construction
		▪ Where practical and appropriate, additional landscaping and enhanced design features will be used to minimize the visual image of the TPSS sites and other ancillary facilities. (V4)	Check design and landscaping plans.	Contractors	1. Metro 2. Metro 3. Design & construction

Applies to Below-Grade Crossing at Centinela Option Only					
Visual and Aesthetics	The loss of landscaping and vegetation would result in a significant impact to visual quality to residences along La Colina Drive.	▪ For the Centinela Avenue Below-Grade Crossing design option, screening that is consistent with the existing area and Edward Vincent Jr. Park shall be installed on the north side of the trench to the extent feasible to reduce the adverse effects on the south-facing view of the trench. (V5)	Check station plans.	Contractors	1. Metro 2. Metro 3. Design & construction
Applies to Alternate Southwest Portal at Crenshaw/King Station Only					
Visual and Aesthetics	Potential significant visual impact from incompatibility of station portal design with historic Broadway Building at the Crenshaw/King Station	▪ Should the alternate southwest portal at the Crenshaw/King Station be selected, the structure for the portal will be designed to complement the Streamline Moderne style of the Broadway Department Store consistent with the Secretary of Interior standards. (V6)	Check architectural plans.	Contractors	1. Metro/Secretary of Interior 2. Metro/Certified Cultural Consultant 3. Design & construction
Noise and Vibration	Warning signal noise would exceed the significance criteria at 57th Street and West Boulevard grade crossing. The LPA would exceed the vibration criteria at 16 locations (Table 4-20 of the FEIS/FEIR). Moderate passby noise impacts along La Colina Drive.	▪ Warning device noise levels shall not exceed 103 dBA at 50 feet, subject to approval by the California Public Utilities Commission. (N1) ▪ Further site-specific testing shall be performed during the Final Design where potential for adverse vibration and ground-borne effects has been identified. Where adverse vibration and ground-borne effects are still predicted, the vibration and ground-borne energy transmitted into the ground shall be decreased using design features such as, but not limited to high-resilience fasteners, ballast mats, or floating slab trackbed. Vibration- and ground-borne-reducing design specifications for the track sections shall be determined in consultation with a qualified vibration scientist or engineer during the design phase. The features shall reduce the vibration levels below the FTA thresholds identified in Table 4 21 and Table 4 22 of the FEIS/FEIR. (N2)	Check compliance with required mitigation measure. Check design plans and compliance with required mitigation measure.	Contractors Contractors	1. Metro /CPUC 2. Metro 3. Design & construction 1. Metro 2. Metro 3. Design & construction
Ecological/ Biological Resources	The project would require the removal or disturbance of mature trees along Crenshaw Boulevard. Removal or disturbance of vegetation during the nesting season could affect the habitat and bird species that are present.	▪ Two biological surveys shall be conducted, one 15 days prior and a second 72 hours prior to construction that would remove or disturb suitable nesting habitat. The surveys shall be performed by a biologist with experience conducting breeding bird surveys. The biologist shall prepare survey reports documenting the presence or absence of protected native bird in the habitat to be removed and other such habitat within 300 feet of the construction work area (within 500 feet for raptors). If a protected native bird is found, surveys will be continued in order to locate nests. If an active nest is located, construction within 300 feet of the nest (500 feet for raptor nests) will be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of a second attempt at nesting. (EB1)	Check compliance with required mitigation measure.	Contractors	1. Metro /Certified Biologist 2. Metro 3. Design & construction
		▪ If construction of the project requires pruning of native tree species on non-Metro-owned land, the pruning shall be performed in a manner that does not cause permanent damage or adversely affect the health of the trees. If construction of the project requires the removal of a native tree species, the affected tree species shall be relocated or replaced in consultation with	Check design plans and compliance with required mitigation measure.	Contractors	1. Metro /Certified Biologist 2. Metro 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
		appropriate jurisdiction. (EB2)			
Geologic/ Seismic	Potential for ground deformation and liquefaction areas to have a significant impact for the project.	▪ A soil mitigation plan shall be prepared after final construction plans are prepared showing the lateral and vertical extent of soil excavation during construction. The soil mitigation plan shall establish soil reuse criteria, establish a sampling plan for stockpiled materials, describe the disposition of materials that do not satisfy the reuse criteria, and specify guidelines for imported materials. The soil mitigation plan shall include a provision that during grading or excavation activities, soil shall be screened for contamination by visual observations and field screening for volatile organic compounds with a photo ionization detector (PID). Soil samples that are suspected of contamination based on field observations and PID readings shall be analyzed for suspected chemicals by a California certified laboratory. If contaminated soil is found, it shall be removed, transported to an approved disposal location, and remediated or disposed according to guidance identified in proven technologies and remedies of site cleanup prescribed by the Department of Toxic Substance Control. (GEO1)	Check design plans and compliance with required mitigation measure.	Contractors	1. Metro /DTSC 2. Metro 3. Design
Hazards and Hazardous Materials	Potential significant impact from exposure to hazardous materials.	▪ All hazardous materials, drums, trash, and debris shall be removed and disposed of in accordance with regulatory guidelines set forth by the Department of Toxic Substances Control in Title 22 Division 4.5 of the California Code of Regulations. Waste would be disposed of by a licensed hazardous waste transporter at an authorized and licensed disposal facility or recycling facility utilizing properly completed Uniform Hazardous Waste Manifest forms. A Department of Health Services certified laboratory should sample waste to determine the appropriate disposal facility. (GEO2)	Check for compliance with required mitigation measure.	Contractors	1. Metro /DTSC 2. Metro 3. Construction
		▪ A health and safety plan shall be developed for sensitive receptors with potential exposure to the constituents of concern identified in the preliminary Geotechnical Report contained in Appendix H. (GEO3)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Historical and present site usage along the many areas of the proposed alignment included businesses that stored hazardous materials and/or waste and used USTs, from at least the 1920s to the present. It is possible that areas with soil and/or groundwater impacts may be present that were not identified in this report, or were considered a low potential to adversely impact the subject property. In general, observations should be made during future	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
		development activities for features of concern or areas of possible contamination such as, but not limited to, the presence of underground facilities, buried debris, waste drums, tanks, soil staining or odorous soils. Further investigation and analysis may be necessary, should such materials be encountered. (GEO4)			
Hazards and Hazardous Materials	Potential significant impact from exposure to hazardous materials.	▪ Best Management Practices (BMPs) identified in Appendix F, required as part of the National Pollutant Discharge Elimination System (NPDES) permit and application of SCAQMD Rule 403, shall be implemented for the proposed project to not only reduce potential soil erosion, but also to maintain soil stability and integrity during grading, excavation, below grade construction, and installation of foundations for aerial structures, and maintenance and operations facilities. BMPs would comply with applicable Uniform Building Codes and include, but are not limited to, scheduling excavation and grading activities during dry weather, covering stockpiles of excavated soils with tarps or plastic sheeting, and debris traps on drains. (GEO5)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /RWQCB/ SCAQMD 2. Metro 3. Design & construction
		▪ The design of the project shall adhere to the design specifications of the geotechnical study for maintaining structural integrity under static and seismic loading and operational demands. (GEO6)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
Water Resources	Potential significant impact on water quality.	▪ During project construction and operation, remediation should be required at maintenance facilities and vehicle storage areas, where a potential exists for grease and oil contamination to flow into storm drains. Various types of ditch structures, including grease traps, sediment traps, detention basins, and/or temporary dikes may be used to control possible pollutants. These facilities shall be constructed pursuant to guidance published in Section 402 of the Clean Water Act and shall follow the most current guidance within the NPDES program. (WQ1)	Check for compliance with required mitigation measure.	Contractors	1. Metro /RWQCB 2. Metro 3. Construction and Operation
		▪ The flood capacity of existing drainage or water conveyance features within the project study corridor shall not be reduced in a way that causes ponding or flooding during storm events. A drainage control plan shall be developed during project design to ensure that drainage is properly conveyed from the study area and does not induce ponding on adjacent properties. (WQ2)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Water Resources	Potential significant impact on water quality.	▪ A dewatering permit shall be required if groundwater is encountered during tunneling operations. If contaminated groundwater is encountered during construction, the contractor shall stop work in the vicinity of the suspect find, cordon off the area, and contact the appropriate hazardous waste coordinator and maintenance hazardous spill coordinator at Metro and immediately notify the Certified Unified Program Agencies (City of Los Angeles Fire Department, County of Los Angeles Fire Department, and Los Angeles RWQCB) responsible for	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /RWQCB 2. Metro 3. Design & construction
		hazardous materials or waste incidents. Coordination with the Los Angeles RWQCB shall be initiated immediately to develop an investigation plan and remediation plan for expedited protection of public health and environment. Contaminated groundwater is prohibited from being discharged to the storm drain system. The contractor shall properly treat or dispose of hazardous or toxic materials, according to local, state, and federal regulations. Potential treatment methods include, but are not limited to, extraction, treatment and reinjection, bioremediation, recirculating wall technology, deep well treatment, vapor extraction, and natural attenuation. (WQ3)			
		▪ The study area currently drains indirectly to Ballona Creek and Dominguez Creek through the MS4. Treatment control BMPs shall be incorporated into the project design. The project shall consider placing the treatment BMPs in series or in a complimentary system to increase the control of pollutants to the maximum extent practicable. The systems shall be designed to efficiently and effectively handle and treat dry and wet weather flows to the maximum extent practicable. A SUSMP and appropriate drainage control plan shall be implemented to select and place appropriate permanent treatment BMPs. (WQ4)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /City of Los Angeles Bureau of Sanitation/City of Inglewood Department of Public Works 2. Metro 3. Design & construction
		▪ During construction of the Project, on-site integrated management strategies that employ green infrastructure strategies to capture runoff and remove pollutants shall be implemented to the extent feasible and cost effective. Green infrastructure strategies include, but are not limited to, a variety of physical, chemical, and biological processes that focus on conveying runoff to bioretention areas, swales, or vegetated open spaces. (WQ5)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
Archaeological	Discovery of unknown archaeological resource is possible during	Construction personnel shall be informed of the potential for encountering significant archaeological and paleontological resources along Crenshaw Boulevard in the vicinity of the	Check CRMMP; Check for compliance with required mitigation	Metro	1. Metro/Contractor 2. Tribal Representative 3. Design &

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Archaeological	excavation activities and would result in a significant impact if destroyed. .	Crenshaw/King Station, and instructed in the identification of fossils and other potential resources. All construction personnel shall be informed of the need to stop work on the project site until a qualified archaeologist or paleontologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Monitors with Native American qualifications shall be used at a minimum for construction within a ½ mile of the Crenshaw/King Station. If human remains are encountered during construction, all work shall cease in the area of potential affect and the Los Angeles County Coroner's Office shall be contacted pursuant to procedures set forth in Public Resources Code Section 5097 et seq. and Health and Safety Code in Sections 7050.5, 7051, and 7054 with respect to treatment and removal, Native American involvement, burial treatment, and re-burial, if necessary. A detailed CRMMP would be prepared prior to implementation of this project, similar in scope to the CRMMP that was prepared for Metro's Eastside Gold Line Transit Corridor (Glenn and Gust 2004). Implementation of a CRMMP during ground disturbance in highly sensitive archaeological areas would ensure that cultural resources are identified and adequately protected. If cultural resources are discovered or if previously identified resources are affected in an unanticipated manner, the Monitoring Plan would also ensure that such resources receive mitigation to reduce the impact to less-than-significant levels. This plan would include, but not be limited to, the following elements: o Worker training o Archaeological monitoring o The scientific evaluation and mitigation of archaeological discoveries o Native American participation, as needed o Appropriate treatment of human remains, if applicable o Reporting of monitoring and mitigation results (CR1)	measure; periodically inspect and monitor construction sites.		construction
Paleontological	Discovery of unknown paleontological resource is possible during excavation activities and would result in a significant impact if	▪ Paleontological Monitoring o A qualified paleontologist shall produce a Paleontological Monitoring and Mitigation Plan (PMMP) for the proposed project and supervise monitoring of construction excavations. Paleontological resource monitoring shall include inspection of exposed rock units during active excavations within	Check CRMMP; Check for compliance with required mitigation measure; periodically inspect and monitor construction sites.	Contractors	1. Metro 2. Metro /Qualified Paleontologist 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Paleontological	destroyed.	sensitive geologic sediments. The monitor shall have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. All efforts to avoid delays in project schedules shall be made. o All project-related ground disturbances that could potentially affect previously undisturbed Quaternary older alluvial deposits shall be monitored by a qualified paleontological monitor under the supervision of a qualified paleontologist on a full-time basis because these geologic units are determined to have a high paleontological sensitivity. Very shallow surficial excavations (less than 5 feet) within areas of previous disturbance or areas mapped as Quaternary younger alluvial deposits or Artificial fill shall be monitored on a part-time basis to ensure that underlying sensitive units (i.e. older alluvium) are not adversely affected. The location of subsurface sensitive sediments shall be determined by the qualified paleontologist upon review of project grading plans. o Paleontological monitors shall be equipped with the necessary tools for the rapid removal of fossils and retrieval of associated data to prevent construction delays. This equipment shall include handheld global positioning system (GPS) receivers, digital cameras and cell phones, as well as a tool kit containing specimen containers and matrix sampling bags, field labels, field tools (awls, hammers, chisels, shovels, etc.) and plaster kits. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. o Any collected fossils shall be transported to a paleontological laboratory for processing where they will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis and reposited in a designated paleontological curation facility (such as the Natural History Museum of Los Angeles County). o The qualified paleontologist shall prepare a final monitoring and mitigation report to be filed, at a minimum with Metro and the repository. The final report shall include, but not be limited to, a discussion of the results of the mitigation and monitoring program, an evaluation and analysis of the fossils collected (including an assessment of their significance, age			

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
		and geologic context), an itemized inventory of fossils collected, a confidential appendix of locality and specimen data with locality maps and photographs, an appendix of curation agreements and other appropriate communications, and a copy of the project-specific paleontological monitoring and mitigation plan. (CR2)			
Community Facilities/ Parklands	Potential effect to flow of pedestrians near Faithful Central Bible Church and La Brea Station.	▪ The project shall incorporate Metro Design Criteria standards for sidewalks to ensure the safe flow of pedestrians. Metro shall coordinate with the City of Inglewood Public Works Department and CPUC for the approval of final design features. (PCF1)	Check design plans; check for compliance with required mitigation measure.	Contractors	4. Metro /City of Inglewood Public Works 5. Metro 6. Design & construction
Safety and Security	Potential safety impact from pedestrian crossings and security at stations.	▪ All stations and parking facilities shall be equipped with monitoring equipment and/or be monitored by Metro security personnel on a regular basis. (SS1)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design, construction, and operation
		▪ Metro shall implement a security plan for LRT operations that shall include both in-car and station surveillance by Metro security or other local jurisdiction security personnel and establish well lit pedestrian station and parking areas that minimize shadows and provide visibility for security personnel to monitor activity. (SS2)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /LAPD/LA Co. Sheriff 2. Metro /LAPD & LA Co. Sheriff 3. Design, construction, and operation
		▪ All stations shall be lit to a standard of no less than two footcandles to minimize shadows and ensure that all pedestrian pathways leading to/from sidewalks and parking facilities shall be well illuminated. (SS3)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Metro shall coordinate and consult with the LAPD, the LA County Sheriff's Department, the Inglewood Police Department, and the LAX Police to develop safety and security plans for the alignment, parking facilities, and station areas which satisfy the requirements necessary for the appropriate policing jurisdiction to effectively patrol the area. (SS4)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /LAPD/LA Co. Sheriff 2. Metro /LAPD & LA Co. Sheriff (during operation only) 3. Design, construction, & operation
		▪ The station design shall be undertaken to avoid obstructions to visibility or observation and discrete locations favorable to crime; pedestrian access to at-grade, below-grade, and above-grade	Check design plans; check for compliance with required	Contractors	1. Metro 2. Metro 3. Design &

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Safety and Security	Potential safety impact from pedestrian crossings and security at stations.	station entrances/exits shall be accessible at ground-level with clear sight lines. (SS5)	mitigation measure.		construction
		▪ Metro shall implement appropriate measures to ensure pedestrian crossing safety at all locations with adjacent schools, churches, and high pedestrian areas to satisfy the requirements determined by the CPUC. (SS6)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /CPUC 2. Metro 3. Design & construction
		▪ Metro shall conduct a Hazard Analysis that establishes a design basis for warning devices that satisfies the requirements set forth by the California Public Utilities Commission. (SS7)	Check design plans; check for implementation of recommended mitigation measure.	Contractors	1. Metro /CPUC 2. Metro 3. Design, construction, & operation
		▪ Vehicular and pedestrian warning measures, such as signage, shall be provided along the length of the platforms of the LRT Stations. Gates shall be provided at pedestrian crossings of the LRT and/or BNSF tracks within the Harbor Subdivision. These markings will be provided to alert motorists and pedestrians to potential conflict in the area. (SS8)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design
		▪ To discourage crossing the alignment and enhance safety, such as near the Faithful Central Bible Church, Metro shall provide fencing along either side of the alignment, between the parking lot and church buildings and provide pedestrian safety devices at designated crossings. (SS9)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction & operation
Construction-Transportation	Temporary traffic lane closures during the day may affect normal traffic flow and bus travel times. Night closures of entire street blocks may require some buses to be temporarily re-routed. Some bus stops may also be temporarily relocated. General construction traffic may affect traffic patterns.	▪ Metro shall coordinate with the local jurisdictions to designate and identify haul routes for trucks and to establish hours of operation. The selected routes should minimize noise, vibration, and other impacts. (T1)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /LADOT/City of Inglewood Public Works 2. Metro 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Transportation	Temporary traffic lane closures during the day may affect normal traffic flow and bus travel times. Night closures of entire street blocks may require some buses to be temporarily re-routed. Some bus stops may also be temporarily relocated. General construction traffic may affect traffic patterns.	▪ Metro shall prepare a traffic management plan to facilitate the flow of traffic in and around the construction zone. This traffic management plan shall identify a community liaison and include the following measures: o Schedule as much construction-related travel as possible (i.e., deliveries, hauling, and worker trips) during the off-peak hours; o Develop detour routes to facilitate traffic movement through construction zones without significantly increasing cut-through traffic in adjacent residential areas; o Where feasible, temporarily re-stripe roadway to maximize the vehicular capacity at those locations affected by construction closures; o Where feasible, temporarily remove on-street parking to maximize the vehicular capacity at those locations affected by construction closures; o Where feasible, traffic control officers should be at major intersections during peak hours to minimize delays related to construction activities; o Develop and implement an outreach program to inform the general public about the construction process and planned roadway closures; ▪ Develop and implement a program with business owners to minimize impacts to businesses during construction activity, including but not limited, to signage programs. (T2)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro /LADOT/City of Inglewood Public Works 2. Metro 3. Design & construction
		▪ Metro shall include in the traffic management plan measures that minimize any potential adverse effects to pedestrian movement in the corridor and to maximize pedestrian safety to the extent feasible. (T3)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design
		▪ Metro shall coordinate with local school districts to disclose potential impacts to school bus routes. (T4)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Project contractors shall provide alternate off-street parking for their employees during the construction period, in order to minimize the loss of parking to adjacent commercial districts. (T5)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Project contractors shall prohibit parking for their employees in adjacent residential neighborhoods, in order to minimize the impacts to nearby residents. (T6)	Check for compliance with required mitigation measure	Contractors	1. Metro 2. Metro 3. Construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Visual and Aesthetics	Construction lighting, equipment and staging areas may be visible to nearby sensitive uses.	▪ Visually obtrusive erosion control devices, such as silt fences, plastic ground cover, and straw bales should be removed as soon as the area is stabilized. (CON1)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Stockpile areas should be located in less visibly sensitive areas and, whenever possible, not be visible from the road or to residents and businesses. (CON2)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ During nighttime construction activities, lighting shall be aimed downward and away from residential and other sensitive uses adjacent to the alignment and stations. (CON3)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
Construction-Air Quality	Regional construction emissions would exceed the NO_X significance threshold and localized emissions would exceed the NO_X, $PM_{2.5}$, and PM_{10} significance thresholds.	▪ Water or a stabilizing agent shall be applied to exposed surfaces in sufficient quantity to prevent generation of dust plumes. (CON4)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Track-out shall not extend 25 feet or more from an active operation and track-out shall be removed at the conclusion of each workday. (CON5)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Contractors shall be required to utilize at least one of the measures set forth in South Coast Air Quality Management District Rule 403 section (d)(5) to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site. (CON6)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ All haul trucks hauling soil, sand, and other loose materials shall maintain at least 6 inches of freeboard in accordance with California Vehicle Code Section 23114. (CON7)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ All haul trucks hauling soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions). (CON8)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Traffic speeds on unpaved roads shall be limited to 15 mph. (CON9)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Operations on unpaved surfaces shall be suspended when winds exceed 25 mph. (CON10)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Heavy equipment operations shall be suspended during first and second stage smog alerts. (CON11)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ On-site stockpiles of debris or rusty materials shall be covered at all times when not being used. On-site stockpiles of dirt shall be watered at least two times per day or covered at all times when not being used. (CON12)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Air Quality	Regional construction emissions would exceed the NO_X significance threshold and localized emissions would exceed the NO_X, $PM_{2.5}$, and PM_{10} significance thresholds.	▪ Contractors shall maintain equipment and vehicle engines in good condition and in proper tune per manufacturers' specifications. (CON13)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators, as feasible. (CON14)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Heavy-duty trucks shall be prohibited from idling in excess of five minutes, both on- and off-site. (CON15)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Construction parking shall be configured to minimize traffic interference. (CON16)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Construction activity that affects traffic flow on the arterial system shall be limited to off-peak hours, as feasible. (CON17)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Construction staging and vehicle parking, including workers' vehicles, shall be prohibited on streets adjacent to sensitive receptors such as schools, daycare centers, senior facilities, and hospitals. (CON18)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ The construction process shall utilize an on-site rock crushing facility with water control to suppress dust, when feasible. (CON19)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Portable generators shall be low-emitting and use ultra low sulfur diesel (<15 parts per million) or gasoline. (CON20)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Construction equipment shall use a combination of low sulfur diesel (<15 parts per million) and exhaust emission controls. (CON21)	Check for compliance with required mitigation measure.	Contractors	4. Metro 5. Metro 6. Construction
		▪ The construction process shall use equipment having the minimum practical engine size (i.e., lowest appropriate horsepower rating for the intended job). (CON22)	Check for compliance with required mitigation measure.	Contractors	7. Metro 8. Metro 9. Construction
		▪ Contractors shall be prohibited from tampering with construction equipment to increase horsepower or defeat emission control devices. (CON23)	Check for compliance with required mitigation measure.	Contractors	10. Metro 11. Metro 12. Construction
		▪ Metro shall designate a person to ensure the implementation of air quality mitigation measures through direct inspections, records reviews, and complaint investigations. (CON24)	Check for compliance with required mitigation measure.	Metro	13. Metro 14. Metro 15. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Noise and Vibration	Noise and vibration impacts to nearby sensitive receptors during construction of the project.	▪ The construction contractor shall develop and implement a Noise and Vibration Control Plan demonstrating how to achieve the more restrictive of the Metro Design Criteria noise limits and the noise limits of the city noise control ordinance. The Plan should also show how to achieve FTA vibration limits. The Plan shall include measurements of existing conditions, a list of the major pieces of construction equipment that will be used, and predictions of the noise and vibration levels at the closest noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities). The Noise and Vibration Control Plan will need to be approved by Metro prior to initiating construction. Where the construction cannot be performed in accordance with the requirements of Metro, the contractor shall investigate alternative construction measures that would result in lower noise and vibration levels. The contractor shall conduct monitoring to demonstrate compliance with contract noise limits. In addition, the contractor shall coordinate with the View Park Preparatory Accelerated and St John the Evangelist school administrators to avoid disruptive activities during school hours. (CON25)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		The construction contractor shall utilize a combination of the following options of best management practices for noise abatement to comply with the Metro Design Criteria: o The contractor shall utilize specialty equipment equipped with enclosed engines and/or high-performance mufflers as commercially available. o The contractor shall locate equipment and staging areas as far from noise-sensitive receptors as possible. o The contractor shall limit unnecessary idling of equipment. o The contractor shall install temporary noise barriers as determined by the Noise Control Plan. o The contractor shall reroute construction-related truck traffic away from residential streets to the extent permitted by the relevant municipality. o The contractor shall avoid impact pile driving near noise-sensitive receptors (residences, hotels, schools, churches, temples, and similar facilities) where possible. Where geological conditions permit their use, drilled piles or a vibratory pile driver is generally quieter. (CON26)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Geologic/ Seismic/ Hazardous	Potential impacts for encountering hazardous materials during grading and excavation within the Harbor Subdivision.	▪ Soil Mitigation Plan – A soil mitigation plan should be prepared after final construction plans are prepared showing the lateral and vertical extent of soil excavation during construction, and implemented. The soil mitigation plan should establish soil reuse criteria, establish a sampling plan for stockpiled materials, describe the disposition of materials that do not satisfy the reuse criteria, and specify guidelines for imported materials. The soil mitigation plan should include a provision that during grading or excavation activities, soil should be screened for contamination by visual observations and field screening for volatile organic compounds with a PID. Soil samples that are suspected of contamination based on field observations and PID readings shall be analyzed for suspected chemicals by a California certified laboratory. If hazardous soil is found, it shall be removed, transported to an approved disposal location. (CON27)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
Construction-Economic and Fiscal	No significant impacts are anticipated. Mitigation to reduce impacts from the inconvenience and/or disruption to the flow of customers, employees, and materials and supplies to and from corridor businesses.	▪ Nearby business owners and commercial property owners shall be notified of the schedule for specific planned construction activities, changes in traffic flow, and required short-term modifications to property access. (CON28)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ General notice shall be provided to local government, transit agencies, major institutions, and other organizations of the schedule for planned construction activities. (CON29)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Methods shall be developed by which business owners can convey their concerns about construction activities and the effectiveness of mitigation measures during the construction period so activities can be modified to reduce adverse effects. (CON30)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Advance notice shall be provided to affected property owners if utilities would be disrupted for short periods of time and scheduled major utility shut-offs during low-use periods of the day. (CON31)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
		▪ Construction activities shall be planned to minimize effects on community gatherings, special celebrations, or other similar events. (CON32)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design
		▪ Public information campaigns shall be conducted to encourage patronage of corridor businesses during the construction period. (CON33)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to LPA, Design Options, MOSs, and Maintenance Facility					
Construction-Environmental Justice	Disrupt minority businesses through the restricted access, changes to local circulation, loss of street parking.	▪ Metro shall make provisions for temporary signage and advertising during construction to maintain access for residents and help businesses that are partially blocked or that have inconvenient access due to construction activity. (CON34)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction
Applies to Maintenance Facility Only					
Displacement and Relocation	Relocating all of the owners and tenants according to their individual needs, especially with proximity to the airport and available land, would result in a significant impact.	▪ Metro shall set up a business relocation process to oversee the relocation needs of the businesses that would be displaced as a result of a maintenance facility for the Crenshaw/LAX Transit Corridor. In addition, Metro shall attempt to minimize disruption to overall production of businesses that are connected with airport activities by relocating in as close proximity to LAX as possible. (S-DR2)	Check for compliance with required mitigation measure.	Metro	1. Metro 2. Metro 3. Design
		▪ Metro shall work with LAWA to ensure that potential displacement and relocation of rental car businesses are compatible with the long term implementation of the LAX Master Plan consolidated rental car center. (S-DR3)	Check for compliance with required mitigation measure.	Metro	1. Metro 2. Metro 3. Design
Hazardous Materials	Impact from the potential to encounter lead-based paint during demolition of the structures on the maintenance facility site.	▪ An asbestos survey and lead based paint survey shall be conducted on all sites where on-site structures would be demolished or significantly renovated. (S-GEO-4)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction

MITIGATION MONITORING PLAN

LOS ANGELES CRENSHAW/LAX TRANSIT CORRIDOR

Impact Area	Potential Effects	Mitigation Measure and Condition of Approval	Monitoring Action	Party Responsible For Implementing Mitigation	1. Enforcement Agency 2. Monitoring Agency 3. Monitoring Phase
Applies to Maintenance Facility Only					
Construction - Noise	Construction activity would exceed the 5-dBA significance threshold at multiple sensitive receptors for the maintenance facility.	▪ Noise barriers (e.g., sound attenuation blankets or solid walls) shall be placed such that the line-of-sight is blocked between sensitive receptors (e.g., residential and institutional land uses) and the project site, as feasible. (S-CON24)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ During the early stages of construction plan development, natural and artificial barriers, such as ground elevation changes and existing buildings, shall be considered for use as shielding against construction noise. (S-CON25)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ The contractor shall comply with Standard Specification 1565, FTA noise criteria. Each internal combustion engine used for any purpose on the job or related to the job shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated without a muffler. (S-CON26)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ Grading and construction contractors shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than metal-tracked equipment) as much as possible. (S-CON27)	Check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Construction
		▪ The contractor shall submit a noise plan for construction activity associated with the preferred maintenance site alternative. The plan shall be prepared by a qualified acoustical engineer and should be approved by the resident engineer before construction is initiated. The noise control plan shall include an inventory of the equipment, the estimated noise level at 50 feet for each major piece of equipment, calculations of the noise levels at impacted sensitive receptors, and noise reduction measures for sensitive receptor locations where the predicted noise levels exceed the ambient noise level by 5 dBA. Impacted receptors include, but may not be limited to, residences to the west of the preferred maintenance site alternative. (S-CON28)	Check design plans; check for compliance with required mitigation measure.	Contractors	1. Metro 2. Metro 3. Design & construction