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Acronyms and Abbreviations

2008 RCP	2008 Regional Comprehensive Plan
2012 RTP	2012–2035 Regional Transportation Plan/Sustainable Communities Strategy
AA	Alternatives Analysis
BRT	bus rapid transit
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CPA	Community Plan Area
DEIR	Draft Environmental Impact Report
DEIS	Draft Environmental Impact Statement
FTA	Federal Transit Administration
Growth Vision	2004 Compass Blueprint Growth Vision
HOV	high-occupancy vehicle
I	Interstate [I]
LADOT	Los Angeles Department of Transportation
LRT	light rail transit
LRTP	Long-Range Transportation Plan
Metro	Los Angeles County Metropolitan Transportation Authority
MPO	Metropolitan Planning Organization
MSF	maintenance and storage facility
NEPA	National Environmental Policy Act
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SCAG	Southern California Association of Governments
SR	State Route
TSM	Transportation System Management
U.S.C.	United States Code

1.1 Study Background

What Is the East San Fernando Valley Transit Corridor?

The Federal Transit Administration (FTA) and Los Angeles County Metropolitan Transportation Authority (Metro) have initiated a Draft Environmental Impact Statement (DEIS)/Environmental Impact Report (DEIR) for the East San Fernando Valley Transit Corridor Project (Project). The DEIS/DEIR is being prepared with the FTA as the Lead Agency under the National Environmental Policy Act (NEPA) and Metro as the Lead Agency under the California Environmental Quality Act (CEQA).

The DEIS/DEIR and related engineering are being undertaken by Metro, in close coordination with the Cities of Los Angeles and San Fernando. The DEIS/DEIR will be a combined document complying with the most recent state and federal environmental laws. The project's public/community outreach component is being undertaken as an integrated parallel effort to the DEIS/EIR.

Prior to the initiation of the DEIS/DEIR, an Alternatives Analysis (AA) was received by the Metro Board in January 2013 to study the East San Fernando Valley Transit Corridor in order to define, screen, and recommend alternatives for future study.

This study enabled Metro, the City of Los Angeles, and the City of San Fernando to evaluate a range of new public transit service alternatives that can accommodate future population growth and transit demand, while being compatible with existing land uses and future development opportunities. The study considered the Sepulveda Pass Corridor, which is another Measure R project, and the proposed California High Speed Rail Project. Both of these projects may be directly served by a future transit project in the project study area. The Sepulveda Pass Corridor could eventually link the West Los Angeles area to the east San Fernando Valley and the California High Speed Rail Project via the project corridor. As part of the January 2013 Alternatives Analysis, most of Sepulveda Boulevard was eliminated as an alignment option, as well as the alignment extending to Lakeview Terrace. As a result of the Alternatives Analysis, modal recommendations were for BRT and LRT.

As a result of the alternatives screening process and feedback received during the public scoping period, a curb-running BRT, median-running BRT, median-running low-floor LRT/tram, and a median-running LRT, were identified as the four build alternatives, along with the TSM and No-Build Alternatives to be carried forward for analysis in this DEIS/DEIR.

1.1.1 Study Area

Where Is the Study Area Located?

The East San Fernando Valley Transit Corridor Project study area is located in the San Fernando Valley in the County of Los Angeles. Generally, the project study area extends from the City of San Fernando and the Sylmar/San Fernando Metrolink Station in the north to the Van Nuys Metro Orange Line Station within the City of Los Angeles in the south. However, the project study area used for the environmental issue described in this report could vary from this general project study area,

depending on the needs of the analysis. The project study area used for this analysis is described further in Section 3.1.1.

The eastern San Fernando Valley includes the two major north-south arterial roadways of Sepulveda and Van Nuys Boulevards, spanning approximately 10 to 12 miles and the major north-west arterial roadway of San Fernando Road.

Several freeways traverse or border the eastern San Fernando Valley. These include the Ventura Freeway US-101, the San Diego Freeway I-405, the Golden State Freeway I-5, the Ronald Reagan Freeway SR-118, and the Foothill Freeway I-210. The Hollywood Freeway SR-170 is located east of the project study area. In addition to Metro Local and Metro Rapid bus service, the Metro Orange Line (Orange Line) Bus Rapid Transit service, the Metrolink Ventura Line commuter rail service, Amtrak inter-city rail service, and the Metrolink Antelope Valley Line commuter rail service are the major transit corridors that provide interregional trips in the project study area.

Land uses in the project study area include neighborhood and regional commercial land uses, as well as government and residential land uses. Specifically, land uses in the project study area include government services at the Van Nuys Civic Center, retail shopping along the project corridor, and medium- to high-density residential uses throughout the project study area. Notable land uses in the eastern San Fernando Valley include: The Village at Sherman Oaks, Panorama Mall, Whiteman Airport, Van Nuys Airport, Mission Community Hospital, Kaiser Permanente Hospital, Van Nuys Auto Row, and several schools, youth centers, and recreational centers.

1.1.2 Alternatives Considered

What Alternatives Are under Consideration?

The following six alternatives, including four build alternatives, a TSM Alternative, and the No-Build Alternative, are being evaluated as part of this study:

- No-Build Alternative
- Transportation Systems Management (TSM) Alternative
- Build Alternative 1 – Curb-Running Bus Rapid Transit (BRT) Alternative
- Build Alternative 2 – Median-Running BRT Alternative
- Build Alternative 3 – Low-Floor LRT/Tram Alternative
- Build Alternative 4 – Light Rail Transit (LRT) Alternative

All build alternatives would operate over 9.2 miles, either in a dedicated bus lane or guideway (6.7 miles) and/or in mixed-flow traffic lanes (2.5 miles), from the Sylmar/San Fernando Metrolink Station to the north to the Van Nuys Metro Orange Line station to the south, with the exception of Build Alternative 4 which includes a 2.5-mile segment within Metro-owned railroad right-of-way adjacent to San Fernando Road and Truman Street and a 2.5-mile underground segment beneath portions of Panorama City and Van Nuys.

1.1.2.1 No-Build Alternative

The No-Build Alternative represents projected conditions in 2040 without implementation of the project. No new transportation infrastructure would be built within the project study area, aside from projects that are currently under construction or funded for construction and operation by 2040. These projects include highway and transit projects funded by Measure R and specified in the current

constrained element of the Metro 2009 Long-Range Transportation Plan (LRTP) and the 2012 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Existing infrastructure and future planned and funded projects assumed under the No-Build Alternative include:

- Existing Freeways – Interstate 5, and Interstate 105, State Route 118, and U.S. 101;
- Existing Transitway – Metro Orange Line;
- Existing Bus Service – Metro Rapid and Metro Local Shuttle;
- Los Angeles Department of Transportation Commuter Express, and DASH;
- Existing and Planned Bicycle Projects – Bicycle facilities on Van Nuys Boulevard and connecting east/west facilities; and
- Other Planned Projects – Various freeway and arterial roadway upgrades, expansions to the Metro Rapid Bus system, upgrades to the Metrolink system and the proposed California High Speed Rail project.

This alternative establishes a baseline for comparison to other alternatives in terms of potential environmental effects, including adverse and beneficial environmental effects.

1.1.2.2 TSM Alternative

The TSM Alternative enhances the No-Build Alternative and emphasizes transportation systems upgrades, which may include relatively low-cost transit service improvements. It represents efficient and feasible improvements to transit service, such as increased bus frequencies and minor modifications to the roadway network. Additional TSM Alternative transit improvements that may be considered include, but are not limited to, traffic signalization improvements, bus stop amenities/improvements, and bus schedule restructuring (Figure 1-1).

The TSM Alternative considers the existing bus network, enhanced operating hours, and increased bus frequencies for Rapid Line 761 and Local Line 233. Under this alternative, the Metro Rapid Line 761 and Metro Local Line 233 bus routes would retain existing stop locations. This alternative would add 20 additional buses to the existing Metro Local 233 and Metro Rapid 761 bus routes. These buses would be similar to existing Metro 60-foot articulated buses, and each bus would have the capacity to serve up to 75 passengers (57 seats x 1.30 passenger loading standard). Buses would be equipped with transit signal priority equipment to allow for improved operations and on-time performance.

The existing Metro Division 15 maintenance and storage facility (MSF) located in Sun Valley would be able to accommodate the 20 additional buses with the implementation of the TSM Alternative. Operational changes would include reduced headway (elapsed time between buses) times for Metro Rapid Line 761 and Metro Local Line 233, as follows:

- Metro Rapid Line 761 would operate with headways reduced from 10 minutes to 8 minutes during peak hours (7 a.m. to 9 a.m. and 4 p.m. to 7 p.m. on weekdays) and from 17.5 minutes to 12 minutes during off-peak hours.
- Metro Local Line 233 would operate with headways reduced from 12 minutes to 8 minutes during peak hours and from 20 minutes to 16 minutes during off-peak hours.

Figure 1-1: TSM Alternative



Source: KOA and ICF International, 2014.

1.1.2.3 Build Alternative 1 – Curb-Running BRT Alternative

Under the Curb-Running BRT Alternative, the BRT guideway would incorporate 6.7 miles of existing curb lanes (i.e., lanes closest to the curb) along Van Nuys Boulevard between San Fernando Road and the Metro Orange Line. This alternative would be similar to the Metro Wilshire BRT project and would operate similarly. The lanes would be dedicated curb-running bus lanes for Metro Rapid Line 761 and Metro Local Line 233, and for other transit lines that operate on short segments of Van Nuys Boulevard. In addition, this alternative would incorporate 2.5 miles of mixed-flow lanes, where buses would operate in the curb lane along San Fernando Road and Truman Street between Van Nuys Boulevard and Hubbard Avenue for Metro Line 761. Metro Line 233 would continue north on Van Nuys Boulevard to Lakeview Terrace. These improvements would result in an improved Metro Rapid Line 761 (hereafter referred to as 761X) and an improved Metro Local Line 233 (hereafter referred to as 233X). The route of the Curb-Running BRT Alternative is illustrated in Figure 1-2.

From the Sylmar/San Fernando Metrolink Station:

- Metro Rapid Line 761X would operate within roadway travel lanes on Truman Street and San Fernando Road.
- At Van Nuys Boulevard, Metro Rapid Line 761X would turn southwest and travel south within a curb-running dedicated bus lane along Van Nuys Boulevard.
- The alternative would continue to be curb running along Van Nuys Boulevard until reaching the Metro Orange Line Van Nuys station where Metro Rapid Line 761X service would be integrated into mixed-flow traffic.
- Metro Line 761X would then continue south to Westwood as under existing conditions, though it should be noted that in December 2014 the Metro Rapid Line 761 will be re-routed to travel from Van Nuys Boulevard to Ventura Boulevard, and then to Reseda Boulevard, while a new Metro Rapid Line 788 would travel from Van Nuys Boulevard through the Sepulveda Pass to Westwood as part of a Metro demonstration project.

Metro Local Line 233X would operate similar to how it currently operates between the intersections of Van Nuys and Glenoaks Boulevards to the north and Van Nuys and Ventura Boulevards to the south. However, Metro Local Line 233X would operate with improvements over existing service because it would utilize the BRT guideway where its route overlaps with the guideway along Van Nuys Boulevard.

Transit service would not be confined to only the dedicated curb lanes. Buses would still have the option to operate within the remaining mixed-flow lanes to bypass right-turning vehicles, a bicyclist, or another bus at a bus stop.

The Curb-Running BRT Alternative would operate in dedicated bus lanes, sharing the lanes with bicycles and right turning vehicles. However, on San Fernando Road and Truman Street, no dedicated bus lanes would be provided. The Curb-Running BRT Alternative would include 18 bus stops.

Figure 1-2: Build Alternative 1 – Curb-Running BRT Alternative

East San Fernando Valley Transit Corridor Curb Running Bus Rapid Transit (BRT)



Source: KOA and ICF International, 2014.

1.1.2.4 Build Alternative 2 – Median-Running BRT Alternative

The Median-Running BRT Alternative consists of approximately 6.7 miles of dedicated median-running bus lanes between San Fernando Road and the Metro Orange Line, and would have operational standards similar to the Metro Orange Line. The remaining 2.5 miles would operate in mixed-flow traffic between the Sylmar/San Fernando Metrolink Station and San Fernando Road/Van Nuys Boulevard. The Median-Running BRT Alternative is illustrated in Figure 1-3.

Similar to the Curb-Running BRT Alternative, the Median-Running BRT (Metro Rapid Line 761X) would operate as follows from the Sylmar/San Fernando Metrolink Station:

- Metro Rapid Line 761X would operate within mixed-flow lanes on Truman Street and San Fernando Road.
- At Van Nuys Boulevard, the route would turn southwest and travel south within the median of Van Nuys Boulevard in a new dedicated guideway.
- Upon reaching the Van Nuys Metro Orange Line Station, the dedicated guideway would end and the Rapid Line 761X service would then be integrated into mixed-flow traffic.
- The route would then continue south to Westwood, similar to the existing route. Similar to Build Alternative 1, it should be noted that in December 2014 the Metro Rapid Line 761 will be re-routed to travel from Van Nuys Boulevard to Ventura Boulevard, and then to Reseda Boulevard, while a new Metro Rapid Line 788 would travel from Van Nuys Boulevard through the Sepulveda Pass to Westwood as part of a Metro demonstration project.

Metro Local Line 233 would operate similar to existing conditions between the intersections of Van Nuys and Glenoaks Boulevards to the north and Van Nuys and Ventura Boulevards to the south. Rapid Bus stops that currently serve the 794 and 734 lines on the northern part of the alignment along Truman Street and San Fernando Road would be upgraded and have design enhancements that would be Americans with Disabilities Act (ADA) compliant. These stops would also serve the redirected 761X line:

1. Sylmar/San Fernando Metrolink Station
2. Hubbard Station
3. Maclay Station
4. Paxton Station
5. Van Nuys/San Fernando Station

Along the Van Nuys Boulevard segment, bus stop platforms would be constructed in the median. Seventeen new median bus stops would be included.

Figure 1-3: Build Alternative 2 – Median-Running BRT Alternative



Source: KOA and ICF International, 2014.

1.1.2.5 Build Alternative 3 – Low-Floor LRT/Tram Alternative

The Low-Floor LRT/Tram Alternative would operate along a 9.2-mile route from the Sylmar/San Fernando Metrolink Station to the north, to the Van Nuys Metro Orange Line station to the south. The Low-Floor LRT/Tram Alternative would operate in a median dedicated guideway for approximately 6.7 miles along Van Nuys Boulevard between San Fernando Road and the Van Nuys Metro Orange Line station. The low-floor LRT/tram alternative would operate in mixed-flow traffic lanes on San Fernando Road between the intersection of San Fernando Road/Van Nuys Boulevard and just north of Wolfskill Street. Between Wolfskill Street and the Sylmar/San Fernando Metrolink Station, the low-floor LRT/tram would operate in a median dedicated guideway. It would include 28 stations. The route of the Low-Floor LRT/Tram Alternative is illustrated in Figure 1-4.

The Low-Floor LRT/Tram Alternative would operate along the following route:

- From the Sylmar/San Fernando Metrolink Station, the low-floor LRT/tram would operate within a median dedicated guideway on San Fernando Road.
- At Wolfskill Street, the low-floor LRT/tram would operate within mixed-flow travel lanes on San Fernando Road to Van Nuys Boulevard.
- At Van Nuys Boulevard, the low-floor LRT/tram would turn southwest and travel south within the median of Van Nuys Boulevard in a new dedicated guideway.
- The low-floor LRT/tram would continue to operate in the median along Van Nuys Boulevard until reaching its terminus at the Van Nuys Metro Orange Line Station.

Based on Metro's *Operations Plan for the East San Fernando Valley Transit Corridor Project*, the Low-Floor LRT/Tram Alternative would assume a similar travel speed as the Median-Running BRT Alternative, with speed improvements of 18 percent during peak hours/peak direction and 15 percent during off-peak hours.

The Low-Floor LRT/Tram Alternative would operate using low-floor articulated vehicles that would be electrically powered by overhead wires. This alternative would include supporting facilities, such as an overhead contact system (OCS), traction power substations (TPSS), signaling, and a maintenance and storage facility (MSF).

Because the Low-Floor LRT/Tram Alternative would fulfill the current functions of the existing Metro Rapid Line 761 and Metro Local Line 233, these bus routes would be modified to maintain service only to areas outside of the project corridor. Thus, Metro Rapid Line 761 (referred to as 761S with reduced service) would operate only between the Metro Orange Line and Westwood, and Metro Local Line 233 (referred to as 233S with reduced service) would operate only between San Fernando Road and Glenoaks Boulevard. It should be noted that in December 2014 the Metro Rapid Line 761 will be re-routed to travel from Van Nuys Boulevard to Ventura Boulevard, and then to Reseda Boulevard, while a new Metro Rapid Line 788 would travel from Van Nuys Boulevard through the Sepulveda Pass to Westwood as part of a Metro demonstration project.

Stations for the Low-Floor LRT/Tram Alternative would be constructed at various intervals along the entire route. There are portions of the route where stations are closer together and other portions where they are located further apart. Twenty-eight stations are proposed with the Low-Floor LRT/Tram Alternative. The 28 proposed low-floor LRT/tram stations would be ADA compliant.

Figure 1-4: Build Alternative 3 – Low-Floor LRT/Tram Alternative



Source: KOA and ICF International, 2014.

1.1.2.6 Build Alternative 4 – LRT Alternative

Similar to the Low-Floor LRT/Tram Alternative, under this alternative, the LRT would be powered by overhead electrical wires (Figure 1-5). Under Build Alternative 4, the LRT would travel in a dedicated guideway from the Sylmar/San Fernando Metrolink Station along San Fernando Road south to Van Nuys Boulevard, from San Fernando Road to the Van Nuys Metro Orange Line Station, over a distance of approximately 9.2 miles. The LRT Alternative would include a segment in exclusive right-of-way through the Antelope Valley Metrolink railroad corridor, a segment with semi-exclusive right-of-way in the middle of Van Nuys Boulevard, and an underground segment beneath Van Nuys Boulevard from just north of Parthenia Street to Hart Street.

The LRT Alternative would be similar to other street-running LRT lines that currently operate in the Los Angeles area, such as the Metro Blue Line, Metro Gold Line, and Metro Exposition Line. The LRT would travel along the median for most of the route, with a subway of approximately 2.5 miles in length between Vanowen Street and Nordhoff Street. On the surface-running segment, the LRT Alternative would operate at prevailing traffic speeds up to a maximum of 35 miles per hour and would be controlled by standard traffic signals.

Stations would be constructed at approximately 1-mile intervals along the entire route. There would be 14 stations, three of which would be underground near Sherman Way, the Van Nuys Metrolink station, and Roscoe Boulevard. Entry to the three underground stations would be provided from an entry plaza and portal. The entry portals would provide access to stairs, escalators, and elevators leading to an underground LRT station mezzanine level, which, in turn, would be connected via additional stairs, escalators, and elevators to the underground LRT station platforms.

Similar to the Low-Floor LRT/Tram Alternative, the LRT Alternative would require a number of additional elements to support vehicle operations, including an OCS, TPSS, communications and signaling buildings, and an MSF.

Figure 1-5: Build Alternative 4 – LRT Alternative

East San Fernando Valley Transit Corridor Median Running Light Rail Transit (LRT)



Source: KOA and ICF International, 2014.

Chapter 2

Regulatory Framework/Methodology

This section describes the regulatory framework related to communities and neighborhoods, and the methodology used to determine potential impacts that could result from the project. The following common terms are used in this Community and Neighborhood Impacts Report and are defined below for clarity:

- **Direct Effects:** Direct effects are effects that would be caused by the project and would result at the same time and place as the project.
- **Indirect Effects:** Indirect effects are effects that would be caused by the project and would result later in time or would be farther removed in distance, but would still be reasonably foreseeable. Indirect effects would include growth-related effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.
- **Project Corridor:** The East San Fernando Valley Transit Corridor (project corridor) is defined as the area that could be directly and physically affected by at least one of the project alternatives (road widening, construction of a BRT, low-floor LRT/tram, or LRT system, et cetera). More specifically, the project corridor is limited to the properties abutting the following roadway/transit segments:
 - Van Nuys Boulevard, from the Metro Orange Line in the south to San Fernando Road in the north.
 - San Fernando Road, from Van Nuys Boulevard in the southeast to the Sylmar San Fernando Metrolink Station in the northwest (at 12219 Frank Modugno Drive between Hubbard Avenue and Sayre Street).
 - Truman Street, from La Rue Street in the southeast to the Sylmar San Fernando Metrolink Station in the northwest.
 - The Antelope Valley Metrolink railroad corridor, from Van Nuys Boulevard in the southeast to the Sylmar San Fernando Metrolink Station in the northwest.

2.1 Regulatory Framework

2.1.1 Federal Regulations

2.1.1.1 National Environmental Policy Act (NEPA)

NEPA of 1969, as amended, established that the federal government must use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.¹ The Council on Environmental Quality (CEQ) regulations, which establishes the steps necessary to comply with NEPA, requires evaluation of the potential environmental consequences of all proposed federal activities and program.

¹ U.S. Congress. 1969. National Environmental Policy Act of 1969, as amended, 42 USC Section 4331. Available: <<http://ceq.hss.doe.gov/nepa/regs/nepa/nepaeqia.htm>>. Accessed: February 15, 2013.

This provision includes a requirement to examine indirect effects, which may result in areas beyond the immediate influence of a proposed action and/or at some time in the future. These effects may include changes in land use and population density, which are elements of growth.²

2.1.1.2 Civil Rights Act

Projects must be developed in accordance with Title VI of the Civil Rights Act of 1964, as amended. Title VI states that “No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”³

2.1.1.3 Executive Order 12898

All projects receiving federal funding must comply with Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”, signed by President Clinton on February 11, 1994.⁴ This executive order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse impacts of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law.

2.1.1.4 Uniform Relocation Assistance and Real Property Acquisition Policies Act

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced as a direct result of projects undertaken by a federal agency or with federal financial assistance. The Uniform Act provides for uniform and equitable treatment for persons displaced from their homes and businesses and establishes uniform and equitable land acquisition policies.

Where acquisition and relocation are unavoidable, owners of private property have federal constitutional guarantees that their property would not be taken or damaged for public use unless they first receive just compensation. Just compensation is measured by the “fair market value” of the property taken.

2.1.2 State Regulations

2.1.2.1 California Environmental Quality Act (CEQA)

CEQA does not consider an economic or social change alone to be a substantial impact on the environment. However, if a social or economic change is related to a physical change, then an

² CEQ (Council on Environmental Quality). n.d. Regulations for Implementing NEPA, 40 CFR Section 1508. Available: <<http://ceq.hss.doe.gov/nepa/regs/ceq/1508.htm>>. Accessed: February 15, 2013.

³ U.S. Congress. 1964. Title VI of the 1964 Civil Rights Act, 42 USC Section 2000d. Available: <<http://www.justice.gov/crt/about/cor/coord/titlevistat.php>>. Accessed: March 4, 2013.

⁴ President William J. Clinton. 1994. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Federal Register Volume 59, Number 32). February 11. Available: <<http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf>>. Accessed: February 27, 2013.

economic or social change may be considered in determining whether the physical change is significant.⁵

CEQA also requires the analysis of a project's potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents "...discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."⁶

2.1.2.2 California Relocation Act

The provisions of the California Relocation Act (California Act) apply if a public entity undertakes a project for which federal funds are not present. In this case, the public entity must provide relocation assistance and benefits. The California Act, which is consistent with the intent and guidelines of the Uniform Act, seeks to achieve the following:

- Ensure the consistent and fair treatment of owners and occupants of real property.
- Encourage and expedite acquisition by agreement to avoid litigation and relieve congestion in the courts.
- Promote confidence in the public land acquisitions.

As stated above under federal regulations, owners of private property have similar state constitutional guarantees regarding property acquisitions, damages, and just compensation.

2.1.3 Local Regulations

The project study area lies in the Southern California region and is under the jurisdiction of the Southern California Association of Governments (SCAG). SCAG is responsible for defining regional planning goals for the project corridor. In addition, Metro has policies relating to "Complete Streets" that would be applicable to the project corridor. The project study area also lies within the County of Los Angeles, and the Cities of Los Angeles and San Fernando. The local regulations for these jurisdictions were reviewed for policies and regulations that apply to the project.

2.1.3.1 SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy

SCAG's 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) focuses on the need to coordinate land use and transportation decisions to manage travel demand within the region. The 2012-2035 RTP/SCS sets forth the regional goal of encouraging land use and growth patterns that facilitate transit and non-motorized transportation.

2.1.3.2 SCAG Regional Comprehensive Plan

The SCAG Regional Comprehensive Plan addresses important regional issues, such as housing, traffic/transportation, water, and air quality, and presents a vision of how the region can balance

⁵ California Natural Resources Agency. 2010b. *State CEQA Guidelines, 14 CCR Section 15358*. Available: <<http://ceres.ca.gov/ceqa/guidelines/art20.html>>. Accessed: February 15, 2013.

⁶ California Natural Resources Agency. 2010a. *State CEQA Guidelines, 14 CCR Section 15126.2(d)*. Available: <<http://ceres.ca.gov/ceqa/guidelines/art9.html>>. Accessed: February 15, 2013.

resource conservation, economic vitality, and quality of life.⁷ The plan identifies voluntary best practices to approach growth and infrastructure challenges, and serves as an advisory document to local agencies in the Southern California region for their information and use in preparing local plans and addressing local issues of regional significance. The plan has the following goals related to communities and neighborhoods:

- Focus growth in existing and emerging centers and along major transportation corridors.
- Create significant areas of mixed-use development and walkable, “people-scaled” communities.
- Provide new housing opportunities, with building types and locations that respond to the region’s changing demographics.
- Target growth in housing, employment, and commercial development within walking distance of existing and planned transit stations.
- Inject new life into under-used areas by creating vibrant new business districts, redeveloping old buildings and building new businesses and housing on vacant lots.
- Preserve existing, stable, single-family neighborhoods.
- Protect important open space, environmentally sensitive areas, and agricultural land from development.

2.1.3.3 Metro Complete Streets Policy

Metro has developed a Complete Streets Policy to establish a standard of excellence for multimodal design.⁸ The term, “Complete Streets,” describes a comprehensive, integrated transportation network with infrastructure and design that allows safe and convenient travel along and across streets for all users, including pedestrians, users and operators of public transit, bicyclists, persons with disabilities, seniors, children, motorists, users of green modes (e.g., active transportation, rideshare transit, and clean-fueled vehicles), and movers of commercial goods. Metro’s Complete Streets Policy Statement is guided by the following principles:

- **Complete Streets Serving All Users and Modes:** Metro expresses its commitment to work with partner agencies and local jurisdictions to plan and fund Complete Streets that provide safe, comfortable, and convenient travel along and across streets (including streets, roads, transit facilities, highways, bridges, and other portions of the transportation system) through a comprehensive, integrated transportation network that serves all categories of users, including pedestrians, users and operators of public transit, bicyclists, persons with disabilities, seniors, children, motorists, users of green modes, and movers of commercial goods.
- **Context Sensitivity:** In planning and implementing transportation projects, Metro departments, partner agencies, and funding recipients will maintain sensitivity to local conditions in both residential and business districts as well as urban, suburban, and rural areas, and will work with residents, merchants, and other stakeholders to ensure that a strong sense of place ensues.
- **Complete Streets Routinely Addressed by All Departments:** All relevant departments at Metro, partner agencies, and funding recipients will work towards making Complete Streets practices a routine part of everyday operations; approach every relevant project, program, and practice as an

⁷ SCAG (Southern California Association of Governments). 2008. *Final 2008 Regional Comprehensive Plan*. Available: <http://www.scag.ca.gov/rcp/pdf/finalrcp/f2008RCP_Complete.pdf>. Accessed: March 1, 2013.

⁸ Metro. 2014. *Metro Complete Streets Policy*. Available: <http://media.metro.net/projects_studies/sustainability/images/policy_completestreets_2014-10.pdf>. Accessed: July 22, 2015.

opportunity to improve streets and the transportation network for all categories of users; and work in coordination with other departments, agencies, and jurisdictions to maximize opportunities for Complete Streets, connectivity, and cooperation.

- **All Projects and Phases:** Complete Streets infrastructure sufficient to enable reasonably safe travel along and across the right-of-way for each category of users will be incorporated into all planning, funding, design, approval, and implementation processes for any transit and highway planning and design, new construction, reconstruction, retrofits, rehabilitations, and capital grant programs, except that specific infrastructure for a given category of users may be excluded if an exception is approved via the process set forth in the “Exceptions” section of this policy.

As stated in the Complete Streets Policy, it may not be effective to modify all streets to accommodate all modes equally. Modal priorities may need to be established for key arterials based on context sensitive evaluations, public feedback, and a review of relevant data. Some streets may be prioritized for transit travel, others for walking, bicycling, vehicle travel, goods movement, or other types of modes. Some streets may have robust facilities that accommodate all modes; however, a number of streets might not contain all these features due to physical right-of-way constraints, connection with local context and local demand, and other considerations.

2.1.3.4 County of Los Angeles

County of Los Angeles Bicycle Master Plan

The County of Los Angeles Bicycle Master Plan (County’s Bicycle Master Plan) includes plans to build off the existing 144 miles of bikeways throughout the County, and install approximately 831 miles of new bikeways in the next 20 years. The County’s Bicycle Master Plan includes a designated bicycle path along the Metro-owned railroad right-of-way in the City of San Fernando within the project study area.⁹ Van Nuys Boulevard, San Fernando Road, and Truman Street are not designated as existing or planned bikeways.

2.1.3.5 City of Los Angeles

City of Los Angeles Great Streets Initiative

The City of Los Angeles Great Streets Initiative includes providing streetscapes that promote economic revitalization, increase public safety, enhance local culture, support neighborhoods, and create gathering places.¹⁰ The initiative includes creating plazas and parklets, implementing improvements to curbs, and installing street lighting, street trees, and street furniture. The initiative is being implemented along portions of the project corridor on Van Nuys Boulevard between Victory Boulevard and Oxnard Street, and between Laurel Canyon Boulevard and San Fernando Road. Between Victory Boulevard and Oxnard Street, the City of Los Angeles Great Streets Initiative “seeks to strengthen the connections between the Van Nuys Civic Center and the Orange Line while priming the corridor for Metro’s planned East San Fernando Valley Transit Corridor.” In addition, from Laurel Canyon Boulevard to San Fernando Road, the initiative “seeks to build connections to Pacoima City Hall in particular, strengthening the civic engagement and enabling positive change in the

⁹ County of Los Angeles. 2012. *County of Los Angeles Bicycle Master Plan*. Available: <<http://dpw.lacounty.gov/pdd/bike/docs/bmp/FINAL%20Bicycle%20Master%20Plan.pdf>>. Accessed: April 6, 2015.

¹⁰ City of Los Angeles. n.d. *Great Streets LA, A Message from Mayor Eric Garcetti*. Available: <<http://www.lamayor.org/greatstreets>>. Accessed April 9, 2015.

community. Great Streets will also improve walkability and bikeability in anticipation of Metro's East San Fernando Valley Transit Corridor project.”.

City of Los Angeles 2010 Bicycle Plan

The City of Los Angeles 2010 Bicycle Plan (City's Bicycle Plan) designates Van Nuys Boulevard as part of the “Backbone Bicycle Network,” which is a 719-mile interconnected system facilitating mobility on key arterials.¹¹ The network is comprised primarily of bicycle lanes, which would enable access to major employment centers, transit stations and stops, and educational, retail, entertainment, and other open space and recreational resources. In 2010, the Backbone Bicycle Network consisted of 124 miles of bicycle lanes and 64 miles of routes (52 of which would be converted to lanes over time). The City's Bicycle Plan added an additional 554 miles of lanes, 16 miles of routes, and 12 miles of bicycle friendly streets to complete the development of the 719-mile Backbone Bicycle Network.

City of Los Angeles Housing and Community Development Five-Year Consolidated Plan 2013-2017

The Consolidated Plan is the City of Los Angeles' strategic plan to provide decent housing and a suitable living environment and to expand economic opportunities, principally for low- and moderate-income persons, through annual funding from the Community Development Block Grant, Emergency Solutions Grant, HOME Investment Partnerships Program, and Housing Opportunities for Persons with AIDS grant.

The Draft 2013-2017 Consolidated Plan recognizes that the passage of Measure R local transit funding and the expansion of the Transportation Infrastructure Finance and Innovation Act will dramatically accelerate transportation projects in the City of Los Angeles, create jobs, and provide significant opportunities to leverage the City of Los Angeles' federal block grant resources to revitalize Los Angeles neighborhoods.¹² The Draft 2013-2017 Consolidated Plan includes the following strategic directions:

- Maximize community and economic impact through place-based strategies focused on opportunities around transit corridors that provide access to jobs.
- Support programs that create jobs; increase family economic stabilization and mobility; create and preserve affordable workforce housing; and reduce and end homelessness.
- Link and leverage limited Consolidated Plan resources with other resources/investments to sustain and expand community benefit.
- Increase the operating efficiency and effectiveness of the City and its partners through continued consolidation, integration, and standardization of public services and community development activities.

¹¹ City of Los Angeles. 2011. *2010 Bicycle Plan*. Available: <<http://planning.lacity.org/cwd/gnlpln/transelt/NewBikePlan/Txt/LA%20CITY%20BICYCLE%20PLAN.pdf>>. Accessed: April 6, 2015.

¹² City of Los Angeles Housing and Community Development Department. 2013. *2013-2017 Five-Year Consolidated Plan*. Available: <http://cdd.lacity.org/home_reports.html>. Accessed: March 1, 2013.

City of Los Angeles Land Use/Transportation Policy

The City of Los Angeles Land Use/Transportation Policy provides the framework to guide future development around transit station areas.¹³ The policy includes several elements, consisting of Land Use, Housing, Urban Design, Ridership Strategy, Parking and Traffic Circulation, Equity, Economic Development, and Community Facilities Elements. The elements are intended to guide the land use and circulation patterns linked to the transit system. The objectives and guiding principles of the Land Use/Transportation Policy that may apply to the project are to:

- Distribute housing, employment, and public transit opportunities equitably for all social and economic groups.
- Reflect the unique cultural and physical identity of each community.
- Promote policies that protect and preserve existing single-family neighborhoods.

City of Los Angeles General Plan

The City of Los Angeles General Plan (City's General Plan) guides future development within the City of Los Angeles.¹⁴ Any projects that are proposed within the City of Los Angeles must be consistent with the general plan. The following elements are applicable to community and neighborhood impacts.

Framework Element

The Framework Element encourages new development in proximity to rail and bus transportation corridors and stations with a considerable mix of uses to provide support services to the community and enhance activity near the stations.¹⁵ The Framework Element encourages development in districts and centers along designated mixed-use boulevards and transit routes at sufficient densities to sustain these areas and support the local transit system. However, the Framework Element also proposes to maintain existing stable multi-family residential neighborhoods, mixed-use boulevards, and commercial areas, and to minimize impacts on those neighborhoods and on areas of inadequate infrastructure and/or overly intense development.

Housing Element 2006-2014

The Housing Element is a blueprint for meeting the City of Los Angeles' housing and growth challenge.¹⁶ The Housing Element lays out the strategy to meet this challenge, by directing growth to transit-rich and job-rich centers, and supporting growth with smart, sustainable infill development and infrastructure investments. The City of Los Angeles had the goal of producing 112,876 new housing units between 2006 and 2014.

¹³ City of Los Angeles. 1993. *City of Los Angeles/Planning Department Land Use/Transportation Policy*. Adopted November 2. Available: <http://www.metro.net/images/Land_Use-Transportation_Policy.pdf>. Accessed: February 16, 2013.

¹⁴ City of Los Angeles. 2013. *General Plan*. Available: <<http://cityplanning.lacity.org/>>. Accessed: March 1, 2013.

¹⁵ City of Los Angeles. 2001a. *The Citywide General Plan Framework, An Element of the City of Los Angeles General Plan*. Re-adopted August 8. Prepared by Envicom Corporation. Available: <<http://cityplanning.lacity.org/cwd/framwk/contents.htm>>. Accessed: February 21, 2013.

¹⁶ City of Los Angeles. 2009a. *Housing Element of the General Plan 2006-2014*. Adopted January 14. Available: <http://cityplanning.lacity.org/HousingInitiatives/HousingElement/Final/HE_Final.pdf>. Accessed: February 13, 2013.

Transportation Element

The Transportation Element recognizes that primary emphasis must be placed on maximizing the efficiency of existing and proposed transportation infrastructure through advanced transportation technology, reduction of vehicle trips, and focusing growth in proximity to public transit.¹⁷ The Transportation Element promotes the development of transportation facilities and services that encourage transit ridership, increase vehicle occupancy, and improve pedestrian and bicycle access. In addition, the Transportation Element calls for enhancing pedestrian and bicycle access in neighborhood districts, community centers, and regional centers along mixed-use boulevards, and promoting direct pedestrian linkages between transit portals/platforms and adjacent commercial development. The Transportation Element designates Van Nuys Boulevard as an arterial street with “Primary Transit Priority.”¹⁸

Mobility Plan 2035

The City of Los Angeles Mobility Plan 2035 (City’s Mobility Plan) provides the policy foundation for achieving a transportation system that balances the needs of all road uses, and is an update to the Transportation Element.¹⁹ The City’s Mobility Plan calls for dedicated bicycle lanes along the entire length of Van Nuys Boulevard.

Land Use Element

The City of Los Angeles has various community plans, which describe local land use policy and collectively make up the Land Use Element of the General Plan. Portions of the project study area overlap with City of Los Angeles Community Plan Areas (CPA).²⁰ Each CPA is comprised of a group of City of Los Angeles neighborhoods. For each of the 35 separate CPAs, community plans were developed to guide land use and design policies within specific portions of Los Angeles.

Four CPA boundaries overlap the project study area. However, it should be noted that not all of the neighborhoods included in each CPA are wholly included in the project study area. The community plans that apply to the project study area are as follows:

- Van Nuys – North Sherman Oaks Community Plan²¹
- Mission Hills – Panorama City – North Hills Community Plan²²
- Arleta – Pacoima Community Plan²³
- Sylmar Community Plan²⁴

¹⁷ City of Los Angeles. 1999a. *City of Los Angeles General Plan, Transportation Element*. Adopted September 8. Available: <<http://cityplanning.lacity.org/cwd/gnlpln/transelt/index.htm>>. Accessed: February 13, 2013.

¹⁸ City of Los Angeles. 1997. *Map B.2, Transportation Element of the General Plan, Transit Priority Arterial Streets in the City of Los Angeles*. Available: <<http://planning.lacity.org/cwd/gnlpln/transelt/TEMaps/B2Trmt.gif>>. Accessed: October 1, 2015.

¹⁹ City of Los Angeles. 2015. *Mobility Plan 2035, An Element of the General Plan*. Available: <http://planning.lacity.org/documents/policy/mobilityplnmemo.pdf>. Accessed: September 30, 2015.

²⁰ KOA Corporation. 2011. *Van Nuys Boulevard Corridor Mobility Study, Purpose and Need Framework*. Monterey Park, CA.

²¹ City of Los Angeles. 1998d. *Van Nuys-North Sherman Oaks Community Plan*. Adopted September 9. Available: <<http://cityplanning.lacity.org/complan/pdf/vnycptxt.pdf>>. Accessed: February 13, 2013.

²² City of Los Angeles. 1999b. *Mission Hills-Panorama City-North Hills Community Plan*. Adopted June 9. Available: <<http://cityplanning.lacity.org/complan/pdf/msscptxt.pdf>>. Accessed: February 13, 2013.

²³ City of Los Angeles. 1996. *Arleta-Pacoima Community Plan*. Approved November 6. Available: <<http://cityplanning.lacity.org/complan/pdf/arlcp.txt.pdf>>. Accessed: February 13, 2013.

²⁴ City of Los Angeles. 1997. *Sylmar Community Plan*. Adopted August 8. Available: <<http://cityplanning.lacity.org/complan/pdf/sylcptxt.pdf>>. Accessed: February 16, 2013.

The community plans anticipate development around transit stations. To promote uses compatible with transit station uses, the plans recommend amendments and zone changes from industrial to commercial uses for specific areas surrounding stations. Commercial uses, such as mixed-use, childcare, and retail, would promote opportunities to encourage transit use versus single occupancy vehicle trips.

City of Los Angeles Special Districts and Overlay Zones

Several special districts and overlay zones are located in the project study area. The design guidelines and standards for these districts are focused on creating pedestrian-oriented commercial centers and enhancing the aesthetic appearance of the areas. The specific plan overlay zones are described in more detail in Section 3.2 of this report.

In addition, a number of Targeted Neighborhood Initiatives (TNI) are located within the project study area. These initiatives strategically revitalize Los Angeles neighborhoods through several community-driven neighborhood improvement programs, including transportation and pedestrian corridor improvements. The TNIs are also described in more detail in Section 3.2 of this report.

Los Angeles River Revitalization Master Plan

The Los Angeles River crosses under Van Nuys Boulevard in the southern portion of the project corridor. The Los Angeles River Revitalization Master Plan includes several goals to encourage economic development in the planning area; improve and enhance natural resources; provide public access to the river; provide additional open space, recreation, and habitat areas; preserve and enhance the flood control features of the river; and foster growth in community awareness of the river.²⁵ The following goals and recommendations are applicable to the project:

- Goal: Enable safe public access.
- Recommendation #4.10. Create a variety of public spaces, including small pocket parks, natural areas, and urban plazas and civic spaces in “reclaimed” areas of the channel.
- Goal: Create a continuous river greenway.
- Recommendation #5.1. Provide opportunities for continuous and uninterrupted movement along the River.
- Goal: Connect neighborhoods to the River.
- Recommendation #5.5. Create safe, non-motorized routes between the River and cultural institutions, parks, civic institutions, transit-oriented development, schools, transit hubs, and commercial employment centers within 1 mile of the River.

City of Los Angeles Hazard Mitigation Plan

The City of Los Angeles Hazard Mitigation Plan has the following goals related to emergency services:²⁶

²⁵ City of Los Angeles. 2007. *Los Angeles River Revitalization Master Plan*. April. Available: <http://www.lariver.org/5.1a_download_publications_LARRMP.htm>. Accessed: February 21, 2013.

²⁶ City of Los Angeles. 2011. *Hazard Mitigation Plan*. Adopted July. Available: <http://emergency.lacity.org/stellent/groups/departments/@emd_contributor/documents/contributor_web_content/lacity_p_019906.pdf>. Accessed: February 21, 2013.

- Increase effectiveness of City emergency services by implementing mitigation programs and projects that aid essential facilities and their responders during emergencies.
- Continue providing City emergency services with training and equipment to address all identified hazards.
- Continue developing and strengthening inter-jurisdictional coordination and cooperation in the area of emergency services.

Pacoima/Panorama City Earthquake Disaster Assistance Project

The designated local authority and successor of the Community Redevelopment Agency of the City of Los Angeles (CRA/LA) is implementing the Pacoima/Panorama City Earthquake Disaster Assistance Project.²⁷ The project is located in northeastern San Fernando Valley and includes portions of communities within the project study area, including Arleta, Mission Hills, North Hills, Pacoima, Panorama City, Sylmar, and Van Nuys.

The goals of the project are to:

- Provide financial and technical assistance to owners and tenants of residential and commercial property damaged as a result of the 1994 Northridge earthquake.
- Replace and improve housing for all income and age groups, including low- and moderate-income households.
- Retain as many existing businesses as possible.
- Promote and encourage new businesses serving community needs.
- Preserve the existing employment base and restore local job opportunities.
- Encourage new investment in the area.

2.1.3.6 City of San Fernando

City of San Fernando General Plan

The City of San Fernando General Plan provides comprehensive planning for the future of the City of San Fernando and indicates how the City of San Fernando plans to respond to diverse human needs, such as shelter, commerce, employment, recreation, and the protection of health, safety, and welfare.²⁸ The following elements are applicable to communities and neighborhoods.

2008 – 2014 San Fernando Housing Element

The Housing Element identifies strategies and programs that focus on:

- Preserving and improving housing and neighborhoods.
- Providing adequate housing sites.
- Assisting with the provision of affordable housing.

²⁷ CRA/LA. n.d. *Pacoima/Panorama City Earthquake Disaster Assistance Project*. Available: <<http://www.crala.org/internet-site/Projects/Pacoima/index.cfm>>. Accessed: March 1, 2013.

²⁸ City of San Fernando. 1987. *City of San Fernando Revised General Plan*. Prepared by Castaneda & Associates. Available: <http://www.ci.san-fernando.ca.us/city_government/departments/comdev/forms_docs/General%20Plan%20-%20Complete.pdf>. Accessed: February 21, 2013.

- Removing governmental and other constraints to housing investment.
- Promoting fair and equal housing opportunities.

The City of San Fernando's new residential dwelling construction need for the period of 2008-2014 has been established at 251 new dwelling units.²⁹ These housing requirements accommodate SCAG's 2008-2014 Regional Housing Needs Assessment (RHNA) process.

At the time the 2008-2014 Housing Element was completed, the RHNA process did not incorporate reform provisions contained in Senate Bill (SB) 375 (the Sustainable Communities and Climate Protection Act of 2008). SB 375 calls for the RHNA to be consistent with the Sustainable Communities Strategy (SCS). The new 2014-2021 RHNA is consistent with the SCS and other SB 375 requirements by setting local housing and zoning goals to support future growth, including transit-oriented, mixed-use, and infill development. These local goals have been incorporated into a region-wide SCS to allocate greenhouse gas emission reduction targets fairly across the region. The City of San Fernando is currently finalizing the Draft 2013-2021 General Plan Housing Element Update, which accommodates the new 2014-2021 RHNA process.

To tackle both land and housing shortages, the City of San Fernando proposes to provide a range of housing types to meet community needs. According to the 2008-2014 Housing Element, this goal will be accomplished by:

- Providing opportunities for mixed-use and infill housing development in downtown San Fernando.
- Facilitating infill development on small parcels by allowing for modified development standards where multi-family projects include the preservation of an existing historic property.
- Promoting the creation of second units within residential neighborhoods as a means of providing additional rental housing and addressing household overcrowding.

Safety Element

This element includes the following goals, objectives, policy, and program related to emergency planning and response:

Goals

- To protect the citizens of the City of San Fernando from injury or loss of life due to the occurrence of any natural disaster.
- To preserve life and property in the event of an emergency by providing a basis for the conduct and coordination of operations and the management of critical resources during emergencies.

Objectives

- To define the responsibilities and tasks of each participating agency regarding emergency response.
- To provide a basis for incorporating into the City, emergency organization, non-governmental agencies, and organizations having resources necessary to meet foreseeable emergency requirements.

²⁹ City of San Fernando. 2009. *The City of San Fernando 2008-2014 Housing Element*. Adopted April 6. Available: <http://www.hcd.ca.gov/hpd/housing_element2/documents/san_fernando.pdf>. Accessed: February 21, 2013.

Policy

- The City's Emergency Response Plan should be reviewed periodically and updated as necessary.

Program

- The City will continue to implement its Emergency Plan which is operative at the authorization of the Director of Emergency Services.

The San Fernando Corridors Specific Plan

The 2005 San Fernando Corridors Specific Plan includes policies and strategies to transform Truman Street, San Fernando Road, and Maclay Avenue into attractive, livable, and economically vital districts.³⁰ According to the specific plan, the City of San Fernando is experiencing a shortage of available housing. Substantial new multifamily development is needed to accommodate the demand of the growing population, particularly given the limited amount of land currently available for new development or re-development in San Fernando.

City of San Fernando Transit-Oriented Development (TOD) Overlay Zone (Proposed)

The City of San Fernando received a Metro grant for a proposed project to implement a TOD Overlay Zone, which would create a transit-oriented district on San Fernando Road between the Sylmar/San Fernando Metrolink Station and the San Fernando Mall (on San Fernando Road between Kittridge Street and San Fernando Mission Boulevard). The purpose of the project is to enhance downtown San Fernando by creating a safe and sustainable transit-oriented district that offers greater opportunities to travel without a car.

As part of the project, the City of San Fernando would create new planning standards and guidelines to make it easier for people to live near transit and for residents to walk, bike, or take transit to the Sylmar/San Fernando Metrolink Station. The project would include updates to the City of San Fernando General Plan with a focus on generating a safer, livable, and walkable downtown neighborhood environment. The project is under CEQA environmental review as of July 2015 and is proposed for adoption in June 2016.

City of San Fernando Pacoima Wash Greenway Master Plan

In 2007, the City of San Fernando obtained funding through Metro to construct elements of a planned greenway and bikeway improvement project along the Pacoima Wash through the City of San Fernando pursuant to the Pacoima Wash Greenway Master Plan.³¹ Over the next several years, the Pacoima Wash Greenway project will provide 50 additional acres of open space with a bicycle and pedestrian trail, pocket parks, and recreational amenities. The greenway trail will connect with the San Fernando Road Metrolink Bike Path, a 12-mile path that has been partially completed with other sections of the bike path planned for future construction (a 1.75-mile section of the path has already been completed and services the Sylmar/San Fernando Metrolink Station).

³⁰ City of San Fernando. 2005. *The San Fernando Corridors Specific Plan*. Adopted January. Available: <http://www.ci.san-fernando.ca.us/sfold/news/specific_plan/sf_corridors_sp_final.pdf>. Accessed: February 13, 2013.

³¹ City of San Fernando. 2004. *Pacoima Wash Greenway Master Plan*. June. Prepared by the Department of Landscape Architecture, California State Polytechnic University, Pomona. Available: <ftp://ftp.dpla.water.ca.gov/users/prop50/10040_LosAngeles/Attachment%208/8.%20Pacoima%20Wash%20Greenway%20-%208th%20Street%20Project/8-1%20Pacoima%20Wash%20Greenway%20Master%20Plan.pdf>. Accessed: February 22, 2013.

The following goals and objectives in the Pacoima Wash Greenway Master Plan are applicable to the project:

- Increase recreational opportunities within San Fernando and surrounding communities.
- Provide diverse recreational spaces that engage all ages and abilities.
- Identify current and future lots suitable for park space.
- Improve the connection between current and proposed park spaces and the surrounding community.
- Connect local attractions to the greenway.
- Create a comprehensive wayfinding system.
- Increase alternative transportation at all scales.
- Promote bicycling and pedestrian activity.
- Increase connections to mass transit.
- Decrease the use of vehicular transportation for local trips.
- Create alternative connections between neighborhoods, schools, and commercial centers currently divided by the wash.

City of San Fernando Natural Hazard Mitigation Plan

The Natural Hazard Mitigation Plan has the following guidelines related to emergency services:³²

- Develop policies that ensure mitigation protects critical services, facilities, and infrastructure.
- Encourage collaboration between emergency services and community stakeholders to improve emergency-response capabilities.
- Integrate natural-hazard mitigation activities with emergency plans and procedures.

2.2 Methodology

This report has been prepared in accordance with CEQA and NEPA. Relevant policies are described in Section 2.1, and thresholds of significance are identified in Section 2.3. An assessment of community and neighborhood impacts includes evaluating the effects of a transportation project on a community and its quality of life. The assessment should address all items important to people, such as mobility, safety, business and employment effects, relocation, isolation, and other community issues.³³

The following five steps were used to assess potential impacts from the project on the existing communities and neighborhoods in the project study area:

³² City of San Fernando. 2007. *Natural Hazard Mitigation Plan*. Adopted May 21. Prepared by Roger Mason, LECMgt. Available: <http://hazardmitigation.calema.ca.gov/docs/lhmp/San_Fernando_City_of_Natural_Hazards_Mitigation_Plan.pdf>. Accessed: February 21, 2013.

³³ U.S. Department of Transportation, Federal Highway Administration. 1996. *Community Impact Assessment: A Quick Reference for Transportation*. September. Available: http://www.ciitrans.net/CIA_Quick_Reference/Purpose.html. Accessed: March 7, 2013.

- Communities, neighborhoods, and special districts in the project study area were identified, described, and visually represented on a map of the project study area.
- Community issues and attitudes were described.
- Demographic information for the census tracts within the project study area was collected and compared to the demographics for the City and County of Los Angeles.
- Transportation facilities and policies were identified and described in the project study area.
- An assessment of the project's impacts on communities and neighborhoods was conducted.

In order to complete the steps described above, the following methodology was used.

2.2.1 Community and Neighborhoods Maps

To provide a visual representation of communities, neighborhoods, and special districts in the project study area, maps were obtained from several City of Los Angeles and San Fernando planning documents and overlain onto maps showing the boundaries of the project study area.

2.2.2 Community Issues and Attitudes

City planning documents were reviewed and summarized to describe the community issues and attitudes in the project study area. In addition, a series of public meetings were held as follows:

Community Outreach Meetings

- Panorama High School, October 24, 2011
- Pacoima Neighborhood City Hall, October 25, 2011
- Van Nuys Civic Center, October 28, 2011
- San Fernando Regional Pool Facility, April 12, 2012
- St. Mary Byzantine Catholic Church, April 17, 2012
- Valley Presbyterian Hospital, April 18, 2012
- Mission Community Police Station, May 1, 2012
- Sepulveda Middle School, October 2, 2012
- San Fernando High School, October 4, 2012
- Panorama High School, October 6, 2012
- Marvin Braude Civic Center, October 9, 2012

Scoping Meetings

- Panorama High School, March 16, 2013
- The City of San Fernando Regional Pool Facility, March 19, 2013
- Arleta High School, March 21, 2013
- Marvin Braude Constituent Service Center, March 27, 2013

Project Information Meetings

- San Fernando Regional Pool Facility, November 6, 2014
- Marvin Braude Constituent Service Center, November 12, 2014
- Pacoima Neighborhood City Hall, November 13, 2014

2.2.3 Demographic Information

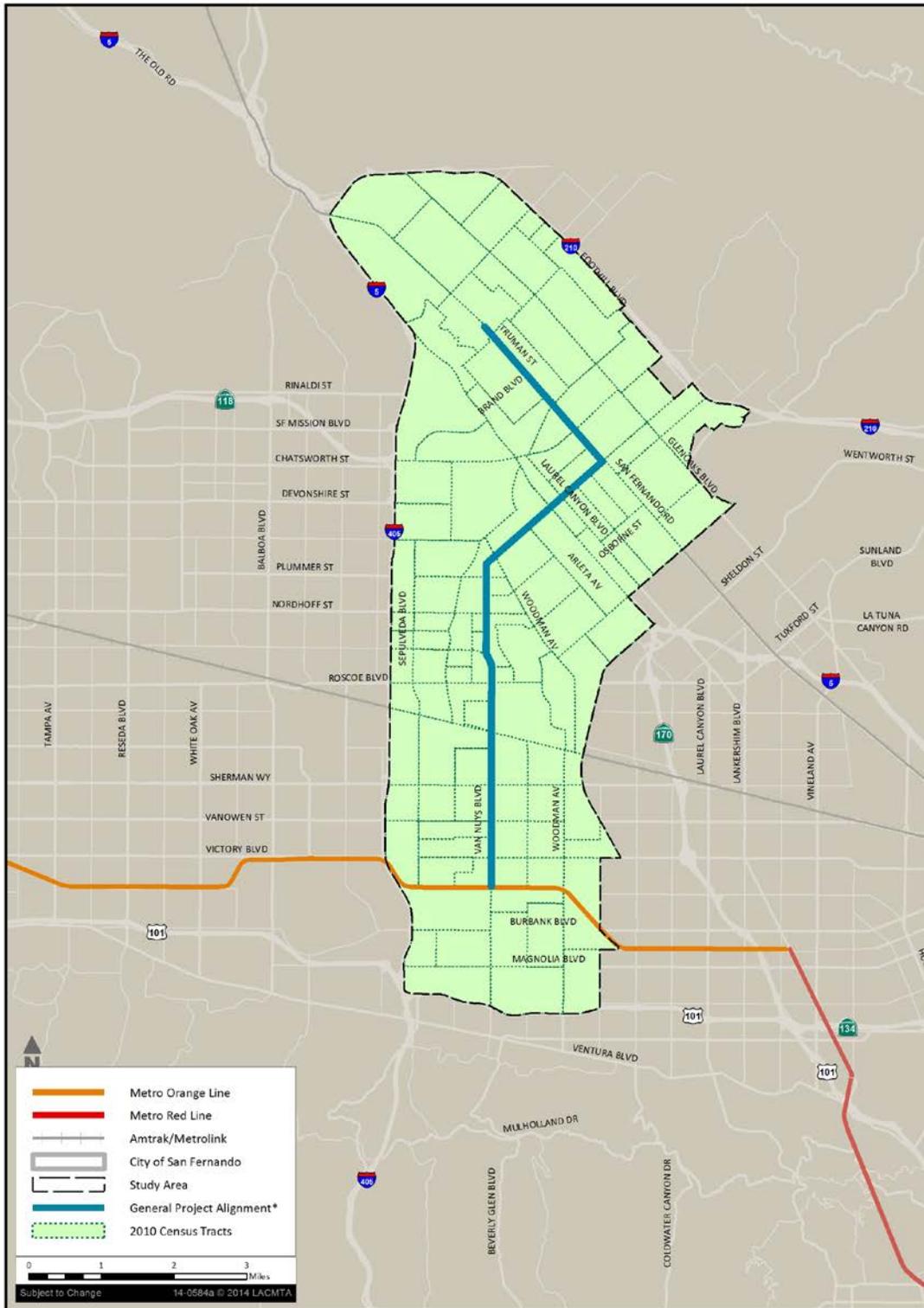
Demographic information for the project study area was obtained from the United States (U.S.) U.S. Census. The U.S. Census Bureau organizes each county into statistical subdivisions called census tracts and gives each a unique identification number. The project study area includes 108 census tracts (2010 boundaries) as shown in Table 2-1. These census tract boundaries are depicted in Figure 2-1.

Table 2-1 – Census Tracts in the Study Area

2010 Census Tracts					
City of Los Angeles					
1041.05	1064.05	1174.05	1200.2	1273	1287.02
1041.08	1064.06	1174.07	1200.3	1275.2	1288.01
1042.01	1064.07	1174.08	1201.03	1277.11	1288.02
1042.03	1064.08	1175.1	1201.04	1277.12	1289.1
1043.1	1065.1	1175.2	1201.05	1278.03	
1043.2	1065.2	1175.3	1201.06	1278.04	
1044.01	1066.04	1190.01	1201.07	1278.05	
1044.03	1066.48	1190.02	1201.08	1278.06	
1044.04	1066.49	1192.01	1203	1279.1	
1045	1070.1	1192.02	1204	1279.2	
1046.1	1070.2	1193.1	1235.1	1281.01	
1046.2	1091	1193.2	1235.2	1281.02	
1047.01	1094	1193.4	1236.02	1282.1	
1047.03	1095	1193.41	1245	1282.2	
1047.04	1096.01	1193.42	1246	1283.02	
1048.1	1096.03	1194	1271.02	1283.03	
1048.21	1096.04	1197	1271.03	1284	
1048.22	1171.01	1198	1271.04	1285	
1061.14	1171.02	1199	1272.1	1286.01	
1064.03	1172.01	1200.1	1272.2	1286.02	
City of San Fernando					
3201	3202.01	3202.02	3203		

Source: U.S. Census Bureau, 2010

Figure 2-1: Census Tracts in the Study Area



*Alignment generalized for clarity at this scale.

Source: Esri, 2013; U.S. Census Bureau, 2010b

Where partial census tracts were included in the project study area, the percentage of each tract within the project study area was calculated using Geographic Information System (GIS) software products manufactured by Esri, a company that supplies GIS mapping software, solutions, services, map applications, and data.³⁴ The census information was then adjusted to include only the portion of each tract within the project study area.

Generally, the U.S. Census Bureau surveys the U.S. population each decade and gathers population and housing statistics. In addition, the U.S. Census Bureau conducts the American Community Survey, which is a survey of a random sample of the U.S. population to provide annual estimates of transportation and income statistics. For the purpose of this report, population and housing statistics were gathered from the most recent U.S. Census (2010), and transportation and income statistics were gathered from the American Community Survey (2006-2010).^{35,36} To understand trends over the last decade, these statistics were compared with information from the previous Census (2000).³⁷ The following statistics were obtained for the census tracts within the project study area, as well as for the City and County of Los Angeles for comparison with the project study area:

- Population Change (2000 to 2010)
- Racial and Ethnic Characteristics
- Age and Sex Characteristics
- Median Household Income
- Housing Units and Household size
- Mode of Transportation to Work
- Transportation Dependency by Age and Vehicle Ownership

Transportation dependency by age and median household income in the project study area were visually represented by mapping 2010 census data onto the project study area map.

2.2.4 Transportation Facilities and Policies

In addition, highway facilities, public transportation services, and transportation development policies were also identified and described in the project study area by researching City of Los Angeles and City of San Fernando planning documents and websites, and Google Maps.³⁸ Highway facilities in the project study area were also visually represented by overlaying them onto maps showing the boundaries of the project study area.

³⁴ Esri. 2013. Esri - GIS Mapping Software, Solutions, Services, Map Apps, and Data. Maps throughout this report were created using ArcGIS® software by Esri. ArcGIS® and ArcMap™ are the intellectual property of Esri and are used herein under license. Copyright © Esri. All rights reserved. For more information about Esri® software, please visit www.esri.com.

³⁵ U.S. Census Bureau. 2010b. *2010 Census*. Detailed Tables Generated by Mandy Jones using American FactFinder. Available: <<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>>. Accessed February 13, 2013.

³⁶ U.S. Census Bureau. 2010a. *American Community Survey, 2006-2010*. Detailed Tables Generated by Mandy Jones Using American FactFinder. Available: <<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>>. Accessed February 13, 2013.

³⁷ U.S. Census Bureau. 2000. *2000 Census*. Detailed Tables Generated by Mandy Jones using American FactFinder. Available: <<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>>. Accessed: February 13, 2013.

³⁸ Google, Inc. 2013. *Google Maps*. Available: <<http://maps.google.com/>>. Accessed: February 13, 2013.

2.2.5 Community and Neighborhood Impact Assessment

The methodology for assessing the project's impacts on communities and neighborhoods was modeled after guidelines provided in *Community Impact Assessment: A Quick Reference for Transportation*, produced by the U.S. Department of Transportation, Federal Highway Administration.³⁹ The reference guide lists several impacts to address in a community impact assessment:

Mobility and Access Impacts

- Changes in access to public transportation, businesses, and community resources
- Changes in pedestrian and bicycle access
- Changes in emergency access

Social and Economic Impacts

- Population, business, and employment growth
- Displacement of housing and people
- Changes in community cohesion and interaction
- Changes in quality of life or social values
- Short-term economic impacts from construction

Physical Impacts

- Changes in land use patterns
- Changes in aesthetic character
- Safety impacts and other physical intrusions (e.g., dust, noise, and odors)
- Physical division of communities

Because of the interdisciplinary nature of a community impact assessment, the analysis of the project's impacts on communities and neighborhoods drew upon the analyses for other impact areas, such as land use, aesthetics, growth, and safety and security. In addition, the results of community outreach meetings, as detailed in Section 2.2.2 of this report, have been incorporated into the analysis, because the meeting discussions provided information on potential impacts of concern to the community. Other tools and techniques to complete the impact assessment included comparisons to similar Metro transit improvement projects, as well as mapping overlays that plotted physical characteristics, demographics, and project alternatives.

The impact analysis also took into consideration the likelihood of impacts; the scale, severity, and extent of impacts; the duration of the impacts over time; the reversibility of the impacts; direct and indirect impacts; and cumulative or counterbalancing impacts.

After potential impacts to communities and neighborhoods were identified, any potentially substantial adverse impacts were addressed through avoidance, minimization, mitigation, or

³⁹ U.S. Department of Transportation, Federal Highway Administration. 1996. *Community Impact Assessment: A Quick Reference for Transportation*. September. Available: http://www.fhwa.dot.gov/environment/cia/quick_reference. Accessed: March 7, 2013.

enhancement measures, as necessary, with the incorporation of public input from the community outreach process.

2.3 Significance Thresholds

Significance thresholds are used to determine whether a project may have a significant environmental effect. The significance thresholds for the project, as defined by federal and state regulations and guidelines, are discussed below.

2.3.1 Federal

NEPA requires federal agencies to determine if an undertaking would significantly affect the environment; however, NEPA does not include specific significance thresholds. According to the CEQ Regulations for Implementing NEPA, the determination of significance under NEPA is based on context and intensity.⁴⁰

Context relates to the various levels of society where impacts could result, such as society as a whole, the affected region, the affected interests, and the locality. The intensity of an effect relates to several factors, including the degree to which the impact would affect public health and safety; the proximity of a project to sensitive resources; and the degree to which effects on the quality of the human environment are likely to be highly controversial or involve unique or unknown risks.

Under NEPA, the context and intensity of the project's effects are discussed in this report regardless of any threshold levels, and mitigation measures are included where reasonable.

2.3.2 State

CEQA requires state and local government agencies to identify the significant environmental effects of proposed actions; however, CEQA does not describe specific significance thresholds. According to the Governor's Office of Planning and Research (OPR), significance thresholds for a given environmental effect are at the discretion of the lead agency and are the levels at which the lead agency finds the effects of the project to be significant.⁴¹

As discussed in Section 2.1.2, an economic or social change by itself is not to be considered a significant effect on the environment under CEQA; however, if a social or economic change results in a physical change, then social or economic changes may be considered in determining whether the physical change is significant. Because the project would result in physical changes to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

2.3.2.1 State CEQA Guidelines

The CEQA Guidelines define "significant effect on the environment" as: "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project

⁴⁰ CEQ (Council on Environmental Quality). n.d. *Regulations for Implementing NEPA, 40 CFR Section 1508*. Available: <<http://ceq.hss.doe.gov/nepa/regs/ceq/1508.htm>>. Accessed: February 15, 2013.

⁴¹ OPR (State of California, Governor's Office of Planning and Research). 1994. *Thresholds of Significance: Criteria for Defining Environmental Significance*. September. Available: <<http://ceres.ca.gov/ceqa/more/tas/Threshold.html>>. Accessed: February 12, 2013.

including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance” (CEQA Guidelines, Section 15382).⁴²

The CEQA Guidelines do not describe specific significance thresholds. However, Appendix G of the CEQA Guidelines lists a variety of potentially significant effects related to community and neighborhood impacts. As outlined in Appendix G, a project may have a significant effect on communities and neighborhoods if the project would:

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.
- 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).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people necessitating the construction of replacement housing elsewhere.
- Substantially degrade the existing visual character or quality of the site and its surroundings.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.
- Physically divide an established community.

2.3.2.2 L.A. CEQA Thresholds Guide

The City of Los Angeles CEQA Thresholds Guide for Population and Housing, as well as Land Use Compatibility, states that a determination of significance shall be made on a case-by-case basis, considering the following factors:⁴³

Transportation

- The amount of pedestrian activity at project access points.
- Design features/physical configurations that affect the visibility of pedestrians and bicyclists to drivers entering and exiting the site, and the visibility of cars to pedestrians and bicyclists.
- The type of bicycle facility the project driveway(s) crosses and the level of utilization.

⁴² California Natural Resources Agency. 2010c. *State CEQA Guidelines, 14 CCR Section 15382*. Available: <<http://ceres.ca.gov/ceqa/guidelines/art20.html>>. Accessed: February 15, 2013.

⁴³ City of Los Angeles. 2006a. *L.A. CEQA Thresholds Guide*. Available: <http://environmentla.com/programs/table_of_contents.htm>. Accessed: February 13, 2013.

- The physical conditions of the site and surrounding area, such as curves, slopes, walls, landscaping or other barriers, that could result in vehicle/pedestrian, vehicle/ bicycle or vehicle/vehicle impacts.

Population and Housing

- The degree to which the project would cause growth (i.e., new housing or employment generators) or accelerate development in an undeveloped area that exceeds project/planned levels for the year of project occupancy/buildout, and that would result in an adverse physical change in the environment.
- Whether the project would introduce unplanned infrastructure that was not previously evaluated in the adopted Community Plan or General Plan.
- The extent to which growth would result without implementation of the project.

Population and Housing Displacement

- The total number of residential units to be demolished, converted to market rate, or removed through other means as a result of the proposed project, in terms of net loss of market-rate and affordable units.
- The current and anticipated housing demand and supply of market rate and affordable housing units in the project area.
- The land use and demographic characteristics of the project area and the appropriateness of housing in the area.
- Whether the project is consistent with adopted City and regional housing policies such as the Framework and Housing Elements, Housing and Urban Development Consolidated Plan and Comprehensive Housing Affordability Study policies, redevelopment plan, Rent Stabilization Ordinance, and the Regional Comprehensive Plan.

Aesthetics

- The amount or relative proportion of existing features or elements that substantially contribute to the valued visual character or image of a neighborhood, community, or localized area, which would be removed, altered, or demolished.
- The degree of contrast between proposed features and existing features that represent the area's valued aesthetic image.
- The degree to which the project would contribute to the area's aesthetic value.

Hazards

- The degree to which the project may require a new, or interfere with an existing, emergency response or evacuation plan, and the severity of the consequences.

Noise

- Construction activities lasting more than one day would exceed existing ambient exterior noise levels by 10 A-weighted decibels (dBA) or more at a noise sensitive use.
- Construction activities lasting more than 10 days in a three month period would exceed existing ambient exterior noise levels by five dBA or more at a noise sensitive use.

- Construction activities would exceed the ambient noise level by five dBA at a noise sensitive use between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, before 8:00 a.m. or after 6:00 p.m. on Saturday, or at anytime on Sunday.

Air Quality

The City of Los Angeles has not adopted specific citywide significance thresholds for air quality impacts.

Land Use Compatibility

- The extent of the area that would be impacted, the nature and degree of impacts, and the type of land uses within that area.
- The extent to which existing neighborhoods, communities, or land uses would be disrupted, divided or isolated, and the duration of the disruptions, which may include the loss of housing, businesses, or community resources.
- The number, degree, and type of secondary impacts to surrounding land uses that could result from implementation of the proposed project.

3.1 Study Area and Regional Setting

3.1.1 Study Area

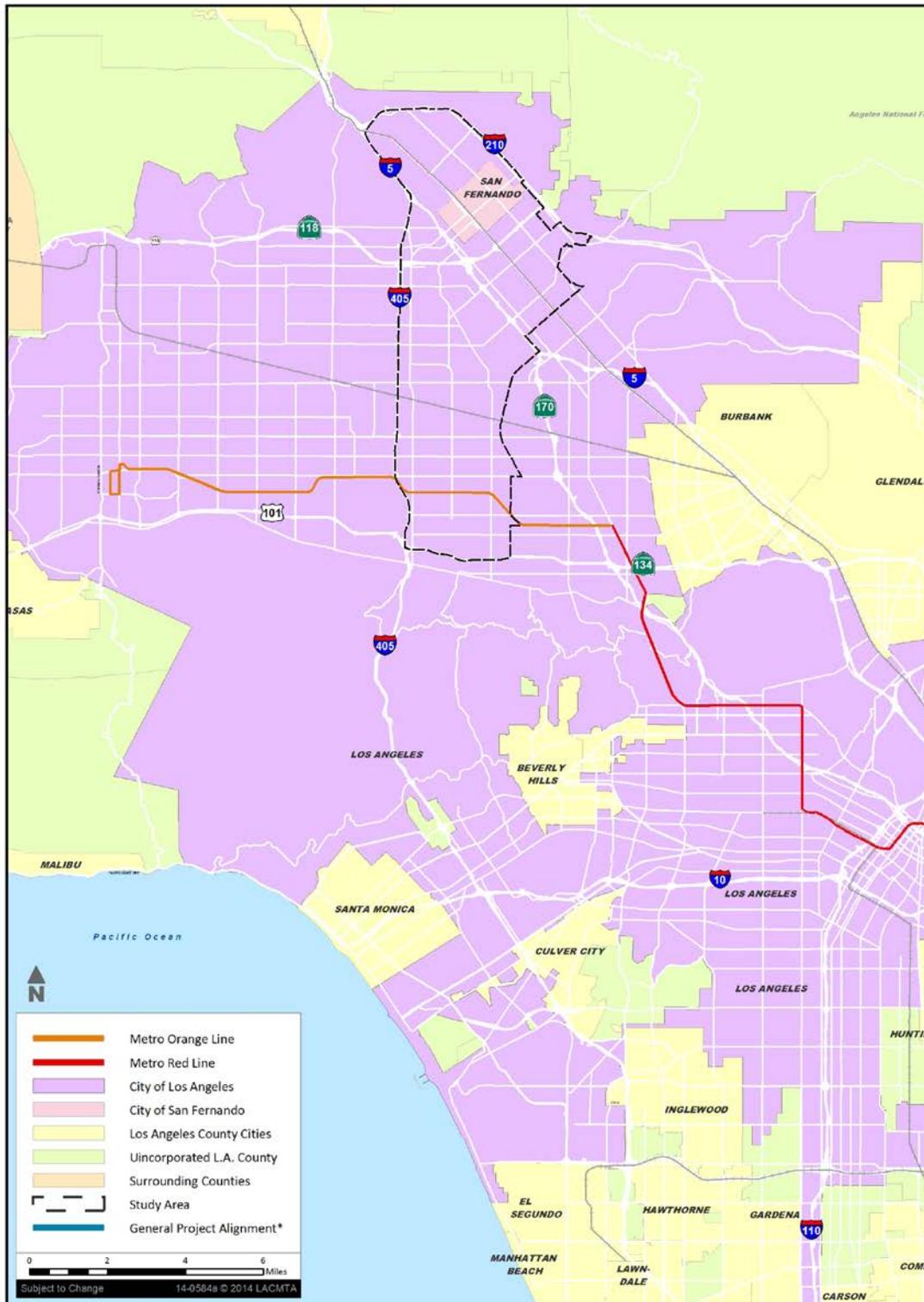
The project study area is located in the San Fernando Valley area of the City of Los Angeles (see Figure 3-1). The San Fernando Valley is an area with flat topography consisting of approximately 260 square miles, and is bounded by the Santa Susana Mountains to the northwest, the Simi Hills to the west, the Santa Monica Mountains and Chalk Hills to the south, the Verdugo Mountains to the east, and the San Gabriel Mountains to the northeast.

A project study area encompasses the area in which direct, and/or indirect effects associated with a project are likely to result. Ideally, the project study area should include all land, buildings, roadways, and transit facilities that could be directly and/or indirectly impacted by a project. In addition, identification of areas using U.S. Census Bureau information and/or municipal boundaries helps to clearly define the demographic characteristics of communities that may be affected by a project. Other somewhat less measurable elements can be considered, including subdivisions, ethnic regions, or shopping areas that give residents a sense of belonging to their neighborhoods.

For this report, a preliminary project study area was identified using information provided in the Purpose and Need Framework, site visits in October 2011 and February 2013, and aerial photographs of the project corridor. Research was performed to identify physical characteristics such as freeways, which serve to naturally delineate communities, Cities of Los Angeles and San Fernando neighborhood designations, community buildings and/or community centers, and other elements that contribute to neighborhood cohesion. The project study area was finalized after considering the information gathered during research, analyzing 2010 census tract boundaries, and evaluating the build alternatives. Potential impacts, such as those related to construction and operation, were also taken into consideration when determining the extent of the project study area. Section 2.1.7 of this report identifies 2010 census tracts that were included in the project study area.

The project study area for this report includes all persons, lands, buildings, and environment located within the boundaries depicted in Figure 3-2. The project study area is generally bound by the San Diego Freeway (Interstate 405 (I-405)) to the west, the Ventura Freeway (US-101) to the south, Fulton Avenue and the Los Angeles River to the east, and the Foothill Freeway (Interstate 210 (I-210)) to the north. The project study area lies within the jurisdiction of both the Cities of Los Angeles and San Fernando. The project study area includes residential areas, local community resources, such as local transit stops, schools, parks, and shopping centers, and public facilities, such as the Van Nuys Civic Center.

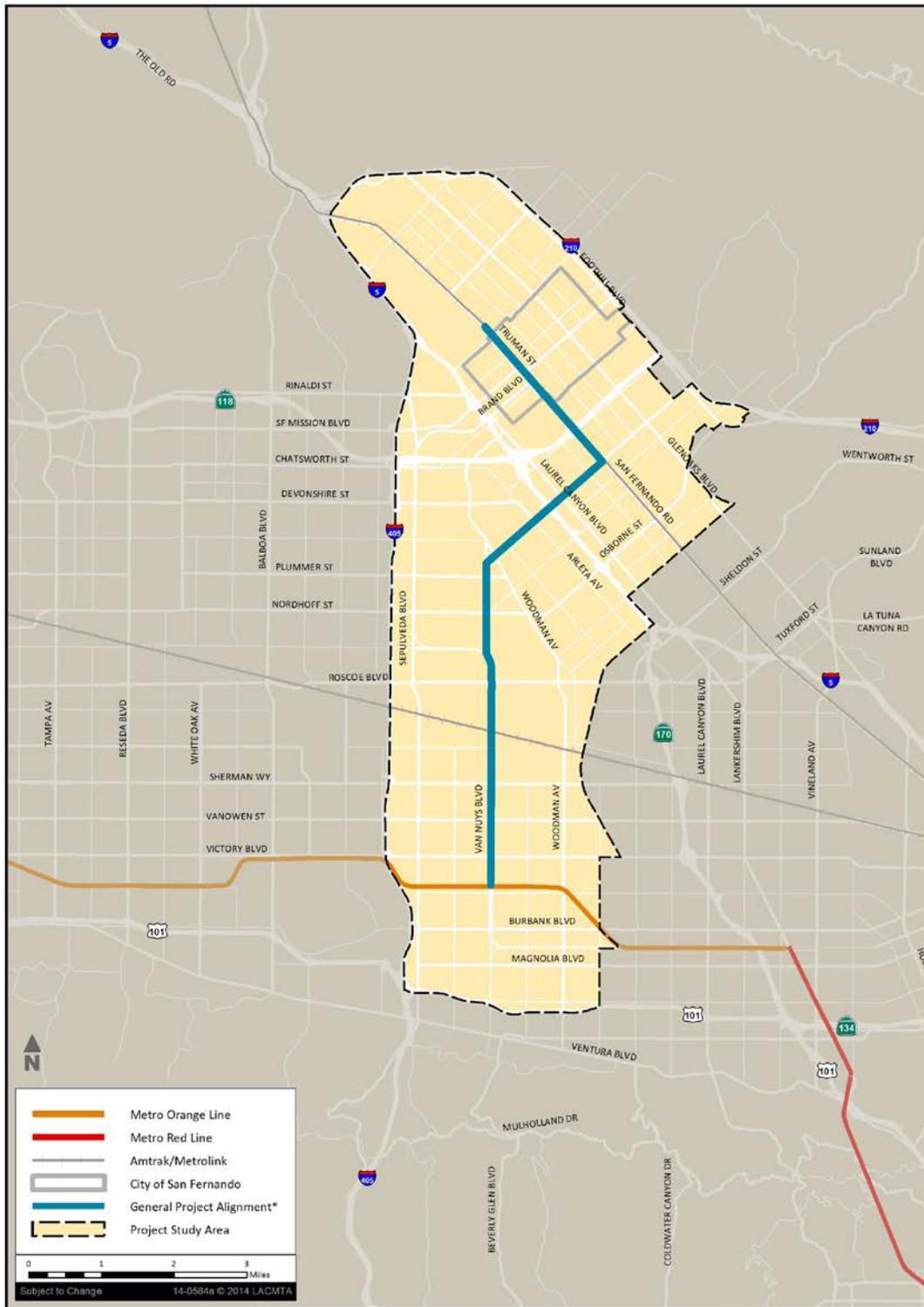
Figure 3-1: Project Vicinity



*Alignment generalized for clarity at this scale.

Source: Esri, 2013

Figure 3-2: Project Study Area for Community and Neighborhood Impact Assessment



*Alignment generalized for clarity at this scale.

Source: Esri, 2013; U.S. Census Bureau, 2010b

3.1.2 Regional Areas

A project study area is often compared with the surrounding region in order to gain perspective and identify similarities, differences, and relationships between the two areas. Generally, a region is defined as the jurisdiction that is larger than, but includes, the project study area, although some circumstances may dictate deviations from this standard. For the purpose of this Community and Neighborhood Impacts Report, two regional comparisons are used: the County of Los Angeles and the City of Los Angeles. These regional areas are shown in Figure 3-3. The City of San Fernando was not included as a regional area because the project study area is larger than the City of San Fernando; therefore, the City of San Fernando would not meet the definition of a regional area (i.e., an area that is larger than and includes the project study area).

3.2 Community and Neighborhood Setting

3.2.1 City of Los Angeles Community Planning Areas (CPAs)

Each neighborhood in the City of Los Angeles is grouped with other neighborhoods and included in a City of Los Angeles CPA. Thirty-five separate CPAs were developed to guide land use and design policies within specific portions of the City of Los Angeles. Because these development guidelines define the existing and planned characteristics of neighborhood groups, their boundaries are an important factor when assessing cohesion within the neighborhoods they include. Figure 3-4 outlines the CPA boundaries and their relationship to neighborhoods in the project study area. The CPAs that apply to the project study area are as follows:

- Van Nuys – North Sherman Oaks Community Plan⁴⁴
- Mission Hills – Panorama City – North Hills Community Plan⁴⁵
- Arleta – Pacoima Community Plan⁴⁶
- Sylmar Community Plan⁴⁷

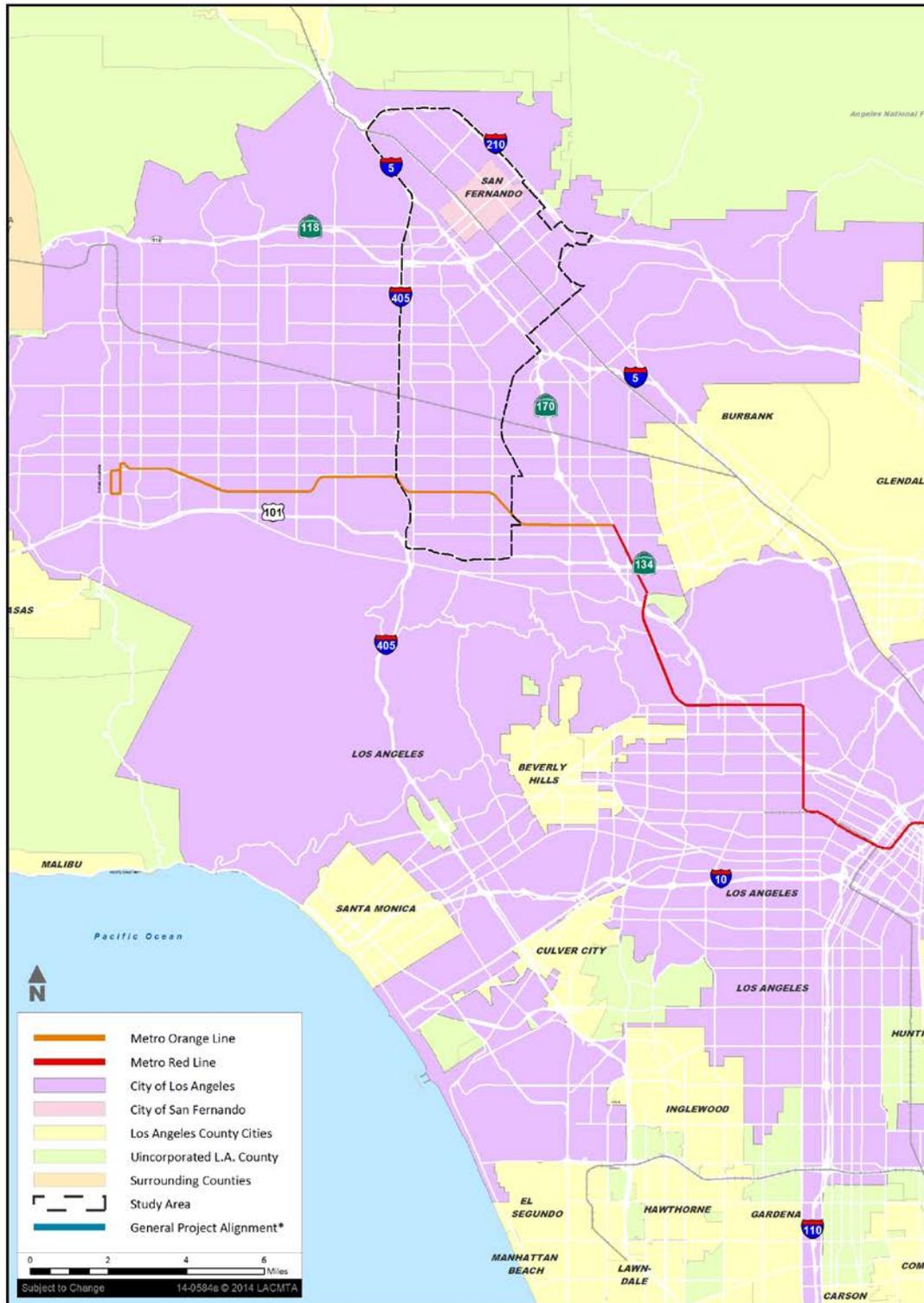
⁴⁴ City of Los Angeles. 1998d. *Van Nuys-North Sherman Oaks Community Plan*. Adopted September 9. Available: <<http://cityplanning.lacity.org/complan/pdf/vnycptxt.pdf>>. Accessed: February 13, 2013.

⁴⁵ City of Los Angeles. 1999b. *Mission Hills-Panorama City-North Hills Community Plan*. Adopted June 9. Available: <<http://cityplanning.lacity.org/complan/pdf/msscptxt.pdf>>. Accessed: February 13, 2013.

⁴⁶ City of Los Angeles. 1996. *Arleta-Pacoima Community Plan*. Approved November 6. Available: <<http://cityplanning.lacity.org/complan/pdf/arlcp.txt.pdf>>. Accessed: February 13, 2013.

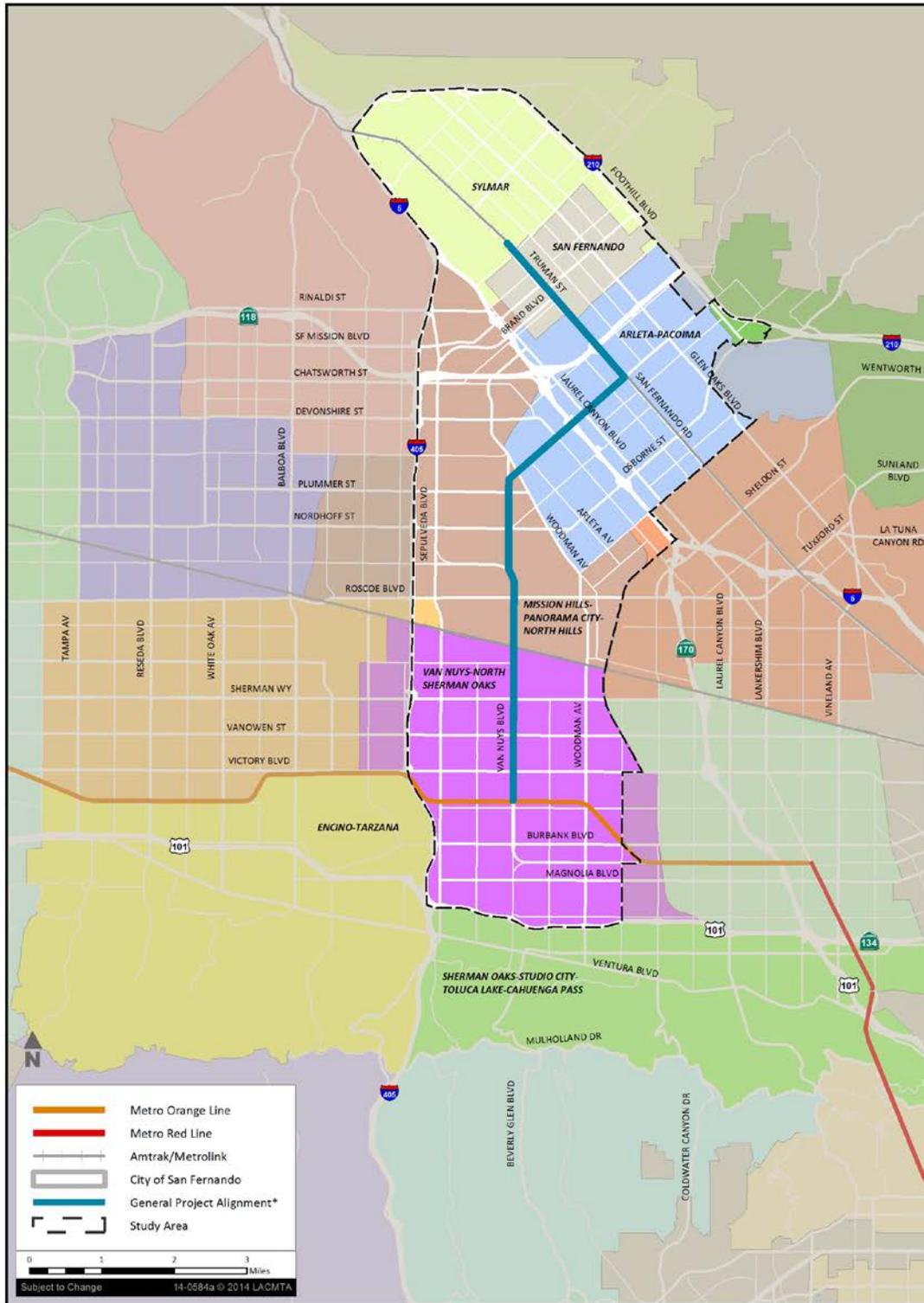
⁴⁷ City of Los Angeles. 1997. *Sylmar Community Plan*. Adopted August 8. Available: <<http://cityplanning.lacity.org/complan/pdf/sylcptxt.pdf>>. Accessed: February 16, 2013.

Figure 3-3: Community and Neighborhood Impacts Regional Areas



Source: Esri, 2013

Figure 3-4: City of Los Angeles Community Planning Areas in the Study Area



*Alignment generalized for clarity at this scale.

Source: Esri, 2013; City of Los Angeles, 2013

3.2.2 Neighborhoods

Several City of Los Angeles Certified Neighborhood Councils (neighborhoods) lie in or adjacent to the project area.⁴⁸ Some of the neighborhoods in the project study area have not yet been certified; however, their boundaries have been formally established and are used for the purposes of this report.

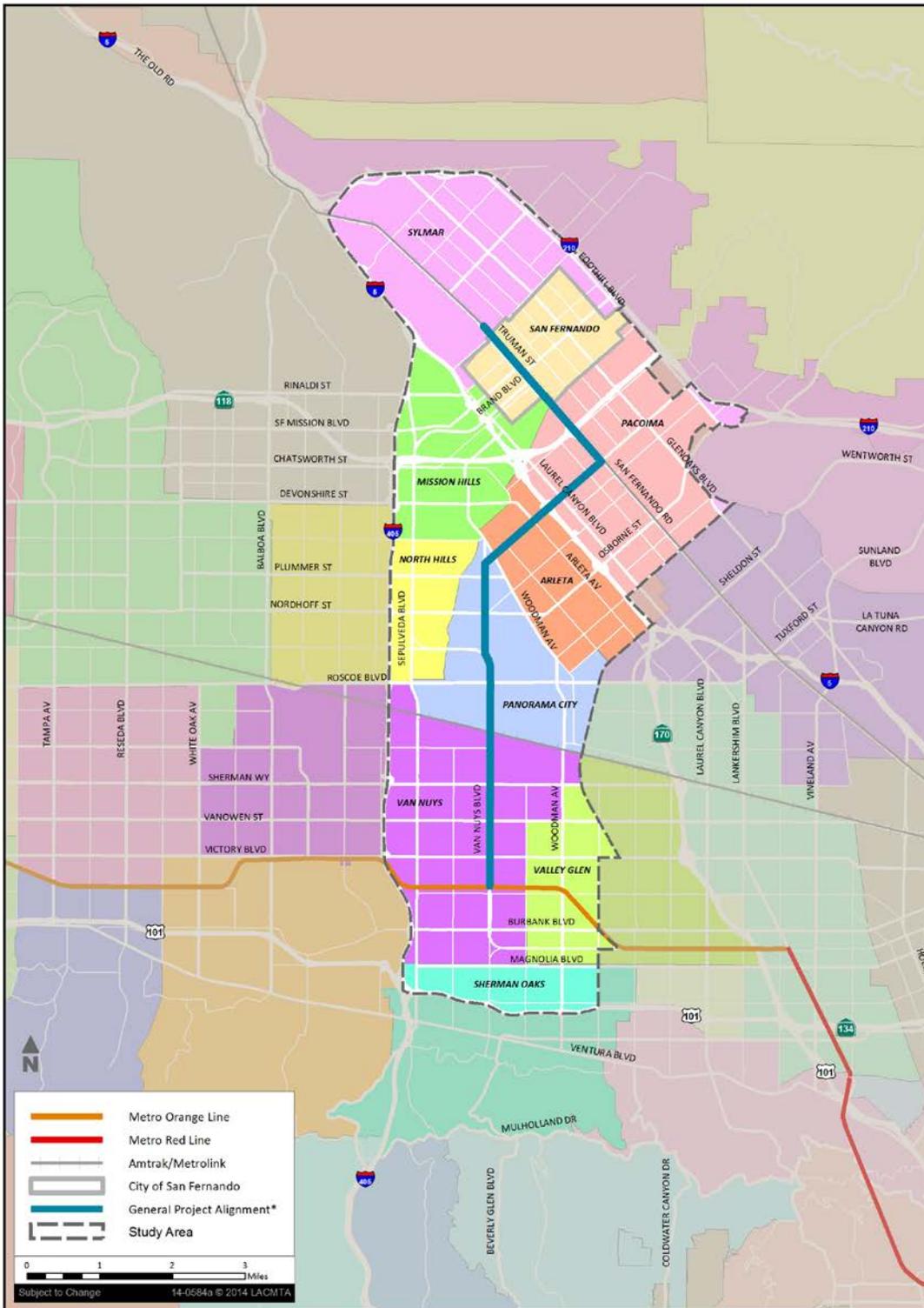
The neighborhoods are identifiable by signage posted throughout the project study area; these neighborhood designations contribute to community identity and overall cohesion. Within each neighborhood, areas of residential, commercial, industrial, religious, academic, and recreational uses are present. These land uses contribute to the cohesive layout of each individual neighborhood. The following neighborhoods are within the project study area and are shown in Figure 3-5:

- Sherman Oaks
- Valley Glen
- Van Nuys
- Panorama City
- North Hills East
- Arleta
- Mission Hills
- Pacoima
- Sylmar

In addition to these City of Los Angeles neighborhoods, the City of San Fernando is included in the project study area.

⁴⁸ City of Los Angeles Department of Neighborhood Development. n.d. *Neighborhood Council Map*. Available <www.lacityneighborhoods.com/map.htm>. Accessed: February 11, 2013.

Figure 3-5: Neighborhoods in the Study Area



*Alignment generalized for clarity at this scale.

Source: Esri, 2013; City of Los Angeles, 2013

3.2.3 Special Districts

Within the City of Los Angeles CPA boundaries and the City of San Fernando, there are several special districts. These special districts are typically in areas that offer shopping and transportation opportunities in a central location to surrounding residential developments. The special districts that are critical to measuring community cohesion within the project study area are listed below and depicted in Figure 3-6. It is important to note that not all special districts within the project study area are listed because their primary purpose is to provide development design guidelines. The guidelines are discussed separately in the Land Use Impacts Report.

The following special districts are located within the project study area:

- Van Nuys Auto Row Business Improvement District (BID)⁴⁹
- Van Nuys CBD Special Planning Area (SPA)
- Van Nuys Central Business District (CBD) Community Design Overlay District (CDO)⁵⁰
- Panorama City CDO⁵¹
- Panorama City BID⁵²
- Pacoima CDO⁵³
- San Fernando Corridors SPA
- Sylmar BID⁵⁴

⁴⁹ City of Los Angeles. 2000. *Van Nuys Auto Row Business Improvement District*. March. Available: <<http://cityplanning.lacity.org/complan/rproginfo/BID/bidmap/vnyauto.pdf>>. Accessed: February 15, 2013.

⁵⁰ City of Los Angeles. 2004c. *Van Nuys Central Business District Community Design Overlay District (CDO) Design Guidelines and Standards*. Revised August 16. Available: <<http://cityplanning.lacity.org/complan/othrplan/pdf/vnycbdcdotxt.pdf>>. Accessed: February 13, 2013.

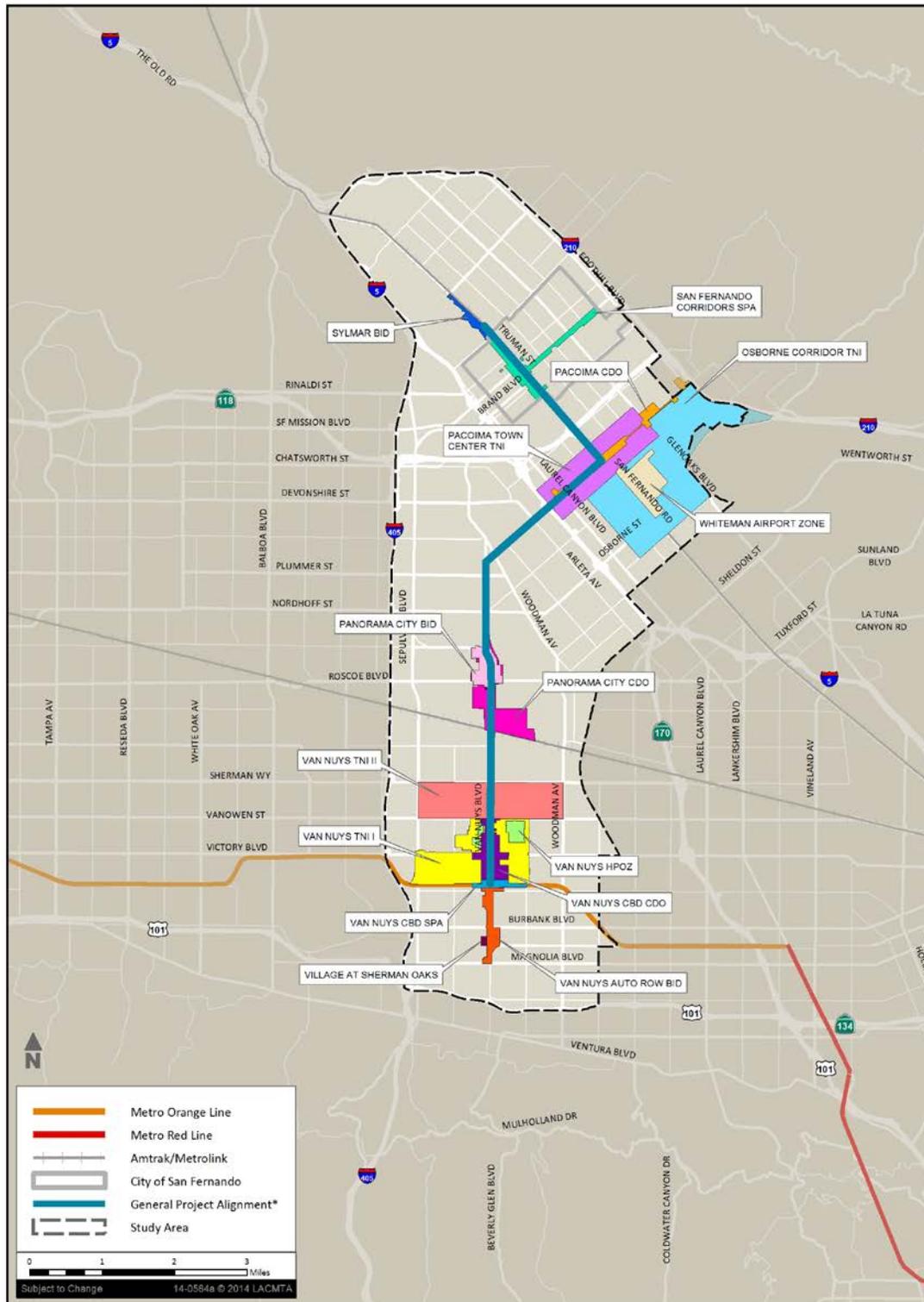
⁵¹ City of Los Angeles. 2003c. *Panorama City Community Design Overlay (CDO) Design Guidelines and Standards*. Approved March 27. Available: <http://cityplanning.lacity.org/complan/othrplan/pdf/PanoramaCityCDO_guidelines.pdf>. Accessed: February 15, 2013.

⁵² City of Los Angeles. 2009. *Panorama City Business Improvement District*. Approved March.

⁵³ City of Los Angeles. 2003b. *Pacoima Community Design Overlay (CDO) Design Guidelines and Standards*. Approved May 22. Available: <<http://cityplanning.lacity.org/complan/othrplan/pdf/PacoimaCDOGuidelines.pdf>>. Accessed: February 13, 2013.

⁵⁴ Sylmar Chamber of Commerce. 2012. *The Vista at Sylmar*. Available: <<http://www.sylmarchamber.com/sylmarbid.html>>. Accessed: November 10, 2014.

Figure 3-6: Special Districts, TNIs, and Special Zones in the Study Area



*Alignment generalized for clarity at this scale.

Source: Esri, 2013; City of Los Angeles, 2013

3.2.4 Targeted Neighborhood Initiatives

Several TNIs are included in the project study area, as shown on Figure 3-6. These initiatives strategically revitalize Los Angeles neighborhoods through several community-driven neighborhood improvement programs, including transportation and pedestrian corridor improvements that provide street trees, street lights, benches, and bus shelters. There are four TNIs within the project study area:

- Van Nuys Boulevard TNI⁵⁵
- Van Nuys TNI II⁵⁶
- Pacoima Town Center TNI⁵⁷
- Osborne Corridor TNI⁵⁸

3.2.5 Special Zones

As shown on Figure 3-6, there are two special zones within the project study area:

- **Van Nuys Historic Preservation Overlay Zone (HPOZ):** Within the Van Nuys HPOZ, lots are categorized by whether they have contributing features, non-contributing features, or if the parcel is undeveloped. The Van Nuys HPOZ Preservation Plan includes guidelines to preserve the historic character of the streetscape, including paving and curbs, signage, street furniture, utilities, street lights, and sidewalks.
- **Whiteman Airport Zone:** Whiteman Airport is outside of the project corridor, but is within the project study area, just 0.5 mile southeast of the project corridor; therefore, many parcels within the project study area fall within the Whiteman Airport Zone. To avoid the construction of hazards to air navigation, Los Angeles County's Aviation Division requests that parcels within this zone report projects to the department to ensure compliance with Federal Aviation Administration requirements.⁵⁹

3.3 Community Issues and Concerns

3.3.1 Community Outreach Meetings

As outlined in Section 2.2.2, a series of community outreach meetings were held in order to gauge community concerns and potential issues that could arise within the project study area. The following issues and concerns were expressed at the community outreach meetings related to community and neighborhood impacts:

⁵⁵ City of Los Angeles. 2002. *Van Nuys Boulevard Targeted Neighborhood Initiative (TNI)*. Available: <<http://planning.lacity.org/complan/rproginfo/TNI/tniarea/vannuystni.htm>>. Accessed: November 18, 2011.

⁵⁶ City of Los Angeles. 2001c. *Van Nuys Targeted Neighborhood Initiative (TNI II)*. Available: <<http://planning.lacity.org/complan/rproginfo/TNI/tniarea/vannuys2.htm>>. Accessed: February 13, 2013.

⁵⁷ City of Los Angeles. 1998b. *Pacoima Town Center Targeted Neighborhood Initiative*. Available: <<http://cityplanning.lacity.org/complan/rproginfo/TNI/tnimap/tni-paco.pdf>>. Accessed: February 13, 2013.

⁵⁸ City of Los Angeles. 2001b. *Osborne Corridor Targeted Neighborhood Initiative (TNI)*. Available: <<http://cityplanning.lacity.org/complan/rproginfo/TNI/tnimap/osborncor.pdf>>. Accessed: February 14, 2013.

⁵⁹ City of Los Angeles Department of Building and Safety. 2011. *Zoning Information File #2418*. Effective July 25.

Mobility and Access Impacts

- Concerns about access challenges for auto dealerships along Van Nuys Boulevard.
- Concerns about changes to local bus routes and bus stops that would require passengers to walk further.
- Concerns that there would be fewer accommodations for bicycles and wheelchairs under the Curb-Running and Median-Running BRT Alternatives.
- Concerns about the adequate provision of bike lanes, paths, and/or infrastructure and bike parking.
- Concerns about providing sufficient connections to other transit modes and destinations, including the future Sepulveda Pass Corridor Project, West Los Angeles, colleges and universities, Los Angeles International Airport, Amtrak, and Metrolink.
- Concerns that there would be higher costs to construct the LRT Alternative, leading to increased fares to cover project costs.
- Concerns about the slower speeds for the Curb-Running and Median-Running BRT Alternatives (compared to the LRT Alternative), which may not relieve congestion.
- Concerns about increased congestion and traffic hazards from adding another mode of transit on roadways that are already congested.
- Concerns about the loss of on-street parking.
- Concerns about the slow and overcrowded Metro Orange Line buses and not wanting something similar on Van Nuys Boulevard.

Social and Economic Impacts

- Concerns about economic impacts on businesses during construction.
- Concerns about social justice and the San Fernando Valley not getting its fair share of transportation dollars.

Physical Impacts

- Concerns about detrimental impacts to road surfaces from increased bus use resulting from the Curb-Running and Median-Running BRT Alternatives.
- Concerns about potential accidents resulting from the LRT Alternative's faster speed compared to the Curb-Running and Median-Running BRT Alternatives.
- Concerns that there would be increased crime resulting from having additional transit options that would increase accessibility for criminals or would attract criminals to where members of the public gather.
- Concerns about the location of the maintenance facility and impacts on surrounding communities.

Outreach to the community, through public scoping meetings and other methods, will continue throughout the environmental review process. This community input is critical in assessing potential issues within the project study area; therefore, any additional information that is made available from future community outreach efforts will be taken into consideration in project development.

3.3.2 City of Los Angeles Community Plans

In addition to community outreach efforts, the following issues and opportunities have been identified in City of Los Angeles community plan documents for each respective CPA. Only the issues and opportunities that are relevant to overall community character have been included in this report. The initial formation of these community plans involved community members who helped to identify and define the needs, desires, resources, and unique nature of their communities. For this reason, the topics listed below indicate what the citizens of each CPA value within their communities.

- **Van Nuys and North Sherman Oaks.** This community plan focuses on the need to preserve single-family neighborhoods, the need for more affordable senior housing, compatibility and continuity of land uses and residential densities, lack of maintenance of existing housing stock, the deterioration of streetscapes, lack of landscaping and architectural character/scale in newer construction, and the need to improve linkages between public transportation modes.
- **Mission Hills, Panorama City, and North Hills.** This community plan focuses on the need to preserve and enhance single-family neighborhoods, lack of maintenance of existing housing stock, compatibility between land uses and residential densities, sufficient infrastructure capacity, access and proximity of employment, the need for new transit facilities, the establishment of equestrian trails, and improvement of transportation linkages by using automobile alternatives (rail, bus, bicycle, walking, etc.).
- **Arleta and Pacoima.** This community plan focuses on the quality and maintenance of existing housing, the preservation of stable neighborhoods and commercial areas, the capacity of infrastructure, lack of open space, improvement of economic vitality, inadequate transition between land uses, and the need to improve transportation linkages by using automobile alternatives (rail, bus, bicycle, walking, etc.).
- **Sylmar.** This community plan focuses on the loss of the semi-rural, suburban character of the community, the high proportion of multi-family housing, the lack of adequate infrastructure, public facilities, services for new residential development, the scarcity of affordable housing, the deterioration of the streetscape, inadequate and incompatible development in adjacent areas, the need to preserve the existing highway-oriented and neighborhood-oriented commercial uses along major arterials, the lack of office buildings and the need to encourage such development, and the need to preserve the existing industrial base as an economic asset.

The City of San Fernando General Plan also contains information related to community issues.⁶⁰ A major focus of the general plan is to involve a citizen's advisory committee to examine issues and patterns within the City of San Fernando limits. The City of San Fernando General Plan focuses on the boundaries of a viable central business district, compatibility of existing land uses, maintaining a distinct circulation network, traffic blockages resulting from railroad traffic, and the preservation and enhancement of open space.

⁶⁰ City of San Fernando. 1987. *City of San Fernando Revised General Plan*. Prepared by Castaneda & Associates. Available: <http://www.ci.san-fernando.ca.us/city_government/departments/comdev/forms_docs/General%20Plan%20-%20Complete.pdf>. Accessed: February 21, 2013.

3.4 Demographics

The discussion, tables, and figures included in this section are based on the 2000 Census, 2010 Census, and 2006-2010 American Community Survey, and are intended to provide a thorough overview of the project study area characteristics compared to the City and County of Los Angeles.

3.4.1 Population Change (2000 to 2010)

In 2000, the City recorded a population of 3,694,686 persons, and the County recorded a population of 9,519,338 persons; of these regional populations, 419,075 persons were located within the project study area (see Table 3-1), which is approximately 11.3 percent of the City of Los Angeles population and 4.4 percent of the County of Los Angeles population.

Table 3-1 – Population Change (2000 to 2010)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent Change	Number	Percent Change	Number	Percent Change
Total Population 2000	419,075	N/A	3,694,686	N/A	9,519,338	N/A
Total Population 2010	444,378	6.0	3,792,621	2.7	9,818,605	3.1

Source: U.S. Census Bureau, 2000; 2010b

In 2010, the City recorded a population of 3,792,621 persons, and the County recorded a population of 9,818,605 persons; of these regional populations, 444,378 persons were located within the project study area, which is approximately 11.7 percent of the City of Los Angeles population and 4.5 percent of the County of Los Angeles population.

Between 2000 and 2010, the population increased by 97,935 persons in the City (2.7 percent change), 299,267 persons in the County of Los Angeles (3.1 percent change), and 25,303 persons in the project study area (6.0 percent change). The rate of population growth in the project study area during that decade was higher than both the City of Los Angeles and the County of Los Angeles.

3.4.2 Racial and Ethnic Characteristics

In the 2000 and 2010 Census data sets, racial groups listed as White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, Some Other Race, and Two or More Races are categorized as “Not Hispanic” (NH). Those listed as Hispanic or Latino are not reported as a race, but as an ethnic group, and may overlap with any of the racial groups.

In 2000, all racial categories in the project study area were similar in percentage or a lower percentage than the City of Los Angeles and County of Los Angeles, with the exception of the Hispanic or Latino ethnic category (see Table 3-2). At that time, the project study area was comprised predominantly of Hispanic or Latino persons at 66.8 percent, which was 20.3 percent higher than the City of Los Angeles and 22.2 percent higher than the County of Los Angeles Hispanic or Latino populations.

Table 3-2 – Racial and Ethnic Characteristics (2000)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Population	Number	Percent of Population	Number	Percent of Population
Total Population	419,075	100.0	3,694,820	100.0	9,519,338	100.0
White (NH)	82,735	19.7	1,099,188	29.7	2,959,614	31.1
African American (NH)	18,818	4.5	401,986	10.9	901,472	9.5
American Indian/ Alaska Native (NH)	1,112	0.3	8,897	0.2	25,609	0.3
Asian (NH)	27,441	6.5	364,850	9.9	1,124,569	11.8
Native Hawaiian/ Other Pacific Islander (NH)	376	0.1	4,484	0.1	23,265	0.2
Some Other Race	673	0.2	9,065	0.2	19,935	0.2
Two or More Races	7,872	1.9	87,277	2.4	222,661	2.3
Hispanic or Latino*	280,049	66.8	1,719,073	46.5	4,242,213	44.6

Source: U.S. Census Bureau, 2000

* Because Hispanic or Latino populations are reported as an ethnic group and calculated as a percentage of all races, there is a slight margin of error. Total numbers may not always add up to 100 percent of the total population.

In 2010, all racial categories in the project study area were either the same percentage or a lower percentage than the City of Los Angeles and County of Los Angeles, with the exception of the Hispanic or Latino ethnic category (see Table 3-3). The project study area was comprised predominantly of Hispanic or Latino persons at 71.1 percent, which was 23.2 percent higher than the City of Los Angeles and 24.0 percent higher than the County of Los Angeles Hispanic or Latino populations. In addition, between 2000 and 2010, the Hispanic and Latino populations increased in the project study area, the City, and the County. These populations are discussed in more detail in the Environmental Justice Impacts Report.

Table 3-3 – Racial and Ethnic Characteristics (2010)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Population	Number	Percent of Population	Number	Percent of Population
Total Population	444,378	100.0	3,792,621	100.0	9,818,605	100.0
White (NH)	71,259	16.0	1,086,908	28.7	2,728,321	27.8
African American (NH)	15,420	3.5	347,380	9.2	815,086	8.3
American Indian/ Alaska Native (NH)	785	0.2	6,589	0.2	18,886	0.2
Asian (NH)	31,662	7.1	420,212	11.1	1,325,671	13.5
Native Hawaiian/ Other Pacific Islander (NH)	378	0.1	4,300	0.1	22,464	0.2
Some Other Race	1,186	0.3	12,057	0.3	25,367	0.3
Two or More Races	5,152	1.2	76,353	2.0	194,921	2.0
Hispanic or Latino*	318,536	71.7	1,838,822	48.5	4,687,889	47.7

Source: U.S. Census Bureau, 2010b

* Because Hispanic or Latino populations are reported as an ethnic group and calculated as a percentage of all races, there is a slight margin of error. Total numbers may not always add up to 100 percent of the total population.

3.4.3 Age Characteristics

In 2000, 35 percent of the population in the project study area was under 19 years of age, which was 5.5 percent greater than the under-19 population in the City of Los Angeles and 4 percent greater than the under-19 population in the County of Los Angeles. The percentage of persons aged 20 to 34 in the project study area (26.3percent) was approximately the same as the City of Los Angeles and County of Los Angeles. The percentage of persons aged 35 to 64 in the project study area (31.2 percent) was 3.2 percent less than the City of Los Angeles and 4.1 percent less than the County of Los Angeles. In addition, 7.6 percent of the population in the project study area was over 65, which was lower than the over-65 population in the City of Los Angeles and County of Los Angeles. Overall, in 2000, the distribution of age in the project study area was younger than in the City of Los Angeles and County of Los Angeles (see Table 3-4).

Table 3-4 – Age Characteristics (2000)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Population	Number	Percent of Population	Number	Percent of Population
Total Population	419,075	100.0	3,694,820	100.0	9,519,338	100.0
Under 19 Years	146,481	35.0	1,091,049	29.5	2,946,796	31.0
20 to 34 Years	110,104	26.3	974,004	26.4	2,283,559	24.0
35 to 64 Years	130,801	31.2	1,272,638	34.4	3,362,310	35.3
65 Years +	31,689	7.6	357,129	9.7	926,673	9.7

Source: U.S. Census Bureau, 2000

In 2010, 31.3 percent of the population in the project study area was under 19 years of age, which was 5.1 percent greater than the under-19 population in the City of Los Angeles and 3.7 percent greater than the under-19 population in the County of Los Angeles. The percentage of persons aged 20 to 34 in the project study area (24.5 percent) was about the same as that in the City and County. The percentage of persons aged 35 to 64 in the project study area (36 percent) was slightly less than in the City and County. In addition, 8.2 percent of the population in the project study area was over the age of 65, which was lower than the over-65 population in the City and County. Overall, in 2010, the distribution of age in the project study area was younger than in the City and County (see Table 3-5). Overall, between 2000 and 2010, the percentage of persons under the age of 34 decreased in the project study area, while persons over the age of 35 increased. This trend can also be seen in the City and County during the same period.

Table 3-5 – Age Characteristics (2010)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Population	Number	Percent of Population	Number	Percent of Population
Total Population	444,378	100.0	3,792,621	100.0	9,818,605	100.0
Under 19 Years	138,990	31.3	994,460	26.2	2,711,958	27.6
20 to 34 Years	108,875	24.5	953,443	25.1	2,228,519	22.7
35 to 64 Years	159,937	36.0	1,448,022	38.2	3,812,429	38.8
65 Years +	36,576	8.2	396,696	10.5	1,065,699	10.9

Source: U.S. Census Bureau, 2010b

3.4.4 Sex Characteristics

In the year 2000, there were more males than females in the project study area, with 50.3 percent male and 49.7 percent female. In contrast, there were slightly more females than males in the City of Los Angeles and County of Los Angeles, as shown in Table 3-6. Similarly, in the year 2010, there were slightly more males than females in the project study area, with 50.1 percent male and 49.9 percent female. In contrast, there were slightly more females than males in the City of Los Angeles and County of Los Angeles, as shown in Table 3-7. Overall, between 2000 and 2010, the percentage of females in the project study area increased slightly, and the percentage of males decreased slightly. City of Los Angeles and County of Los Angeles percentages remained nearly the same during that period.

Table 3-6 – Sex Characteristics (2000)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Population	Number	Percent of Population	Number	Percent of Population
Total Population	419,075	100.0	3,694,820	100.0	9,519,338	100.0
Male	210,811	50.3	1,841,805	49.8	4,704,105	49.4
Female	208,264	49.7	1,853,015	50.2	4,815,233	50.6

Source: U.S. Census Bureau, 2000

Table 3-7 – Sex Characteristics (2010)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Population	Number	Percent of Population	Number	Percent of Population
Total Population	444,378	100.0	3,792,621	100.0	9,818,605	100.0
Male	222,474	50.1	1,889,064	49.8	4,839,654	49.3
Female	221,904	49.9	1,903,557	50.2	4,978,951	50.7

Source: U.S. Census Bureau, 2010b

3.4.5 Median Household Income

Table 3-8 and Table 3-9 include the median household income levels for the project study area, the City of Los Angeles, and the County of Los Angeles populations in 2000 and 2010. In 2000, the median household income within the project study area was \$39,727, which was higher than the median income in the City of Los Angeles (\$36,687) and lower than the County of Los Angeles (\$42,189). Between 2000 and 2010, median income increased within the project study area, the City of Los Angeles, and the County of Los Angeles. In 2010, the median household income in the project study area was \$48,706, which was lower than the median income in the City of Los Angeles (\$49,138) and the County of Los Angeles (\$55,476). Figure 3-7 depicts the median household income by census tract in the project study area.

Table 3-8 – Median Household Income (2000)

	Study Area	City of Los Angeles	County of Los Angeles
Median Household Income in the Past 12 Months	\$39,727	\$36,687	\$42,189

Source: U.S. Census Bureau, 2000

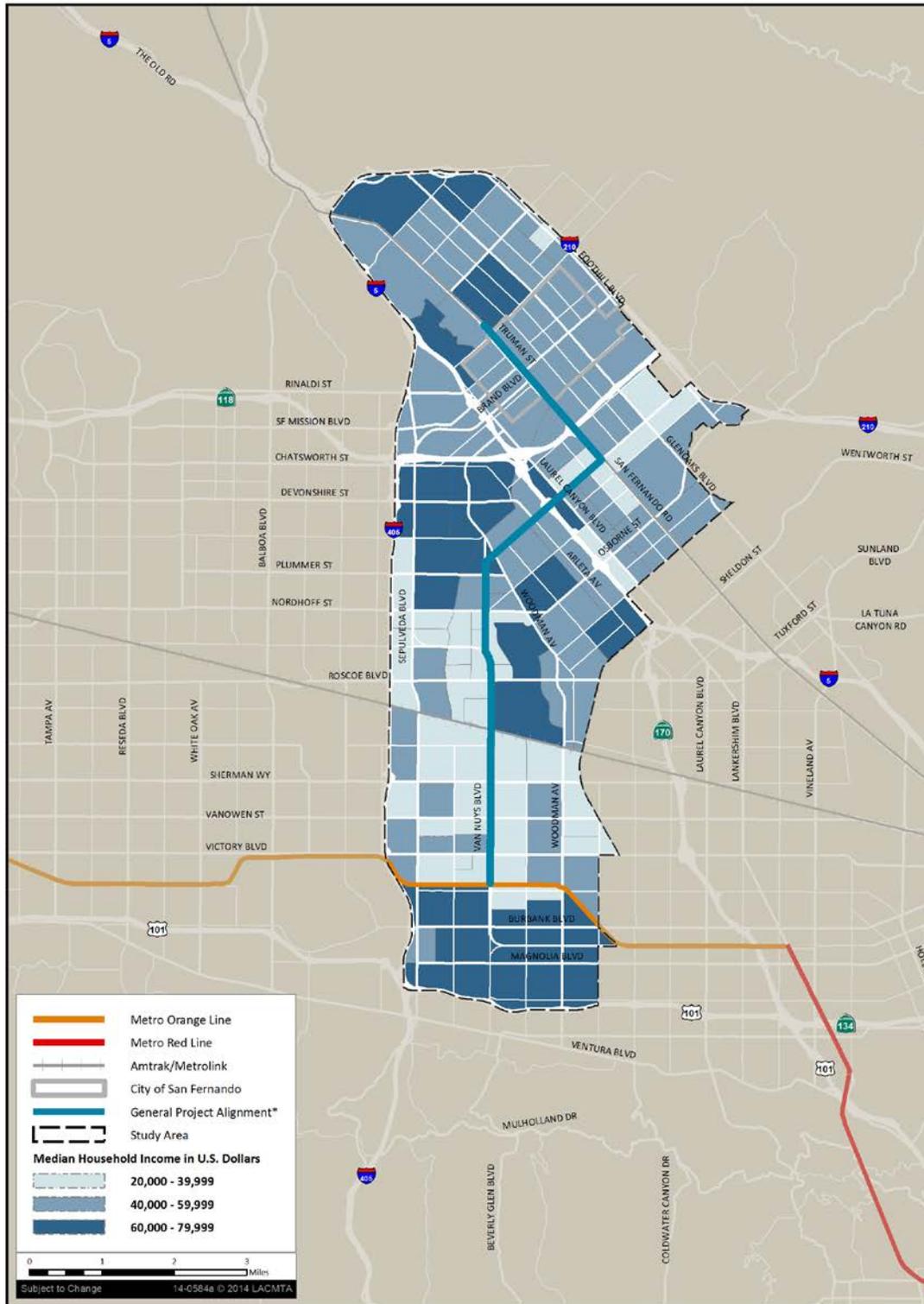
Table 3-9 – Median Household Income (2010)

	Study Area	City of Los Angeles	County of Los Angeles
Median Household Income in the Past 12 Months	\$48,706	\$49,138	\$55,476

Source: U.S. Census Bureau, 2010a

Some census tracts within the project study area have noticeable concentrations of low-income populations. These populations are discussed in further detail in the Environmental Justice Impacts Report.

Figure 3-7: Median Household Income in the Study Area



*Alignment generalized for clarity at this scale.

Source: Esri, 2013; U.S. Census Bureau 2010

3.4.6 Housing Units

A housing unit is a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters. In 2000, there were 122,204 housing units in the project study area; 96.8 percent of those units were occupied, while 3.2 percent were vacant (see Table 3-10). Compared to the City of Los Angeles and County of Los Angeles, the project study area had a slightly higher occupancy rate. Of the occupied units in the project study area, 44.8 percent were owner-occupied, and 55.2 percent were renter-occupied. The project study area contained a lower percentage of renter-occupied units compared to the City of Los Angeles (61.4 percent), but a higher percentage compared to the County of Los Angeles (52.1 percent).

Table 3-10 – Housing Units (2000)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Housing Units	Number	Percent of Housing Units	Number	Percent of Housing Units
Total Housing Units	122,204	100.0	1,337,706	100.0	3,270,909	100.0
Occupied Units	118,353	96.8	1,275,412	95.3	3,133,774	95.8
Vacant Units	3,850	3.2	62,294	4.7	137,135	4.2
	Number	Percent of Occupied Units	Number	Percent of Occupied Units	Number	Percent of Occupied Units
Owner-Occupied	53,076	44.8	491,882	38.6	1,499,744	47.9
Renter-Occupied	65,278	55.2	783,530	61.4	1,634,030	52.1

Source: U.S. Census Bureau, 2000

In 2010, there were 131,012 housing units in the project study area; 94.2 percent of those units were occupied while 5.8 percent were vacant (see Table 3-11). Compared to the City of Los Angeles and County of Los Angeles, the project study area had a higher occupancy rate. Of the occupied units in the project study area, 40.6 percent were owner-occupied, and 53.6 percent were renter-occupied. The project study area contained a lower percentage of renter-occupied units compared to the City (61.8 percent), but a higher percentage compared to the County (52.3 percent).

Between 2000 and 2010, the vacancy rate in the project study area increased from 3.2 percent to 5.8 percent. The units that were renter-occupied in the project study area fell from 55.2 percent to 53.6 percent; the City of Los Angeles and County of Los Angeles reflected opposite trends within the same decade.

Table 3-11 – Housing Units (2010)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Housing Units	Number	Percent of Housing Units	Number	Percent of Housing Units
Total Housing Units	131,012	100.0	1,413,995	100.0	3,445,076	100.0
Occupied Units	123,381	94.2	1,318,168	93.2	3,241,204	94.1
Vacant Units	7,631	5.8	95,827	6.8	203,872	5.9
	Number	Percent of Occupied Units	Number	Percent of Occupied Units	Number	Percent of Occupied Units
Owner-Occupied	53,201	40.6	503,863	38.2	1,544,749	47.7
Renter-Occupied	70,179	53.6	814,305	61.8	1,696,455	52.3

Source: U.S. Census Bureau, 2010b

3.4.7 Household Size

Table 3-12 and Table 3-13 show household size in the project study area, in the City of Los Angeles, and in the County of Los Angeles in 2000 and 2010. In 2000, 1-person and 2-person households were the most common in the project study area, representing 19.1 percent and 21.2 percent of households, respectively. These percentages were lower than the corresponding percentages in the City of Los Angeles and County of Los Angeles. The percentages of larger households, such as 5-person, 6-person, and 7- or more-person households were greater in the project study area than in the City of Los Angeles and County of Los Angeles. Overall, in 2000, households in the project study area were larger than those in the City of Los Angeles and County of Los Angeles.

Table 3-12 – Household Size (2000)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Households	Number	Percent of Households	Number	Percent of Households
Total Households	118,353	100.0	1,275,412	100.0	3,133,774	100.0
1-Person Households	22,567	19.1	363,457	28.5	771,854	24.6
2-Person Households	25,131	21.2	339,493	26.6	820,368	26.2
3-Person Households	18,637	15.7	190,933	15.0	494,369	15.8
4-Person Households	19,143	16.2	167,395	13.1	465,159	14.8
5-Person Households	13,777	11.6	100,303	7.9	277,327	8.8
6-Person Households	8,313	7.0	53,993	4.2	146,730	4.7
7+-Person Households	10,765	9.1	59,838	4.7	157,967	5.0

Source: U.S. Census Bureau, 2000

In 2010, 1-person and 2-person households represented the highest percentage within the project study area, with 18.1 percent and 20.8 percent respectively. These percentages were lower than the corresponding percentages in the City of Los Angeles and County of Los Angeles. Furthermore, the percentages of larger households, such as 4-person, 5-person, 6-person, and 7- or more-person households were greater in the project study area than they were in the City and County. Overall, in 2010, households in the project study area were larger than those in the City and County.

Between 2000 and 2010, the percentage of 1-person and 2-person households in the project study area decreased. The percentage of 3-person, 4-person, 5-person, and 7- or more-person households increased. Overall, households in the project study area grew in size between 2000 and 2010, while household size in the City of Los Angeles and County of Los Angeles did not substantially change.

Table 3-13 – Household Size (2010)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Households	Number	Percent of Households	Number	Percent of Households
Total Households	128,586	100.0	1,318,168	100.0	3,241,204	100.0
1-Person Households	23,231	18.1	373,529	28.3	784,928	24.2
2-Person Households	26,751	20.8	356,194	27.0	853,003	26.3
3-Person Households	20,679	16.1	200,443	15.2	526,937	16.3
4-Person Households	21,336	16.6	174,043	13.2	486,027	15.0
5-Person Households	15,497	12.1	101,385	7.7	283,566	8.8
6-Person Households	8,837	6.9	52,087	4.0	144,956	4.5
7+Person Households	12,254	9.5	60,487	4.6	161,787	5.0

Source: U.S. Census Bureau, 2010b

3.4.8 Transportation Characteristics

3.4.8.1 Mode of Transportation to Work

In 2000, the primary mode of transportation to work in the project study area, the City of Los Angeles, and the County of Los Angeles was single-occupancy car, truck, or van, as shown in Table 3-14. In the project study area, 20.6 percent of workers carpooled to work, which was greater than the City of Los Angeles (14.7 percent) and the County of Los Angeles (15.1 percent). In addition, 8.2 percent of workers in the project study area used public transportation to get to work, which was greater than the County of Los Angeles (6.5 percent), but lower than the City of Los Angeles (10.1 percent). Fewer workers in the project study area used bicycles (0.5 percent), compared to the City of Los Angeles (0.6 percent) and the County of Los Angeles (0.6 percent).

Table 3-14 – Mode of Transportation to Work (2000)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Estimated Workers	Number	Percent of Estimated Workers	Number	Percent of Estimated Workers
Total Estimated Workers	156,400	100.0	1,494,895	100.0	3,858,750	100.0
Car, Truck, or Van (alone)	98,751	63.1	982,735	65.7	2,714,944	70.4
Car, Truck, or Van (carpool)	32,255	20.6	220,408	14.7	582,020	15.1
Public Transportation (excludes taxis)	12,881	8.2	150,697	10.1	250,834	6.5
Bicycle	802	0.5	9,052	0.6	24,015	0.6
Taxi, Motorcycle, Other	2,782	1.8	53,386	3.6	113,004	2.9
Walk	4,413	2.8	16,922	1.1	39,290	1.0
Work at Home	4,515	2.9	61,695	4.1	134,643	3.5

Source: U.S. Census Bureau, 2000

In 2010, the primary mode of transportation to work in the project study area, the City of Los Angeles, and the County of Los Angeles remained single-occupancy car, truck, or van, as shown in Table 3-15. The percentage of workers in the project study area that carpooled to work (16.7 percent) was greater than the City of Los Angeles (10.8 percent) and the County of Los Angeles (11.3 percent). The percentage of workers in the project study area that used public transportation to get to work (8.0 percent) was lower than the City of Los Angeles (10.8 percent) and slightly higher than the County of Los Angeles (7.1 percent).

Overall, between 2000 and 2010, single-occupancy vehicles and persons working from home in the project study area increased, while carpooling, taxi, motorcycle, walking to work, and other similar modes of travel decreased. These trends were similar for the City of Los Angeles and County of Los Angeles during that period.

Table 3-15 – Mode of Transportation to Work (2010)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Estimated Workers	Number	Percent of Estimated Workers	Number	Percent of Estimated Workers
Total Estimated Workers	192,413	100.0	1,747,957	100.0	4,399,339	100.0
Car, Truck, or Van (alone)	131,142	68.2	1,175,818	67.3	3,173,055	72.1
Car, Truck, or Van (carpool)	32,218	16.7	188,666	10.8	497,964	11.3
Public Transportation (excludes taxis)	15,315	8.0	192,261	11.0	311,701	7.1
Bicycle	989	0.5	14,710	0.8	32,423	0.7
Taxi, Motorcycle, Other	2,052	1.1	24,630	1.4	57,930	1.3
Walk	4,409	2.3	61,811	3.5	125,816	2.9
Work at Home	6,290	3.3	90,061	5.2	200,450	4.6

Source: U.S. Census Bureau, 2010a

3.4.8.2 Transportation Dependency by Age

The transportation-dependent population by age is normally identified as persons between the ages of 5 to 17 years old, as well as those 65 years and over. In 2000, the transportation-dependent population by age was 30.0 percent in the project study area, which was greater than in the City of Los Angeles (28.5 percent) and in the same as the County of Los Angeles (30.0 percent), as shown in Table 3-16.

Table 3-16 – Transportation Dependency by Age (2000)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Population	Number	Percent of Population	Number	Percent of Population
Total Population	419,075	100.0	3,694,820	100.0	9,519,338	100.0
Under 5 Years (not dependent)	39,453	9.4	285,976	7.7	737,631	7.7
5 to 17 Years (dependent)	93,905	22.4	695,335	18.8	1,930,345	20.3
18 to 64 Years (not dependent)	254,028	60.6	2,356,380	63.8	5,924,689	62.2
65 Years + (dependent)	31,689	7.6	357,129	9.7	926,673	9.7
Total Dependent Population	125,594	30.0	1,052,464	28.5	2,857,018	30.0

Source: U.S. Census Bureau, 2000

In 2010, the transportation-dependent population by age in the project study area (28.2 percent) was higher than in the City of Los Angeles (26.9 percent) and marginally lower than in the County of Los Angeles (28.7 percent), as shown in Table 3-17. Figure 3-8 displays the percentage of the transportation-dependent population by age in each census tract within the project study area.

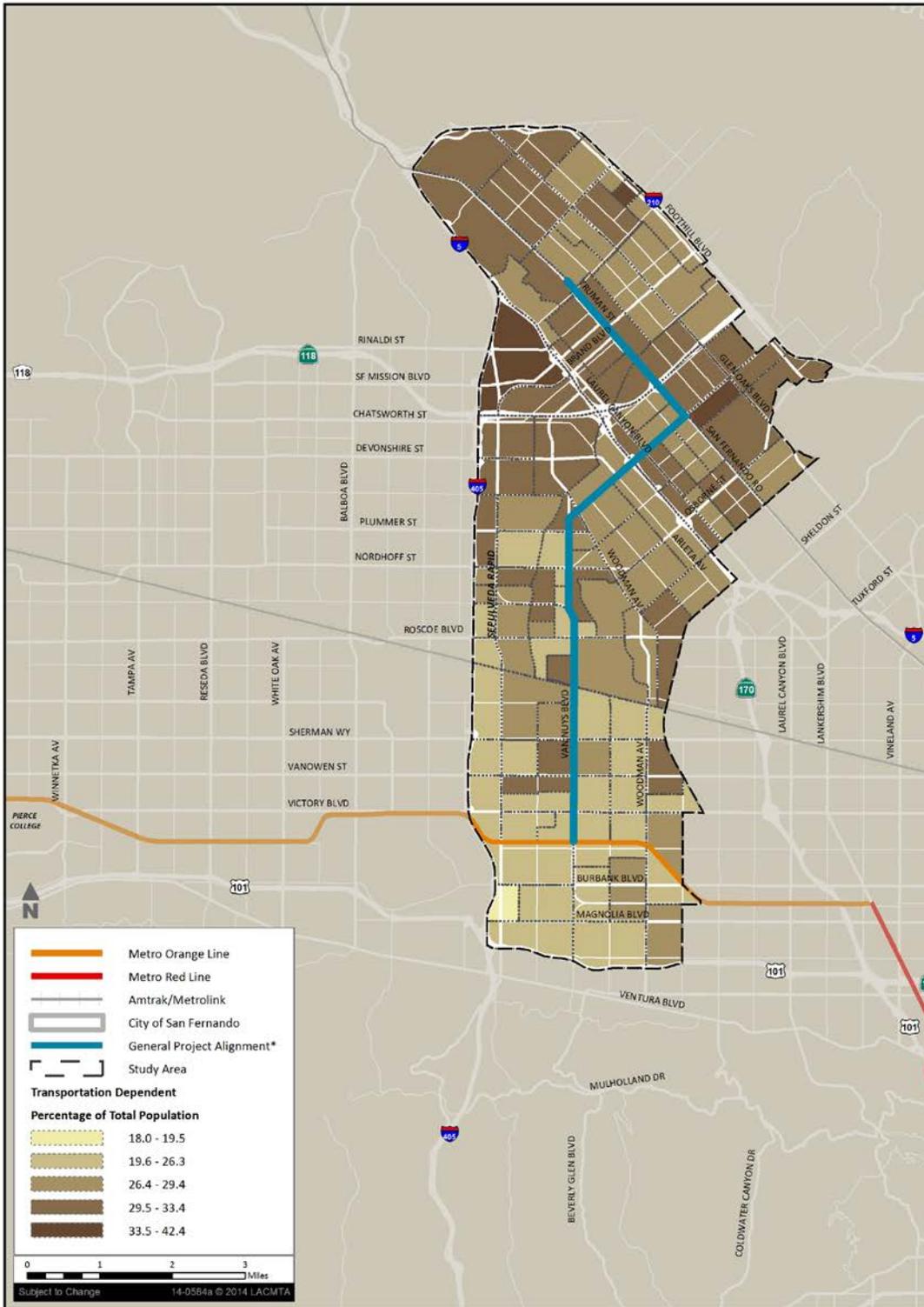
Between 2000 and 2010, the transportation-dependent population by age in the project study area decreased, with a corresponding decrease in the City of Los Angeles and County of Los Angeles. This was due to a decrease in the population ages 5 to 17.

Table 3-17 – Transportation Dependency by Age (2010)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Population	Number	Percent of Population	Number	Percent of Population
Total Population	444,378	100.0	3,792,621	100.0	9,818,605	100.0
Under 5 Years (not dependent)	35,548	8.0	251,097	6.6	645,793	6.6
5 to 17 Years (dependent)	88,696	20.0	623,428	16.4	1,756,415	17.9
18 to 64 Years (not dependent)	283,558	63.8	2,521,400	66.5	6,350,698	64.7
65 Years + (dependent)	36,576	8.2	396,696	10.5	1,065,699	10.9
Total Dependent Population	125,272	28.2	1,020,124	26.9	2,822,114	28.7

Source: U.S. Census Bureau, 2010b

Figure 3-8: Transportation Dependency by Age in the Study Area



Source: Esri, 2013; U.S. Census Bureau, 2010b

3.4.8.3 Transportation Dependency by Vehicle Ownership

Table 3-18 and Table 3-19 show transportation dependency resulting from a lack of vehicle ownership. Because 2000 data was reported by household, and 2010 data was reported by individuals over the age of 16, only percentages were compared.

Table 3-18 – Transportation Dependency by Vehicle Ownership (2000)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Estimated Households	Number	Percent of Estimated Households	Number	Percent of Estimated Households
Total Estimated Households	118,321	100.0	1,337,668	100.0	3,270,909	100.0
No Vehicle Available	15,254	12.9	210,770	15.8	393,309	12.0
1 or More Vehicles	103,067	87.1	1,064,588	79.6	2,740,465	83.8

Source: U.S. Census Bureau, 2000

Table 3-19 – Transportation Dependency by Vehicle Ownership (2010)

	Study Area		City of Los Angeles		County of Los Angeles	
	Number	Percent of Individuals over Age 16	Number	Percent of Individuals over Age 16	Number	Percent of Individuals over Age 16
Total Individuals over Age 16	190,521	100.0	1,726,583	100.0	4,355,343	100.0
No Vehicle Available	9,737	5.1	126,225	7.3	207,074	4.8
1 or More Vehicles	180,784	94.9	1,600,358	92.7	4,148,269	95.2

Source: U.S. Census Bureau, 2010a

In 2000, 12.9 percent of households in the project study area did not own a vehicle, which was lower than in the City of Los Angeles and slightly higher than the County of Los Angeles. In 2010, 5.1 percent of individuals over age 16 in the project study area did not own a vehicle, which was also lower than in the City and slightly higher than in the County. Between 2000 and 2010, vehicle ownership increased in the project study area, the City of Los Angeles, and the County of Los Angeles. Therefore, transportation dependency by vehicle ownership decreased during that period.

3.5 Transportation Facilities and Policies

3.5.1 Highway Facilities

As shown in Figure 3-9, several major highway facilities border and traverse the project study area, including the US-101, the I-405, the I-5, SR-118, and the I-210. The SR-170 is approximately two miles to the east of the project study area. Highway facilities may serve to naturally delineate community areas or create boundaries. Highway facilities in the project study area provide regional access to and from Van Nuys Boulevard, Sepulveda Boulevard, San Fernando Road, and the transit facilities within the project corridor.

3.5.2 Public Transportation

The project study area also includes several mass-transit service facilities used by local populations, including:

- Van Nuys Boulevard Metro Rapid Bus
- Sepulveda Boulevard Metro Rapid Bus
- San Fernando Road Rapid Bus
- Metro Orange Line
- Metrolink service to the Van Nuys station on the Ventura County Line
- Metrolink service to the Sylmar/San Fernando station on the Antelope Valley line
- Amtrak service between Santa Barbara/San Luis Obispo and Los Angeles Union Station/San Diego

Many of the transit routes have a direct relationship with the project study area because they cross over Van Nuys Boulevard or San Fernando Road, or they include stations along the project corridor.

3.5.3 Transportation Development Policies

According to the City of Los Angeles General Plan, transportation improvements within the greater Los Angeles area are focused on re-working the existing system, and transitioning to a more transit-based system that will encourage transit-oriented development and improve area circulation and health for area residents. Van Nuys Boulevard, in conjunction with other roadways within the project corridor, is part of a larger traffic congestion-relief plan for public transportation within the project study area and within the region.

4.1 No-Build Alternative

4.1.1 Mobility and Access Impacts

The No-Build Alternative would not result in changes to existing mobility and access in the project study area. This alternative would not involve any new transportation infrastructure, construction, or major service changes beyond what is identified in Metro's 2009 LRTP and SCAG's 2012-2035 RTP/SCS. Existing Metro Rapid and Local bus service would continue to operate along the project corridor and existing or planned pedestrian and bicycle projects would continue to be implemented on Van Nuys Boulevard and connecting east/west facilities. The No-Build Alternative would also include other planned projects, including various freeway and arterial roadway upgrades, expansions to the Metro Rapid Bus system, upgrades to the Metrolink system, and the proposed California High Speed Rail project. Therefore, the No-Build Alternative would not result in changes to existing or planned pedestrian and bicycle access, access to public transportation, or vehicular access to businesses and community resources within the communities and neighborhoods in the project study area.

This alternative would not achieve the improvements in circulation within the existing community that would result from the proposed build alternatives. Community mobility would continue to deteriorate with the increased regional traffic congestion that is expected between now and 2040, resulting in a long-term reduction in access to public transportation, businesses, and community resources, as well as reduced emergency vehicle access. In addition, this alternative would not result in any actions to implement Metro's Complete Streets Policy.

4.1.2 Social and Economic Impacts

The No-Build Alternative would not result in changes to existing social and economic conditions in the project study area. This alternative would not induce population growth, result in changes to businesses or employment rates, displace housing or people, or result in changes to community cohesion, interaction, quality of life, or social values. More information on economic impacts is provided in the Economic and Fiscal Impacts Report prepared for the project.

This alternative would not achieve the improvements in circulation within the existing community that would result from the proposed build alternatives. Under this alternative, worsening regional traffic congestion that is expected between now and 2040 may result in reduced access to local businesses, which could hinder local economic growth.

4.1.3 Physical Impacts

The No-Build Alternative would not result in changes to the physical environment, including changes in aesthetic character or land use patterns, and would not result in safety impacts or introduce physical intrusions to communities and neighborhoods in the project study area. Under this alternative, transportation facilities would operate entirely within existing transportation corridors,

and no physical barriers would be introduced that would divide the existing communities surrounding the project corridor. However, the No-Build Alternative would not achieve the improvements in circulation within the existing community that would result from the proposed build alternatives.

4.1.4 Impact Conclusions

Under NEPA, the No-Build Alternative would have no effect on communities and neighborhoods because this alternative would not result in changes to mobility and access, social or economic conditions, or physical conditions in the project study area.

Under CEQA, the No-Build Alternative would have no impact on communities and neighborhoods because this alternative would not decrease the performance or safety of public transit, bicycle, or pedestrian facilities, induce substantial population growth, displace people or housing, substantially degrade existing visual character or quality, interfere with emergency access, result in air quality, noise, or odor impacts, or physically divide established communities.

4.2 Transportation Systems Management Alternative

4.2.1 Mobility and Access Impacts

The TSM Alternative would be expected to result in beneficial changes to existing mobility and access in the project study area. This alternative includes the same transportation infrastructure projects as the No-Build Alternative, plus enhanced bus frequencies for the existing Metro Rapid Bus 761 and the Local 233 lines, which would provide additional mobility and access benefits for the communities and neighborhoods in the project study area. Therefore, the TSM Alternative would maintain pedestrian and bicycle access, enhance access to public transportation through increased bus frequencies, and result in improved access to businesses and community resources within the communities and neighborhoods in the project study area. In addition, this alternative would be expected to result in beneficial changes to emergency vehicle access. The TSM Alternative may result in higher transit ridership, which could reduce traffic congestion as compared to the No-Build Alternative, facilitating faster response times for emergency services.

Enhanced bus frequencies under this alternative would not substantially improve regional mobility. Therefore, community mobility would likely continue to deteriorate with the increased regional traffic congestion expected between now and 2040. In addition, this alternative would not result in any actions to implement Metro's Complete Streets Policy.

4.2.2 Social and Economic Impacts

More information on economic impacts is provided in the Economic and Fiscal Impacts Report prepared for the project. The TSM Alternative would not be expected to result in substantial social and economic changes in the project study area. More frequent bus service may require additional drivers, providing employment opportunities; however, there is already a substantial employment base and residential population in the San Fernando Valley, and therefore potential employment opportunities would not be expected to induce substantial population growth in the project study area. In addition, the proposed improvements under this alternative would not displace housing or people, and would

not be expected to result in substantial changes to community cohesion, interaction, quality of life, or social values.

Under the TSM Alternative, enhanced bus frequencies would provide an increased availability of transit service, which could stimulate the local economy by facilitating access to local businesses. However, this alternative would not substantially improve regional mobility, and community access would likely continue to deteriorate with increasing regional traffic congestion expected between now and 2040. Therefore, any social or economic benefits resulting from the TSM Alternative could eventually be cancelled out by increased traffic congestion, which could result in reduced operating speeds, and service reliability, and a long-term reduction in access to local businesses.

4.2.3 Physical Impacts

The TSM Alternative would include traffic signalization improvements, bus stop amenities and improvements, and bus schedule restructuring. This alternative would not be expected to result in substantial changes to the physical environment, including changes in aesthetic character and land use patterns, and would not result in safety impacts, or introduce substantial physical intrusions to communities and neighborhoods in the project study area. Minor modifications to the roadway network would be expected to enhance the existing transportation network, would be compliant with Americans with Disabilities Act (ADA) guidelines, and would not be expected to result in pedestrian, bicycle, and/or vehicle safety impacts. In addition, the TSM Alternative would operate entirely within existing transportation corridors, and would not introduce physical barriers that would divide the existing communities surrounding the project corridor. This alternative, however, would not achieve the improvements in circulation within the existing community that would result from the proposed build alternatives.

4.2.4 Impact Conclusions

Under NEPA, the TSM Alternative would have minor beneficial effects on communities and neighborhoods because this alternative would enhance mobility and access in the project study area, and would not result in adverse effects on social, economic, or physical conditions in the project study area.

Under CEQA, the TSM Alternative would have less than significant impacts on communities and neighborhoods, because this alternative would enhance the performance of the public transit system and would not decrease the performance of bicycle or pedestrian facilities, induce substantial population growth, displace people or housing, substantially degrade existing visual character or quality, result in substantial noise, air quality, or odor impacts, or physically divide established communities.

4.3 Build Alternative 1 – Curb-Running Bus Rapid Transit Alternative

4.3.1 Mobility and Access Impacts

4.3.1.1 Changes in Access to Public Transportation, Businesses, and Community Resources

Under the Curb-Running BRT Alternative, the BRT line would enhance connections to public transportation within the project study area and across the region, in compliance with Metro's Complete Streets Policy. This alternative would improve community mobility by providing an alternative to driving that would increase access to public transportation, businesses, and community resources in the project study area. Existing motor vehicle turns into and out of cross streets and driveways may be maintained, and no changes would be made to existing turning movements.

All curbside parking may be prohibited on Van Nuys Boulevard and San Fernando Road, which could require vehicles to park further away from businesses and community resources. Nighttime parking may be permitted on these roadways. On-street parking would still be available on all connecting streets where parking is currently permitted, and many businesses and community resources may have dedicated parking lots that would provide sufficient off-street parking. In addition, more people may use transit as a result of the project, which could reduce the need for parking. Therefore, access would not be substantially affected by the Curb-Running BRT Alternative, and this alternative would result in improved mobility and access in the project study area.

ADA regulations and California state law guarantee the civil rights of individuals with disabilities to receive equal access to all public transportation services. These laws require that transit services and vehicles be readily accessible to, and usable by, individuals with a wide range of disabilities and who use mobility aids, wheelchairs, attendants, service animals, and respirators or portable oxygen supplies.

Under this alternative, accommodations would be provided to ensure that stations and vehicles are accessible to all customers, including those with disabilities, in compliance with ADA guidelines. Designated areas for wheelchairs would be provided on transit vehicles with appropriate securement devices (tie-downs) and occupant restraints (seat belts). To ease boarding and alighting, customers with a disability who use a wheelchair would be allowed to board first and alight first. Transit operators would be responsible to use lift ramps appropriately, assist the customer in reaching the designated securement area, and apply the wheelchair securements, including the use of lap and shoulder belts (upon the request of the customer). Additional designated seating areas would be available for seniors and people with disabilities, away from the wheelchair securement area.

4.3.1.2 Changes in Pedestrian and Bicycle Access

The Curb-Running BRT Alternative would retain pedestrian access on sidewalks along the project corridor, in compliance with Metro's Complete Streets Policy. However, some pedestrian routes may be lengthened where minor intersections would be permanently closed as part of project implementation. All existing Metro Rapid Bus stops would be upgraded with ADA-compliant design enhancements. Other modifications required to accommodate the BRT improvements would also comply with ADA guidelines.

The City's Bicycle Plan designates Van Nuys Boulevard as part of the "Backbone Bicycle Network," which plans an interconnected system facilitating mobility on key arterials.⁶¹ In addition, the City's Mobility Plans calls for dedicated bicycle lanes along the entire length of Van Nuys Boulevard.⁶² Under the Curb-Running BRT Alternative, the existing Class II bike lanes on Van Nuys Boulevard north of Parthenia Street would be removed to make room for the dedicated transit lanes. These changes would conflict with the City's Bicycle Plan and Mobility Plan because designated bicycle lanes on Van Nuys Boulevard would not be feasible with the implementation of this alternative. An existing bikeway designated as part of the County's Master Bicycle Plan, located along the Metro-owned railroad right-of-way in the City of San Fernando, would remain under this alternative.

The City's Bicycle Plan and Mobility Plan include planned bicycle lanes on Woodman Avenue (one mile to the east of and parallel to Van Nuys Boulevard) between Ventura Boulevard and the Osborne Street and Nordhoff Street corridors. Bicycle lanes are also planned to connect the Osborne Street corridor to San Fernando Road. To use the planned bicycle lanes on Woodman Avenue, bicyclists would need to travel one mile to the east of Van Nuys Boulevard, which may be an inconvenience for some bicyclists depending on their final destination. In addition, under this alternative, bicycles would need to share a lane with other vehicles along the project corridor, which could result in safety impacts from the increased potential for bicycle collisions. Therefore, the removal of the Class II bike lanes and the decreased safety for bicyclists could substantially affect bicycle access along the project corridor.

The City's General Plan Transportation Element designates Van Nuys Boulevard as a primary transit priority street,⁶³ and the transit accommodations under this alternative would only be feasible with the removal of the bicycle lanes. In addition, as stated in Metro's Complete Streets Policy, a number of streets might not provide accommodations for all modes of transportation due to physical right-of-way constraints, which is the case for this alternative. The project would be consistent with Metro's Complete Streets Policy to prioritize public transit modes based on the transportation needs of the community, as designated in the City's General Plan Transportation Element. While public transit would be a priority along the corridor with project implementation, the project would also facilitate bicycle access in surrounding areas by providing bicycle accommodations at BRT stations and on buses, including bicycle racks, so that passengers may leave their bicycles at the stations or bring them onto buses.

As discussed in Section 2.1.3.4, the City of Los Angeles Great Streets Initiative proposes streetscape improvements to strengthen connections and improve walkability and bikeability along portions of Van Nuys Boulevard within the project corridor. The initiative includes creating plazas and parklets, implementing improvements to curbs, and installing street lighting, street trees, and street furniture. The City of Los Angeles Great Streets Initiative is being implemented in anticipation of the proposed project; therefore, the project would not interfere with improvements associated with the initiative.

⁶¹ City. March 2011. *2010 Bicycle Plan*. Available: <<http://planning.lacity.org/cwd/gnlpln/transelt/NewBikePlan/Txt/LA%20CITY%20BICYCLE%20PLAN.pdf>>. Accessed: April 6, 2015.

⁶² City of Los Angeles. 2015. *Mobility Plan 2035, An Element of the General Plan*. Available: <http://planning.lacity.org/documents/policy/mobilityplnmemo.pdf>. Accessed: September 30, 2015.

⁶³ City of Los Angeles. 1997. *Map B.2, Transportation Element of the General Plan, Transit Priority Arterial Streets in the City of Los Angeles*. Available: <<http://planning.lacity.org/cwd/gnlpln/transelt/TEMaps/B2Trnt.gif>>. Accessed: October 1, 2015.

4.3.1.3 Changes in Emergency Access

Under the Curb-Running BRT Alternative, emergency vehicles would be permitted to enter dedicated transit lanes in addition to mixed-flow lanes, resulting in improved access and increased response times. In addition, with enhanced transit services, the Curb-Running BRT Alternative may result in higher transit ridership, which would reduce traffic congestion over the long-term operation of the project and facilitate faster response times for police and fire protection services. Therefore, adverse changes in emergency access would not be expected to result from this alternative.

4.3.2 Social and Economic Impacts

4.3.2.1 Population, Business, and Employment Growth

The Curb-Running BRT Alternative would not be expected to result in substantial changes to the existing population in the project study area. This alternative would not include the development of new housing or businesses that would directly induce population growth. The Curb-Running BRT Alternative would include additional bus service and would therefore generate additional employment opportunities for bus drivers; however, there is currently a substantial employment base and residential population in the San Fernando Valley, and the employment opportunities would not be expected to result in substantial migration of additional residents to the project study area. Therefore, this alternative would not be expected to induce substantial population growth in existing communities and neighborhoods.

The Curb-Running BRT Alternative could indirectly affect growth and development in the project study area by promoting planned development and redevelopment near station areas. The type of development expected around station areas would most likely be Transit-Oriented Development (TOD), which is mixed-use residential and commercial development designed to maximize access to public transport. The Curb-Running BRT Alternative may also attract businesses from other areas of the region to the immediate areas surrounding the proposed stations. However, because this alternative would be located in an urban area containing a limited number of vacant or underutilized parcels, this alternative would not be expected to change existing growth and development patterns substantially. In addition, the Curb-Running BRT Alternative would accommodate projected population growth for the region, and any development that could result around station areas is anticipated to be consistent with these current growth projections. TOD near station areas would also be consistent with the proposed City of San Fernando TOD Overlay Zone.

Under the Curb-Running BRT Alternative, enhanced transit service could stimulate the local economy by facilitating access to local businesses. In addition, business viability could improve because increased pedestrian traffic near the proposed stations would provide new potential customers. Therefore, this alternative would be expected to result in improved economic conditions for local businesses. More information on economic impacts is provided in the Economic and Fiscal Impacts Report prepared for the project.

4.3.2.2 Displacement of Housing and People

The Curb-Running BRT Alternative would be constructed within the curb lanes of an existing roadway, and would not result in the displacement of any housing, people, or businesses. This alternative would not require any right-of-way acquisitions for the proposed alignment. In addition, this alternative would not require the construction or expansion of an MSF; therefore, no right-of-way acquisitions associated with an MSF would be required.

4.3.2.3 Changes in Community Cohesion and Interaction

The Curb-Running BRT Alternative would increase connectivity within the eastern San Fernando Valley area, and would result in more unified communities within the project study area, by providing additional transit services connecting these areas. Therefore, this alternative would be expected to enhance community cohesion and interaction.

4.3.2.4 Changes in Quality of Life or Social Values

The Curb-Running BRT Alternative would be expected to result in a long-term overall improved quality of life for the communities and neighborhoods in the project study area resulting from the availability of enhanced transit access to businesses and between communities. The Curb-Running BRT Alternative would permanently improve community mobility by providing a new means of access that does not rely solely on driving. The BRT line would be expected to enhance connections to other neighborhoods within the project study area and across the region, and increased pedestrian traffic near the proposed stations would provide new potential customers and improve business viability. Therefore, this alternative would be expected to result in social and economic benefits for the communities and neighborhoods in the project study area.

4.3.3 Physical Impacts

4.3.3.1 Changes in Land Use Patterns

The Curb-Running BRT Alternative would not be expected to result in substantial changes in land use patterns. While there would be some modifications to the project corridor (e.g., changes in bicycle lanes and loss of curbside parking), the project corridor is an existing transportation route with ongoing bus transit service; therefore, the proposed BRT operations would be consistent with existing bus operations and land use patterns.

The Curb-Running BRT Alternative could indirectly affect development in the project study area by encouraging housing, employment, and commercial development within walking distance of the proposed transit stations along the project corridor. TOD near station areas would be consistent with the proposed City of San Fernando TOD Overlay Zone, and would enhance the City's downtown area. In addition, because this alternative would be located in an urban area containing a limited number of vacant or underutilized parcels, this alternative would not be expected to change existing growth and development patterns substantially.

4.3.3.2 Changes in Aesthetic Character

This alternative would include new and upgraded bus stations, and the installation of dedicated BRT lanes. Because the City of Los Angeles has a contract with CBS Decaux for bus station design, Metro would confirm their legal ability to upgrade the stations with the City of Los Angeles. The proposed BRT vehicles would be similar to existing Metro buses. The project corridor is an existing transportation route with ongoing bus transit service; therefore, the proposed BRT operations would be consistent with existing bus operations, and no substantial changes in aesthetic character would result from this alternative. In addition, stations would include aesthetic enhancements, such as landscaping and canopies, which would be compatible with the existing character of surrounding communities and neighborhoods.

4.3.3.3 Safety Impacts and Other Physical Intrusions

The Curb-Running BRT Alternative would not be expected to result in substantial physical intrusions (e.g., noise, dust, or odors) to the project corridor. While there would be some modifications to the project corridor (e.g., changes in bicycle lanes and loss of curbside parking), the project corridor is an existing transportation route with ongoing bus transit service; therefore, the proposed BRT operations would be consistent with existing bus operations and physical conditions.

The development of new BRT facilities in the project corridor could create security concerns because public gathering may increase at station areas, which could attract criminals and result in a higher potential for assault, robbery, or terrorist attacks. However, these concerns would be addressed both through design considerations (e.g., security cameras in station areas) and by coordinating with law enforcement personnel, including the Los Angeles County Sheriff's Department Transit Services Bureau. In addition, potential bus improvements under this alternative would follow the requirements of Metro's System Safety Program Plan, which would ensure worker and passenger safety, prevent crime, and allow for an adequate emergency response. Therefore, the Curb-Running BRT Alternative is not expected to result in a substantial increase in security risks in the project study area, as detailed in the Safety and Security Impacts Report prepared for the project.

The Curb-Running BRT Alternative would run in mixed-flow curb lanes along San Fernando Road and Truman Streets, and would therefore result in the potential for conflicts with mixed-flow street traffic and other Metro bus operations. The potential for accidents would be highest initially, but would stabilize as people become accustomed to the new alignment. In addition, because existing bus service in the corridor operates in mixed-flow traffic, a substantial increase in accidents or collisions between buses and other motor vehicles is not anticipated to result from this alternative.

The Curb-Running BRT Alternative would be designed in compliance with Metro design guidelines to ensure pedestrian, motorist, and bicyclist safety; however, the removal of existing Class II bike lanes would increase the potential for conflicts between bicyclists and motor vehicles. Therefore, this alternative could result in safety impacts within the communities and neighborhoods in the project study area from the potential for bicycle collisions.

4.3.3.4 Physical Division of Communities

The Curb-Running BRT Alternative would operate entirely within existing transportation corridors, and would not introduce physical barriers that would divide existing communities in the project study area.

4.3.4 Impact Conclusions

Under NEPA, the Curb-Running BRT Alternative would have substantial beneficial long-term effects on mobility, access, and social and economic conditions, because this alternative would improve connections to public transportation, improve access to businesses and community resources, and increase community cohesion and interaction. This alternative would also be expected to increase transit ridership over the long-term operation of the project, which would reduce traffic congestion and facilitate response times for emergency services; this would be a substantial beneficial effect. This alternative would not result in substantial aesthetic, noise, air quality, or odor impacts. This alternative could result in substantial adverse effects related to access and safety from the potential for bicycle and vehicle collisions. Mitigation measures are included in Section 5.2 (Operational Mitigation Measures) to reduce or minimize these potentially substantial adverse effects. However, after implementation of the proposed mitigation measures, potentially substantial adverse effects would remain.

Under CEQA, community and neighborhood impacts resulting from the Curb-Running BRT Alternative would be less than significant impact on population and housing, aesthetics, noise, air quality, and land use, because this alternative would not result in substantial population growth, displace people or housing, substantially degrade the existing visual character or quality of the project corridor, result in substantial noise, air quality, or odor impacts, or physically divide an established community. However, this alternative would result in potentially significant impacts on transportation and hazards, because this alternative could affect bicycle access and safety. Therefore, mitigation measures are included in Section 5.2 (Operational Mitigation Measures) to reduce or minimize these potentially significant impacts. However, after implementation of the proposed mitigation measures, impacts would remain significant and unavoidable. By increasing transit ridership over the long-term operation of the project, the Curb-Running BRT Alternative would reduce traffic congestion and consequently facilitate response times for emergency services, which would be a less than significant and beneficial impact.

4.4 Build Alternative 2 – Median-Running BRT Alternative

4.4.1 Mobility and Access Impacts

4.4.1.1 Changes in Access to Public Transportation, Businesses, and Community Resources

Under the Median-Running BRT Alternative, connections to public transportation within the project study area and across the region would be strengthened by the BRT line, in compliance with Metro's Complete Streets Policy. This alternative would permanently improve community mobility by providing a new means of access that does not rely on driving, and the additional transit service would enhance access to public transportation, businesses and community resources in the project study area.

To implement the Median-Running BRT Alternative, restrictions on motor vehicle movements would be required to accommodate the BRT facilities or eliminate vehicle conflicts. Left turns from Van Nuys Boulevard onto cross streets would be maintained at most of the currently signalized intersections; however, some dual left-turn lanes would be reduced to a single left-turn lane, and several left-turns in the Van Nuys Civic Center, between Calvert Street and Hartland Street, would be prohibited to accommodate median bus stop platforms. Unless otherwise prohibited, U-turns would be allowed from signalized left-turn lanes on Van Nuys Boulevard; therefore, vehicles that need to turn left to access businesses and community resources would continue to have access through U-turns from signalized left-turn lanes.

In addition to restrictions on vehicle movements, all curbside parking would be prohibited on Van Nuys Boulevard and San Fernando Road, which could require vehicles to park further away from businesses and community resources. Nighttime parking may be permitted on these roadways. On-street parking would still be available on all connecting streets where parking is currently permitted, and many businesses and community resources may have dedicated parking lots that would provide sufficient off-street parking. In addition, more people may use transit as a result of the project, which could reduce the need for parking. While restrictions on vehicle movements and loss of parking may present an inconvenience for vehicles traveling along the project corridor, vehicles would continue to have access to either side of the roadway at signalized intersections, and mobility and access by public

transit would be enhanced under the Median-Running BRT Alternative; therefore, access would be retained under this alternative, and no substantial impacts would be expected.

ADA regulations and California state law guarantee the civil rights of individuals with disabilities to receive equal access to all public transportation services. These laws require that transit services and vehicles be readily accessible to, and usable by, individuals with a wide range of disabilities and who use mobility aids, wheelchairs, attendants, service animals, and respirators or portable oxygen supplies.

Under this alternative, accommodations would be provided to ensure that stations and vehicles are accessible to all customers, including those with disabilities, in compliance with ADA guidelines. Designated areas for wheelchairs would be provided on transit vehicles with appropriate securement devices (tie-downs) and occupant restraints (seat belts). To ease boarding and alighting, customers with a disability who use a wheelchair would be allowed to board first and alight first. Transit operators would be responsible to use lift ramps appropriately, assist the customer in reaching the designated securement area, and apply the wheelchair securements, including the use of lap and shoulder belts (upon the request of the customer). Additional designated seating areas would be available for seniors and people with disabilities, away from the wheelchair securement area.

4.4.1.2 Changes in Pedestrian and Bicycle Access

The Median-Running BRT Alternative would still allow pedestrians and bicyclists to access areas in the project corridor, in compliance with Metro's Complete Streets Policy, although minor changes would result to pedestrian and bicycle circulation to allow for the proposed improvements. Current pedestrian movements across roadways at existing signal-controlled crosswalks would be maintained; however, other pedestrian crossings on Van Nuys Boulevard at unsignalized intersections would be prohibited to avoid potential conflicts between pedestrians and BRT vehicles. In addition, under this alternative, a barrier that would be the length of the alignment could be installed to prevent illegal pedestrian crossings of the BRT guideway. However, designated walkways would also be installed to ensure that pedestrian access is maintained along both sides of the barrier.

These modifications to pedestrian movements and sidewalk widths would not be expected to substantially interfere with pedestrian access along the project corridor because adequate pedestrian facilities, sidewalks, and crosswalks, would be provided to ensure pedestrian access and safety. In addition, all Metro Rapid Bus stops would include design elements that would be ADA compliant. Other modifications to the curb lanes to accommodate the BRT improvements would also comply with ADA guidelines.

The City's Bicycle Plan designates Van Nuys Boulevard as part of the "Backbone Bicycle Network," which plans an interconnected system facilitating mobility on key arterials.⁶⁴ In addition, the City's Mobility Plans calls for dedicated bicycle lanes along the entire length of Van Nuys Boulevard. Under the Median-Running BRT Alternative, the existing bike lanes on Van Nuys Boulevard north of Nordhoff Street would be removed to make room for the dedicated transit lanes. These changes would conflict with the City's Bicycle Plan and Mobility Plan because designated bicycle lanes on Van Nuys Boulevard would not be feasible with the implementation of this alternative. An existing bikeway designated as part of the County's Master Bicycle Plan, located along the Metro-owned railroad right-of-way in the City of San Fernando, would remain under this alternative.

⁶⁴ City. March 2011. *2010 Bicycle Plan*. Available: <<http://planning.lacity.org/cwd/gnlpln/transelt/NewBikePlan/Txt/LA%20CITY%20BICYCLE%20PLAN.pdf>>. Accessed: April 6, 2015.

The City's Bicycle Plan and Mobility Plan include planned bicycle lanes on Woodman Avenue (one mile to the east of and parallel to Van Nuys Boulevard) between Ventura Boulevard and the Osborne Street and Nordhoff Street corridors. Bicycle lanes are also planned to connect the Osborne Street corridor to San Fernando Road. To use the planned bicycle lanes on Woodman Avenue, bicyclists would need to travel one mile to the east of Van Nuys Boulevard, which may be an inconvenience for some bicyclists depending on their final destination. In addition, under this alternative, bicycles would need to share a lane with other vehicles along the project corridor, which could result in safety impacts from the increased potential for bicycle collisions. Therefore, the removal of the Class II bike lanes and the decreased safety for bicyclists could substantially affect bicycle access along the project corridor.

The City's General Plan Transportation Element designates Van Nuys Boulevard as a primary transit priority street,⁶⁵ and the transit accommodations under this alternative would only be feasible with the removal of the bicycle lanes. In addition, as stated in Metro's Complete Streets Policy, a number of streets might not provide accommodations for all modes of transportation due to physical right-of-way constraints, which is the case for this alternative. The project would be consistent with Metro's Complete Streets Policy to prioritize public transit modes based on the transportation needs of the community, as designated in the City's General Plan Transportation Element. While public transit would be a priority along the corridor with project implementation, the project would also facilitate bicycle access in surrounding areas by providing bicycle accommodations at BRT stations and on buses, including bicycle racks, so that passengers may leave their bicycles at the stations or bring them onto buses.

As discussed in Section 2.1.3.4, the City of Los Angeles Great Streets Initiative proposes streetscape improvements to strengthen connections and improve walkability and bikeability along portions of Van Nuys Boulevard within the project corridor. The initiative includes creating plazas and parklets, implementing improvements to curbs, and installing street lighting, street trees, and street furniture. The City of Los Angeles Great Streets Initiative is being implemented in anticipation of the proposed project; therefore, the project would not interfere with improvements associated with the initiative.

4.4.1.3 Changes in Emergency Access

Under the Median-Running BRT Alternative, emergency vehicles would be permitted to enter dedicated transit lanes in addition to mixed-flow lanes, resulting in improved access and increased response times. In addition, with enhanced transit services, the Median-Running BRT Alternative may result in higher transit ridership, which would reduce traffic congestion over the long-term operation of the project and facilitate faster response times for police and fire protection services. Therefore, adverse changes in emergency access would not be expected to result from this alternative.

4.4.2 Social and Economic Impacts

4.4.2.1 Population, Business, and Employment Growth

The Median-Running BRT Alternative would not be expected to result in substantial changes to the existing population in the project study area. This alternative would not include the development of new housing or businesses that would directly induce population growth. The Median-Running BRT Alternative would generate additional permanent employment opportunities for bus drivers; however,

⁶⁵ City of Los Angeles. 1997. *Map B.2, Transportation Element of the General Plan, Transit Priority Arterial Streets in the City of Los Angeles*. Available: < <http://planning.lacity.org/cwd/gnlpln/transelt/TEMaps/B2Trnt.gif>>. Accessed: October 1, 2015.

a substantial employment base and residential population currently exist in the San Fernando Valley, and the employment opportunities would not be expected to result in substantial migration of additional residents to the project study area. Therefore, this alternative would not indirectly induce substantial population growth in communities and neighborhoods from an increase in employment opportunities.

The Median-Running BRT Alternative could indirectly affect growth and development in the project study area by promoting planned development and redevelopment near station areas. The type of development expected around station areas would most likely be TOD, which is mixed-use residential and commercial development designed to maximize access to public transport. The Median-Running BRT Alternative may also attract businesses from other areas of the region to the immediate areas surrounding the proposed stations. However, because this alternative would be located in an urban area containing a limited number of vacant or underutilized parcels, this alternative would not be expected to change existing growth and development patterns substantially. The Median-Running BRT Alternative would accommodate projected population growth for the region, and any development that could result around station areas is anticipated to be consistent with these current growth projections. TOD near station areas would also be consistent with the proposed City of San Fernando TOD Overlay Zone.

Under the Median-Running BRT Alternative, the enhanced transit service could stimulate the local economy by facilitating access to local businesses. In addition, business viability could improve because the increased pedestrian traffic near the proposed stations would provide new potential customers. Therefore, this alternative would be expected to result in improved economic conditions for local businesses. More information on economic impacts is provided in the Economic and Fiscal Impacts Report prepared for the project.

4.4.2.2 Displacement of Housing and People

This alternative would not displace any housing or people, as the alignment would be constructed in the median of an existing roadway and would not require the displacement of businesses or residences. No right-of-way acquisitions would be required for the proposed alignment, and this alternative would not require the construction or expansion of an MSF.

4.4.2.3 Changes in Community Cohesion and Interaction

By providing additional transit services in the region, the Median-Running BRT Alternative would increase connectivity within the eastern San Fernando Valley area, and would result in more unified communities. Therefore, this alternative would be expected to enhance community cohesion and interaction.

4.4.2.4 Changes in Quality of Life or Social Values

When long-term operational benefits are considered for the Median-Running BRT Alternative, an overall improved quality of life would be expected for the communities and neighborhoods in the project study area through the availability of new transit access to businesses and between communities. The Median-Running BRT Alternative would permanently improve community mobility by providing a new means of access that does not rely solely on driving. Connections to other neighborhoods within the project study area and across the region would be strengthened by the BRT line. Business viability would be expected to improve because the increased pedestrian traffic near the proposed stations would provide new potential customers. Therefore, this alternative would be

expected to result in social and economic benefits for the communities and neighborhoods in the project study area.

4.4.3 Physical Impacts

4.4.3.1 Changes in Land Use Patterns

The Median-Running BRT Alternative would not be expected to result in substantial changes in land use patterns. While there would be some modifications to the project corridor (e.g., changes in pedestrian crossings, bicycle lanes, and turning movements, and loss of curbside parking), the project corridor is an existing transportation route with ongoing bus transit service; therefore, the proposed BRT operations would be consistent with existing bus operations.

The Median-Running BRT Alternative could indirectly affect development in the project study area by focusing growth in housing, employment, and commercial development within walking distance of the proposed transit stations along the project corridor. TOD near station areas would be consistent with the proposed City of San Fernando TOD Overlay Zone, and would enhance the City's downtown area. In addition, because this alternative would be located in an urban area containing a limited number of vacant or underutilized parcels, this alternative would not be expected to change existing growth and development patterns substantially.

4.4.3.2 Changes in Aesthetic Character

This alternative would include new bus stations and the installation of dedicated BRT lanes. The proposed BRT vehicles would be similar to existing Metro buses. The project corridor is an existing transportation route with ongoing bus transit service; therefore, the proposed BRT operations would be consistent with existing bus operations, and no substantial changes in aesthetic character would result from this alternative. In addition, stations would include aesthetic enhancements, such as landscaping and canopies, which would be compatible with the existing character of surrounding communities and neighborhoods.

4.4.3.3 Safety Impacts and Other Physical Intrusions

The Median-Running BRT Alternative would not be expected to introduce substantial physical intrusions (e.g., noise, dust, or odors) to the project corridor. While there would be some modifications to the project corridor (e.g., changes in pedestrian crossings, bicycle lanes, and turning movements, construction of median fences, and loss of curbside parking), the project corridor is an existing transportation route in an urbanized area with ongoing bus transit service; therefore, the proposed BRT operations would be consistent with existing bus operations.

The development of new BRT facilities in the project corridor could pose security concerns because public gathering may increase at station areas, which could attract criminals and result in a higher potential for assault, robbery, or terrorist attacks. However, these concerns would be addressed both through design considerations (e.g., security cameras in station areas) and by coordinating with law enforcement personnel, including the Los Angeles County Sheriff's Department Transit Services Bureau. In addition, potential bus improvements under this alternative would be subject to Metro's System Safety Program Plan, which is implemented to ensure worker and passenger safety, prevent crime, and allow for an adequate emergency response. Therefore, the Median-Running BRT Alternative is not expected to result in a substantial increase in security risks in the project study area, as detailed in the Safety and Security Impacts Report prepared for the project.

The Median-Running BRT Alternative would run in mixed-flow lanes along San Fernando Road and Truman Streets, and would therefore result in the potential for conflicts with street traffic and other Metro bus operations. The potential for accidents would be highest initially, but would stabilize as people become accustomed to the new alignment. In addition, potential bus improvements under this alternative would be subject to Metro's System Safety Program Plan. Because existing bus service in the corridor operates in mixed-flow traffic, it is not expected that there would be a substantial increase in accidents or collisions between buses and other motor vehicles as a result of this alternative.

To guard motorists from accidentally driving onto the guideway on Van Nuys Boulevard, directional signs would be installed on busway entrances. In addition, Metro guidelines pertaining to the prevention of accidents and collisions would further increase safety and reduce the potential for conflicts, accidents, and collisions.

While the proposed changes to the roadway network would be designed in compliance with Metro design guidelines to ensure pedestrian, motorist, and bicyclist safety, the removal of Class II bike lanes or replacement with shared bike lanes would increase the potential for conflicts between bicyclists and motor vehicles, reducing safety. Therefore, the Median-Running BRT Alternative could result in safety impacts within the communities and neighborhoods in the project study area from the potential for bicycle collisions.

4.4.3.4 Physical Division of Communities

Under this alternative, a barrier that would be the length of the alignment could be installed to prevent illegal pedestrian crossings of the BRT guideway. However, designated pedestrian walkways would also be installed to ensure that pedestrian access is maintained along both sides of the barrier, and the barrier would not encroach on residential properties. The installation of barriers and fencing could be considered a physical intrusion in the communities and neighborhoods in the project study area. However, the Median-Running BRT Alternative would operate entirely within existing transportation corridors, and would not introduce physical barriers that would substantially affect access between the existing communities and neighborhoods in the project study area.

4.4.4 Impact Conclusions

Under NEPA, the Median-Running BRT Alternative would have substantial beneficial long-term effects on mobility, access, and social and economic conditions, because this alternative would improve connections to public transportation, improve access to businesses and community resources, and increase community cohesion and interaction. This alternative would also be expected to increase transit ridership over the long-term operation of the project, which would reduce traffic congestion and facilitate response times for emergency services; this would be a substantial beneficial effect. This alternative would not result in substantial aesthetic, noise, air quality, or odor impacts. However, this alternative could result in substantial adverse effects related to access and safety from the potential for bicycle and vehicle collisions. Mitigation measures are included in Section 5.2 (Operational Mitigation Measures) to reduce or minimize these potentially substantial adverse effects. However, after implementation of the proposed mitigation measures, potentially substantial adverse effects would remain.

Under CEQA, community and neighborhood impacts from the Median-Running BRT Alternative would be less than significant for population and housing, aesthetics, noise, air quality, and land use, because this alternative would not result in substantial population growth, displace people or housing, substantially degrade the existing visual character or quality of the project corridor, result in substantial noise, air quality, or odor impacts, or physically divide an established community.

However, this alternative would result in potentially significant impacts on transportation and hazards, because this alternative could affect bicycle access and safety. Therefore, mitigation measures are included in Section 5.2 (Operational Mitigation Measures) to reduce or minimize these potentially significant impacts. However, after implementation of the proposed mitigation measures, impacts would remain significant and unavoidable. By increasing transit ridership over the long-term operation of the project, the Median-Running BRT Alternative would reduce traffic congestion and consequently facilitate response times for emergency services, which would be a less than significant and beneficial impact.

4.5 Build Alternative 3 – Low-Floor LRT/Tram Alternative

4.5.1 Mobility and Access Impacts

4.5.1.1 Changes in Access to Public Transportation, Businesses, and Community Resources

Under the Low-Floor LRT/Tram Alternative, connections to public transportation within the project study area and across the region would be strengthened by the low-floor LRT/tram line, in compliance with Metro's Complete Streets Policy. This alternative would permanently improve community mobility by providing a new means of access that does not rely on driving, and the additional transit service would enhance access to public transportation, businesses, and community resources in the project study area.

To implement the Low-Floor LRT/Tram Alternative, restrictions on motor vehicle movements would be required to accommodate the low-floor LRT/tram facilities or eliminate vehicle conflicts. Unless otherwise prohibited, U-turns would be allowed from signalized left-turn lanes on Van Nuys Boulevard; therefore, vehicles that need to turn left to access businesses and community resources would continue to have access through U-turns from signalized left-turn lanes.

Most of the left turns from San Fernando Road would be prohibited through the City of San Fernando where a median dedicated guideway for the low-floor LRT/tram vehicle is proposed between the Sylmar/San Fernando Metrolink Station and Wolfskill Street. In addition, to maintain the pedestrian-oriented retail character of San Fernando Road between San Fernando Mission Boulevard and Chatsworth Drive, through traffic would be forced off San Fernando Road on the block between Maclay Avenue and Brand Boulevard by means of turn restrictions. All existing turning movements would be maintained on San Fernando Road between Wolfskill Street and Van Nuys Boulevard where the low-floor LRT/tram would share travel lanes with motor vehicles.

In addition to restrictions on vehicle movements, all curbside parking would be prohibited on Van Nuys Boulevard and San Fernando Road, which could require vehicles to park further away from businesses and community resources. Nighttime parking may be permitted on these roadways. On-street parking would still be available on all connecting streets where parking is currently permitted, and many businesses and community resources may have dedicated parking lots that would provide sufficient off-street parking. In addition, more people may use transit as a result of the project, which could reduce the need for parking. While restrictions on vehicle movements and loss of parking would present an inconvenience for vehicles traveling along the project corridor, vehicles would continue to have access to either side of the roadway at signalized intersections, and mobility and

access by public transit would be enhanced under the Low-Floor LRT/Tram Alternative; therefore, access would be maintained under this alternative, and no substantial impacts would be expected.

According to Metro fare policies, additional fares would not be required for transfers from Metro Rapid and Local buses to the Low-Floor LRT/Tram Alternative. Therefore, the low-floor LRT/tram service would not be cost-prohibitive and would comply with Metro fare policies. Public outreach will be conducted to ensure that community and neighborhood concerns, including fare policies, are addressed.

ADA regulations and California state law guarantee the civil rights of individuals with disabilities to receive equal access to all public transportation services. These laws require that transit services and vehicles be readily accessible to, and usable by, individuals with a wide range of disabilities and who use mobility aids, wheelchairs, attendants, service animals, and respirators or portable oxygen supplies.

Under this alternative, accommodations would be provided to ensure that stations and vehicles are accessible to all customers, including those with disabilities, in compliance with ADA guidelines. Designated areas for wheelchairs would be provided on transit vehicles with appropriate securement devices (tie-downs) and occupant restraints (seat belts). To ease boarding and alighting, customers with a disability who use a wheelchair would be allowed to board first and alight first. Transit operators would be responsible to use lift ramps appropriately, assist the customer in reaching the designated securement area, and apply the wheelchair securements, including the use of lap and shoulder belts (upon the request of the customer). Additional designated seating areas would be available for seniors and people with disabilities, away from the wheelchair securement area.

4.5.1.2 Changes in Pedestrian and Bicycle Access

The Low-Floor LRT/Tram Alternative would still allow pedestrians and bicyclists to access areas in the project corridor, in compliance with Metro's Complete Streets Policy, although minor changes would result to pedestrian and bicycle circulation to allow for the proposed improvements. Current pedestrian movements across roadways at existing signal-controlled crosswalks would be maintained; however, other pedestrian crossings on Van Nuys Boulevard at unsignalized intersections would be prohibited to avoid potential conflicts between pedestrians and low-floor LRT/tram vehicles. In addition, on Van Nuys Boulevard from the Metro Orange Line to El Dorado Avenue in Pacoima, the existing 13-foot-wide sidewalks on each side of the roadway would be narrowed to 10 feet to accommodate the installation of the low-floor LRT/tram facilities, while providing two travel lanes in each direction.

These modifications to pedestrian movements and sidewalk widths would not be expected to substantially interfere with pedestrian access along the project corridor. In addition, all stops would include design elements that would be ADA compliant. A pedestrian bridge would also be provided at the Sylmar/San Fernando Metrolink Station from the low-floor LRT/tram platform to the parking lot.

The City's Bicycle Plan designates Van Nuys Boulevard as part of the "Backbone Bicycle Network," which plans an interconnected system facilitating mobility on key arterials.⁶⁶ In addition, the City's Mobility Plans calls for dedicated bicycle lanes along the entire length of Van Nuys Boulevard.⁶⁷

⁶⁶ City. March 2011. *2010 Bicycle Plan*. Available: <<http://planning.lacity.org/cwd/gnlpln/transelt/NewBikePlan/Txt/LA%20CITY%20BICYCLE%20PLAN.pdf>>. Accessed: April 6, 2015.

⁶⁷ City of Los Angeles. 2015. *Mobility Plan 2035, An Element of the General Plan*. Available: <http://planning.lacity.org/documents/policy/mobilityplnmemo.pdf>. Accessed: September 30, 2015.

Under the Low-Floor LRT/Tram Alternative, the existing bike lanes on Van Nuys Boulevard north of Nordhoff Street would be removed to make room for the dedicated transit lanes. These changes would conflict with the City's Bicycle Plan and Mobility Plan because designated bicycle lanes on Van Nuys Boulevard would not be feasible with the implementation of this alternative. An existing bikeway designated as part of the County's Master Bicycle Plan, located along the Metro-owned railroad right-of-way in the City of San Fernando, would remain under this alternative.

The City's Bicycle Plan and Mobility Plan include planned bicycle lanes on Woodman Avenue (one mile to the east of and parallel to Van Nuys Boulevard) between Ventura Boulevard and the Osborne Street and Nordhoff Street corridors. Bicycle lanes are also planned to connect the Osborne Street corridor to San Fernando Road. To use the planned bicycle lanes on Woodman Avenue, bicyclists would need to travel one mile to the east of Van Nuys Boulevard, which may be an inconvenience for some bicyclists depending on their final destination. In addition, under this alternative, bicycles would need to share a lane with other vehicles along the project corridor, which could result in safety impacts from the increased potential for bicycle collisions. Therefore, the removal of the Class II bike lanes and the decreased safety for bicyclists could substantially affect bicycle access along the project corridor.

The City's General Plan Transportation Element designates Van Nuys Boulevard as a primary transit priority street,⁶⁸ and the transit accommodations under this alternative would only be feasible with the removal of the bicycle lanes. In addition, as stated in Metro's Complete Streets Policy, a number of streets might not provide accommodations for all modes of transportation due to physical right-of-way constraints, which is the case for this alternative. The project would be consistent with Metro's Complete Streets Policy to prioritize public transit modes based on the transportation needs of the community, as designated in the City's General Plan Transportation Element. While public transit would be a priority along the corridor with project implementation, the project would also facilitate bicycle access in surrounding areas by providing bicycle accommodations at low-floor LRT/tram stations and on transit vehicles, including bicycle racks, so that passengers may leave their bicycles at the stations or bring them onto low-floor LRT/tram vehicles.

As discussed in Section 2.1.3.4, the City of Los Angeles Great Streets Initiative proposes streetscape improvements to strengthen connections and improve walkability and bikeability along portions of Van Nuys Boulevard within the project corridor. The initiative includes creating plazas and parklets, implementing improvements to curbs, and installing street lighting, street trees, and street furniture. The City of Los Angeles Great Streets Initiative is being implemented in anticipation of the proposed project; therefore, the project would not interfere with improvements associated with the initiative.

4.5.1.3 Changes in Emergency Access

With enhanced transit services, the Low-Floor LRT/Tram Alternative may result in higher transit ridership, which would reduce traffic congestion over the long-term operation of the project and facilitate faster response times for police and fire protection services. Therefore, adverse changes in emergency access would not be expected to result from this alternative.

⁶⁸ City of Los Angeles. 1997. *Map B.2, Transportation Element of the General Plan, Transit Priority Arterial Streets in the City of Los Angeles*. Available: < <http://planning.lacity.org/cwd/gnlpln/transelt/TEMaps/B2Trnt.gif>>. Accessed: October 1, 2015.

4.5.2 Social and Economic Impacts

4.5.2.1 Population, Business, and Employment Growth

The Low-Floor LRT/Tram Alternative would not be expected to result in substantial changes to the existing population in the project study area. This alternative would not include the development of new housing or businesses that would directly induce population growth. The Low-Floor LRT/Tram Alternative would generate additional permanent employment opportunities for low-floor LRT/tram operators, and maintenance and storage facility employees; however, a substantial employment base and residential population currently exist in the San Fernando Valley, and the employment opportunities would not be expected to result in substantial migration of additional residents to the project study area. Therefore, this alternative would not result in substantial population growth in communities and neighborhoods from an increase in employment opportunities.

The Low-Floor LRT/Tram Alternative could indirectly affect growth and development in the project study area by promoting planned development and redevelopment near station areas. The type of development expected around station areas would most likely be TOD, which is mixed-use residential and commercial development designed to maximize access to public transport. The Low-Floor LRT/Tram Alternative may also attract businesses from other areas of the region to the immediate areas surrounding the proposed stations. However, because this alternative would be located in an urban area containing a limited number of vacant or underutilized parcels, this alternative would not be expected to change existing growth and development patterns substantially. In addition, the Low-Floor LRT/Tram Alternative would accommodate projected population growth for the region, and any development that could result around station areas is anticipated to be consistent with these current growth projections. TOD near station areas would also be consistent with the proposed City of San Fernando TOD Overlay Zone.

Under the Low-Floor LRT/Tram Alternative, the enhanced transit service could stimulate the local economy by facilitating access to local businesses. In addition, business viability could improve because the increased pedestrian traffic near the proposed stations would provide new potential customers. Therefore, this alternative would be expected to result in improved long-term economic conditions for local businesses. More information on economic impacts is provided in the Economic and Fiscal Impacts Report prepared for the project.

Business displacements would be required for this alternative, and the resulting social and economic impacts are discussed further in the following section (Displacement of Housing and People).

4.5.2.2 Displacement of Housing and People

To assess the types of potential displacement from the Low-Floor LRT/Tram Alternative, conceptual engineering plans for the proposed alignment, station options, and rights-of-way were reviewed. When an acquisition is required, it typically results in either a partial or full take of a parcel. A partial take would result if a portion of the parcel is necessary to accommodate the project. A full take would result under two circumstances: (1) when the majority of the property is required for the horizontal alignment because of insufficient right-of-way or the need to construct storage or maintenance facilities, and (2) when a severe loss of access reduces the useful operation of the property.

The majority of the Low-Floor LRT/Tram alignment would be constructed in the median of an existing roadway and would not require the displacement of businesses or residences along the majority of the project corridor. However, some areas of the project alignment would require commercial property acquisitions to accommodate the low-floor LRT/tram facilities, including at Van

Nuys Boulevard and Bessemer Street, the Van Nuys/San Fernando Station at Van Nuys Boulevard and El Dorado Avenue, at San Fernando Road and Pinney Street, and at the Paxton Station at San Fernando Road and Weidner Street. No residential properties would be displaced to accommodate the low-floor LRT/tram alignment.

The Low-Floor LRT/Tram Alternative would also require full right-of-way acquisitions for the construction of the MSF. The exact location of the proposed low-floor LRT/tram MSF has yet to be determined; however, three potential locations have been selected for consideration along Van Nuys Boulevard at Aetna, Keswick, and Arminta Streets. The property acquisitions for each site are listed in Table 4-1 below.

As shown in Table 4-1, the MSF site at Aetna Street would require 63 full property acquisitions, which includes one parcel for a connection to the low-floor LRT/tram alignment. The MSF site at Arminta Street would require 37 full property acquisitions, and the MSF site at Keswick Street would require 42 full property acquisitions; these MSF sites do not require any parcels for connections to the low floor LRT/tram alignment. The potential MSF sites are primarily located on properties zoned as limited manufacturing, light manufacturing, commercial manufacturing, general commercial, and regional commercial. Three parcels zoned as medium residential would be acquired for the MSF site at Aetna Street; however, these parcels are developed with a single parking lot serving an adjacent warehouse business. The displacement of businesses would be required to construct the MSF sites. In addition, for the MSF site at Aetna Street, the displacement of four residential units on a parcel zoned for light manufacturing use would be required.

In addition to these full property acquisitions, partial property acquisitions would be required for TPSSs, which would be located near potential stations or at the MSF site, mostly in vacant lots, parking lots, and commercial sites. These partial acquisitions would not be expected to require the displacement or relocations of businesses.

Table 4-1 – Number of Full Property Acquisitions by Land Use Type for the Potential Low-Floor LRT/Tram MSF Sites and Connections to the Alignment

Potential MSF Site	Land Use Type					
	Medium Residential	Limited Manufacturing	Light Manufacturing	Commercial Manufacturing	General Commercial	Regional Commercial
Aetna Street	3	0	51	9	0	0
Keswick Street	0	0	35	0	2	0
Arminta Street	0	17	16	0	0	9

Source: KOA Corporation, 2014

Right-of-way acquisitions are discussed in further detail in the Real Estate and Acquisitions Impacts Report prepared for the project. Each business and residence displaced by the Low-Floor LRT/Tram Alternative would be given advance written notice and would be informed of their eligibility for relocation assistance and payments under the Uniform Act, described in Section 2.1.1 (Federal

Regulations). Relocation assistance for the residents of the four residential units may not be required because these units are rental housing and would likely be vacated in advance of right-of-way acquisitions.

While displaced businesses and residences required for the low-floor LRT/tram facilities and MSF site may need to be relocated, the project corridor is in an area developed largely with commercial and residential uses; therefore, it is assumed that replacement buildings for displaced businesses and residences would be available within a reasonable distance from their existing locations, and the displacement would not necessitate the construction of a substantial number of additional buildings on properties that are currently undeveloped. Therefore, the Low-Floor LRT/Tram Alternative would not be expected to result in substantial changes to existing population and housing characteristics in the project study area, or result in substantial development impacts to accommodate business or residential displacements.

The economic impacts related to business displacements and relocations are discussed in further detail in the Economic and Fiscal Impacts Report. Because it is anticipated that most displaced businesses would be relocated to nearby properties, the Low-Floor LRT/Tram Alternative would not be expected to result in substantial changes to the local economic conditions in the project study area by the displacements. Local business viability may be temporarily affected by the relocations as customers become accustomed to accessing businesses at their new locations; however, after the businesses become established in their new sites, business viability would be expected to return to existing conditions. It is anticipated that where relocation would be required, it would result in the relocation of most of the jobs that would be potentially displaced. Therefore, there would be no net loss of jobs overall.

Public controversy among community members and business owners could result from business displacements; therefore, early and ongoing public outreach would be required to discuss potential concerns and communicate with property owners and community members.

4.5.2.3 Changes in Community Cohesion and Interaction

By providing additional transit services in the region, the Low-Floor LRT/Tram Alternative would increase connectivity within the eastern San Fernando Valley area, and would result in more unified communities. Therefore, this alternative would be expected to enhance long-term community cohesion and interaction.

Business displacements required for the low-floor LRT/tram alignment and MSF site could result in substantial changes to local neighborhood character, and potentially the social fabric of the local community. Neighborhood residents or visitors may be accustomed to accessing businesses in their existing locations, and the displacement of those businesses could be psychologically or socially disruptive, and could affect professional and social interactions. However, if relocation sites are available within proximity to the existing business sites, the disruptions to professional and social interactions may be temporary as residents become accustomed to accessing the displaced businesses at their new locations.

Public controversy among community members and business owners could result from business displacements; therefore, early and ongoing public outreach would be required to discuss potential concerns and communicate with property owners and community members.

4.5.2.4 Changes in Quality of Life or Social Values

When long-term operational benefits are considered for the Low-Floor LRT/Tram Alternative, an overall improved quality of life would be expected for the communities and neighborhoods in the project study area through the availability of new transit access to businesses and between communities. The Low-Floor LRT/Tram Alternative would permanently improve community mobility by providing a new means of access that does not rely solely on driving. Connections to other neighborhoods within the project study area and across the region would be strengthened by the low-floor LRT/tram line. Business viability would be expected to improve because the increased pedestrian traffic near the proposed stations would provide new potential customers. Therefore, this alternative would be expected to result in social and economic benefits for the communities and neighborhoods in the project study area.

4.5.3 Physical Impacts

4.5.3.1 Changes in Land Use Patterns

The Low-Floor LRT/Tram Alternative would not be expected to result in substantial changes in land use patterns. While there would be some modifications to the project corridor (e.g., changes in bicycle lanes and turning movements, the loss of curbside parking, and the addition of an OCS, TPSSs, and MSF), the project corridor is an existing transportation route in an urbanized area with ongoing bus transit service, and therefore, the proposed low-floor LRT/tram operations would be consistent with existing transportation uses.

The Low-Floor LRT/Tram Alternative could indirectly affect development in the project study area by focusing growth in housing, employment, and commercial development within walking distance of the proposed transit stations along the project corridor. TOD near station areas would be consistent with the proposed City of San Fernando TOD Overlay Zone, and would enhance the City's downtown area. In addition, because this alternative would be located in an urban area containing a limited number of vacant or underutilized parcels, this alternative would not be expected to change existing growth and development patterns substantially.

4.5.3.2 Changes in Aesthetic Character

The project corridor is an existing transportation route in an urbanized area with ongoing bus transit service; therefore, the proposed low-floor LRT/tram operations would be consistent with existing transportation uses, and no substantial changes in aesthetic character would result from this alternative along the majority of the project corridor. In addition, stations would include aesthetic enhancements, such as landscaping and canopies, which would be compatible with the existing character of surrounding communities and neighborhoods.

This alternative would require a number of elements to support vehicle operations, including median fences, an OCS, TPSSs, signaling, a pedestrian bridge at the Sylmar/San Fernando Metrolink station, and an MSF. These additional elements would result in substantial changes to the aesthetic character of some areas along the project corridor, especially in residential and recreational areas, and along the San Fernando Mall on San Fernando Road between Kittridge Street and San Fernando Mission Boulevard. In the San Fernando Mall area, San Fernando Road narrows from a four-lane roadway (two lanes in each direction) to a two-lane roadway (one lane in each direction), and businesses are located relatively close to the roadway, making this area more pedestrian-oriented than other areas along the project corridor.

The following parks are also in proximity to the proposed improvements and could be affected by visual changes from this alternative:

- Blythe Street Park, 14740 Blythe Street, Van Nuys: This park is in proximity to the proposed MSF site at Arminta Street.
- Tobias Avenue Park, 9122 Tobias Avenue, Panorama City: This park is adjacent to the project corridor on Van Nuys Boulevard to the north of Nordhoff Street.
- Pacoima Wash Greenway: This greenway is a future proposed project that crosses under the project corridor south of Van Nuys Boulevard and Arleta Avenue, and at San Fernando Road to the south of La Rue Street in San Fernando.

Residential areas adjacent to the project corridor are in the following locations:

- Low-density residential areas are located adjacent to and south of the proposed MSF site at Aetna Street.
- Medium-density residential areas are located adjacent to and north of the proposed MSF site at Arminta Street.
- Medium-density residential areas are located adjacent to Van Nuys Boulevard between Parthenia Street and Plummer Street in Panorama City.
- Medium-, low-medium-, and low-density residential areas are located adjacent to Van Nuys Boulevard between just south of Woodman Avenue and Remick Avenue in Arleta.
- Low-medium density residential areas are located adjacent to and north/northeast of the Sylmar/San Fernando Metrolink Station.

The median fences, OCS, and pedestrian bridge, in particular, would introduce additional vertical elements that could substantially change the existing visual character and quality in these areas of the project corridor, especially for residents, pedestrians, and bicyclists, who would be expected to have high viewer sensitivity to their surroundings. Therefore, changes in aesthetic character from the Low-Floor LRT/Tram Alternative would be expected to be substantial in areas where sensitive viewers are located, and will need to be addressed during community outreach efforts. Potential impacts on aesthetic character from the Low-Floor LRT/Tram Alternative are also addressed in more detail in the Visual and Aesthetics Impacts Report prepared for the project.

4.5.3.3 Safety Impacts and Other Physical Intrusions

The Low-Floor LRT/Tram Alternative would not be expected to introduce substantial physical intrusions (e.g., noise, dust, or odors) to the project corridor. While there would be some modifications to the project corridor (e.g., changes in bicycle lanes and turning movements, the loss of curbside parking, and the addition of an OCS and TPSSs, median fences, a pedestrian bridge at the Sylmar/San Fernando Metrolink Station, and an MSF site), the project corridor is an existing transportation route in an urbanized area with ongoing bus transit service, and therefore, the proposed low-floor LRT/tram operations would be consistent with existing transportation uses.

The development of new low-floor LRT/tram facilities in the project corridor could pose security concerns because public gathering may increase at station areas, which could attract criminals and result in a higher potential for assault, robbery, or terrorist attacks. However, these concerns would be addressed both through design considerations (e.g., security cameras in station areas) and by coordinating with law enforcement personnel, including the Los Angeles Police Department's Foothill Community Police Station and the Van Nuys Community Police Station, the City of San

Fernando Police Department, the Los Angeles County Sheriff's Department Transit Services Bureau, and the Transportation Security Administration. In addition, potential low-floor LRT/tram improvements under this alternative would be subject to Metro's System Safety Program Plan, which is implemented to ensure worker and passenger safety, prevent crime, and allow for an adequate emergency response. A complete Threat and Vulnerability Assessment in compliance with FTA regulations would also be conducted for the alternative. Therefore, the Low-Floor LRT/Tram Alternative is not expected to result in a substantial increase in security risks in the project study area, as detailed in the Safety and Security Impacts Report prepared for the project.

The low-floor LRT/tram would run in mixed-flow lanes along San Fernando Road just north of Wolfskill Street, and would therefore result in the potential for conflicts with street traffic and low-floor LRT/tram operations. The potential for accidents would be highest initially, but would stabilize as people become accustomed to the new alignment. In addition, potential low-floor LRT/tram improvements under this alternative would be subject to Metro's System Safety Program Plan.

Low-Floor LRT/tram vehicles would not exceed the posted adjacent roadway speed limit, which is typically 35 miles per hour (mph). In addition, Metro would prepare grade crossing applications in coordination with local public agencies to further increase safety and reduce the potential for conflicts, accidents, and collisions.

The Low-Floor LRT/Tram Alternative could result in several pedestrian safety concerns. Stations could present safety hazards if pedestrian traffic and movement are not considered, resulting in potential for collisions between pedestrians and low-floor LRT/tram vehicles. In addition, the introduction of low-floor LRT/tram vehicles in mixed-flow traffic lanes on San Fernando Road, just north of Wolfskill Street, would create a safety concern for pedestrians at intersection crossings where pedestrians would cross over the tracks. Similarly, a potential safety hazard could result if pedestrians attempt to cross streets and tracks illegally.

Pedestrian traffic control and channelization techniques (e.g., barriers and designated walkways) would be used to control pedestrian movements at intersections and encourage the use of designated pedestrian crossings. A pedestrian bridge would also be provided at the Sylmar/San Fernando Metrolink Station from the low-floor LRT/tram platform to the parking lot. Metro would prepare grade crossing applications in coordination with local public agencies to further increase safety and reduce the potential for conflicts, accidents, and collisions.

While the proposed changes to the roadway network would be designed in compliance with Metro design guidelines to ensure pedestrian, motorist, and bicyclist safety, the removal of Class II bike lanes or replacement with shared bike lanes would increase the potential for conflicts between bicyclists and motor vehicles, reducing safety. Therefore, the Low-Floor LRT/Tram Alternative could result in safety impacts within the communities and neighborhoods in the project study area from the potential for bicycle collisions.

4.5.3.4 Physical Division of Communities

Under this alternative, all vehicle and pedestrian movements at unsignalized intersections would be blocked by a median fence. The installation of fencing could be considered a physical intrusion in the communities and neighborhoods in the project study area. However, the low-floor LRT/tram would operate almost entirely within existing transportation corridors, and crossings at most signalized intersections would be maintained. In addition, the median fence would not encroach on residential properties. Therefore, this alternative would not introduce physical barriers that would substantially affect access between the existing communities and neighborhoods in the project study area.

4.5.4 Impact Conclusions

Under NEPA, the Low-Floor LRT/Tram Alternative would have substantial beneficial long-term effects on mobility, access, and social and economic conditions, because this alternative would improve connections to public transportation, improve access to businesses and community resources, and increase community cohesion and interaction. This alternative would also be expected to increase transit ridership over the long-term operation of the project, which would reduce traffic congestion and facilitate response times for emergency services; this would be a substantial beneficial effect. This alternative would not result in substantial noise, air quality, or odor impacts. However, this alternative could result in substantial adverse effects related to disruptions in social and community interactions from business displacements. This alternative could also result in substantial adverse effects on aesthetic character from the construction of vertical elements (e.g., median fences, an OCS) that could substantially change the existing visual character in residential and recreational areas of the project corridor where there are sensitive viewer groups. In addition, this alternative could result in adverse effects related to access and safety from the potential for bicycle and vehicle collisions. Mitigation measures are included in Section 5.2 (Operational Mitigation Measures) to reduce or minimize these potentially substantial adverse effects. However, after implementation of the proposed mitigation measures, potentially substantial adverse effects would remain.

Under CEQA, community and neighborhood impacts from the Low-Floor LRT/Tram Alternative would be less than significant for population and housing, noise, air quality, and land use, because this alternative would not result in substantial population growth, displace people or housing requiring the construction or replacement of housing, result in substantial noise, air quality, or odor impacts, or physically divide an established community. However, this alternative would result in potentially significant impacts on visual and aesthetics, as this alternative could substantially degrade the existing visual character or quality in residential and recreational areas of the project corridor where there are sensitive viewer groups. In addition, this alternative would result in potentially significant impacts on transportation and hazards, because this alternative could affect bicycle access and safety. Mitigation measures are included in Section 5.2 (Operational Mitigation Measures), to reduce or minimize these potentially significant impacts. However, after implementation of the proposed mitigation measures, impacts would remain significant and unavoidable. By increasing transit ridership over the long-term operation of the project, the Low-Floor LRT/Tram Alternative would reduce traffic congestion and consequently facilitate response times for emergency services, which would be a less than significant and beneficial impact.

4.6 Build Alternative 4 – Light Rail Transit Alternative

4.6.1 Mobility and Access Impacts

4.6.1.1 Changes in Access to Public Transportation, Businesses, and Community Resources

Under the LRT Alternative, connections to public transportation within the project study area and across the region would be strengthened by the LRT line, in compliance with Metro's Complete Streets Policy. This alternative would permanently improve community mobility by providing a new means of access that does not rely on driving, and the additional transit service would enhance access to public transportation, businesses, and community resources in the project study area.

To implement the LRT Alternative, restrictions on motor vehicle movements would be required to accommodate the LRT facilities or eliminate vehicle conflicts. Unless otherwise prohibited, U-turns would be allowed from signalized left-turn lanes on Van Nuys Boulevard; therefore, vehicles that need to turn left to access businesses and community resources would continue to have access through U-turns from signalized left-turn lanes.

In addition to restrictions on vehicle movements, all curbside parking would be prohibited on Van Nuys Boulevard, which could require vehicles to park further away from businesses and community resources. Night-time parking may be permitted on these roadways. On-street parking would still be available on all connecting streets where parking is currently permitted, and many businesses and community resources may have dedicated parking lots that would provide sufficient off-street parking. In addition, more people may use transit as a result of the project, which could reduce the need for on-street parking.

Under this alternative, vehicle movements and parking would be maintained along San Fernando Road and Truman Street where the LRT alignment would run along the Metro-owned railroad right-of-way. While restrictions on vehicle movements and loss of parking on Van Nuys Boulevard would present an inconvenience for vehicles traveling along the project corridor, vehicles would continue to have access to either side of the roadway at signalized intersections, and mobility and access by public transit would be enhanced under the LRT Alternative; therefore, vehicle access would be maintained under this alternative, and no substantial impacts would be expected.

According to Metro fare policies, additional fares would not be required for transfers from Metro Rapid and Local buses to the LRT Alternative. Therefore, the LRT service would not be cost-prohibitive and would comply with Metro fare policies. Public outreach will be conducted to ensure that community and neighborhood concerns, including fare policies, are addressed.

ADA regulations and California state law guarantee the civil rights of individuals with disabilities to receive equal access to all public transportation services. These laws require that transit services and vehicles be readily accessible to, and usable by, individuals with a wide range of disabilities and who use mobility aids, wheelchairs, attendants, service animals, and respirators or portable oxygen supplies.

Under this alternative, accommodations would be provided to ensure that stations and vehicles are accessible to all customers, including those with disabilities, in compliance with ADA guidelines. Designated areas for wheelchairs would be provided on transit vehicles with appropriate securement devices (tie-downs) and occupant restraints (seat belts). To ease boarding and alighting, customers with a disability who use a wheelchair would be allowed to board first and alight first. Transit operators would be responsible to use lift ramps appropriately, assist the customer in reaching the designated securement area, and apply the wheelchair securements, including the use of lap and shoulder belts (upon the request of the customer). Additional designated seating areas would be available for seniors and people with disabilities, away from the wheelchair securement area.

4.6.1.2 Changes in Pedestrian and Bicycle Access

The LRT Alternative would still allow pedestrians and bicyclists to access areas in the project corridor, in compliance with Metro's Complete Streets Policy, although minor changes would result to pedestrian and bicycle circulation to allow for the proposed improvements. Current pedestrian movements across roadways at existing signal-controlled crosswalks would be maintained; however, other pedestrian crossings on Van Nuys Boulevard at unsignalized intersections would be prohibited to avoid potential conflicts between pedestrians and LRT vehicles. In addition, at the Van Nuys Civic Center from the Metro Orange Line to the planned subway portal north of Hartland Street, the

existing 13-foot-wide sidewalks on each side of the roadway would be narrowed to 10 feet to accommodate the installation of the LRT facilities, while providing two travel lanes in each direction. A similar narrowing of the sidewalks to 10 feet would occur along Van Nuys Boulevard north of the subway portal near Rayen Street in Panorama City, where the LRT vehicles would resume a surface alignment in the roadway median and proceed to El Dorado Avenue in Pacoima.

These modifications to pedestrian movements and sidewalk widths would not be expected to substantially interfere with pedestrian access along the project corridor. In addition, all stops would include design elements that would be ADA compliant. A pedestrian bridge would also be provided at the Sylmar/San Fernando Metrolink Station from the LRT platform to the parking lot.

The City's Bicycle Plan designates Van Nuys Boulevard as part of the "Backbone Bicycle Network," which plans an interconnected system facilitating mobility on key arterials.⁶⁹ In addition, the City's Mobility Plans calls for dedicated bicycle lanes along the entire length of Van Nuys Boulevard.⁷⁰ Under the LRT Alternative, the existing bike lanes on Van Nuys Boulevard north of Nordhoff Street would be removed to make way for dedicated transit lanes. These changes would conflict with the City's Bicycle Plan and Mobility Plan because designated bicycle lanes on Van Nuys Boulevard would not be feasible with the implementation of this alternative.

The City's Bicycle Plan and Mobility Plan include planned bicycle lanes on Woodman Avenue (one mile to the east of and parallel to Van Nuys Boulevard) between Ventura Boulevard and the Osborne Street and Nordhoff Street corridors. Bicycle lanes are also planned to connect the Osborne Street corridor to San Fernando Road. To use the planned bicycle lanes on Woodman Avenue, bicyclists would need to travel one mile to the east of Van Nuys Boulevard, which may be an inconvenience for some bicyclists depending on their final destination. In addition, under this alternative, bicycles would need to share a lane with other vehicles along the project corridor, which could result in safety impacts from the increased potential for bicycle collisions. Therefore, the removal of the Class II bike lanes and the decreased safety for bicyclists could substantially affect bicycle access along the project corridor.

The City's General Plan Transportation Element designates Van Nuys Boulevard as a primary transit priority street,⁷¹ and the transit accommodations under this alternative would only be feasible with the removal of the bicycle lanes. In addition, as stated in Metro's Complete Streets Policy, a number of streets might not provide accommodations for all modes of transportation due to physical right-of-way constraints, which is the case for this alternative. The project would be consistent with Metro's Complete Streets Policy to prioritize public transit modes based on the transportation needs of the community, as designated in the City's General Plan Transportation Element. While public transit would be a priority along the corridor with project implementation, the project would also facilitate bicycle access in surrounding areas by providing bicycle accommodations at LRT stations and on LRT vehicles, including bicycle racks, so that passengers may leave their bicycles at the stations or bring them onto LRT vehicles.

⁶⁹ City. March 2011. *2010 Bicycle Plan*. Available: <<http://planning.lacity.org/cwd/gnlpln/transelt/NewBikePlan/Txt/LA%20CITY%20BICYCLE%20PLAN.pdf>>. Accessed: April 6, 2015.

⁷⁰ City of Los Angeles. 2015. *Mobility Plan 2035, An Element of the General Plan*. Available: <http://planning.lacity.org/documents/policy/mobilityplnmemo.pdf>. Accessed: September 30, 2015.

⁷¹ City of Los Angeles. 1997. *Map B.2, Transportation Element of the General Plan, Transit Priority Arterial Streets in the City of Los Angeles*. Available: <<http://planning.lacity.org/cwd/gnlpln/transelt/TEMaps/B2Trnt.gif>>. Accessed: October 1, 2015.

An existing bikeway designated as part of the County's Master Bicycle Plan, located along the Metro-owned railroad right-of-way in the City of San Fernando, would remain under this alternative. This bicycle path, also known as the Mission City Trail located in the City of San Fernando along the Metro-owned railroad right-of-way, would be maintained under this alternative because the right-of-way is sufficiently wide enough to allow the bicycle path to remain alongside a pair of LRT tracks and relocated tracks for Metrolink and Union Pacific trains. At the point where the LRT Alternative crosses the bicycle path, near the intersection of Pinney Street and San Fernando Road, a signalized grade crossing would be provided. The bike path would be shifted from the east side of the railroad alignment to the west side of the tracks through the City of San Fernando to reduce the number of bike-rail crossings, reduce the amount of right-of-way acquisitions, and provide a better alignment of the railroad and LRT tracks.

As discussed in Section 2.1.3.4, the City of Los Angeles Great Streets Initiative proposes streetscape improvements to strengthen connections and improve walkability and bikeability along portions of Van Nuys Boulevard within the project corridor. The initiative includes creating plazas and parklets, implementing improvements to curbs, and installing street lighting, street trees, and street furniture. The City of Los Angeles Great Streets Initiative is being implemented in anticipation of the proposed project; therefore, the project would not interfere with improvements associated with the initiative.

4.6.1.3 Changes in Emergency Access

With enhanced transit services, the LRT Alternative may result in higher transit ridership, which would reduce traffic congestion over the long-term operation of the project and facilitate faster response times for police and fire protection services. Therefore, adverse changes in emergency access would not be expected to result from this alternative.

4.6.2 Social and Economic Impacts

4.6.2.1 Population, Business, and Employment Growth

The LRT Alternative would not be expected to result in substantial changes to the existing population in the project study area. This alternative would not include the development of new housing or businesses that would directly induce population growth. The LRT Alternative would generate additional permanent employment opportunities for LRT operators, and maintenance and storage facility employees; however, a substantial employment base and residential population currently exist in the San Fernando Valley, and the employment opportunities would not be expected to result in substantial migration of additional residents to the project study area. Therefore, this alternative would not indirectly induce substantial population growth in communities and neighborhoods from an increase in employment opportunities.

The LRT Alternative could indirectly affect growth and development in the project study area by promoting planned development and redevelopment near station areas. The type of development expected around station areas would most likely be TOD, which is mixed-use residential and commercial development designed to maximize access to public transport. The LRT Alternative may also attract businesses from other areas of the region to the immediate areas surrounding the proposed stations. However, because this alternative would be located in an urban area containing a limited number of vacant or underutilized parcels, this alternative would not be expected to change existing growth and development patterns substantially. In addition, the LRT Alternative would accommodate projected population growth for the region, and any development that could result around station areas is anticipated to be consistent with these current growth projections. TOD near station areas would also be consistent with the proposed City of San Fernando TOD Overlay Zone.

Under the LRT Alternative, the enhanced transit service could stimulate the local economy by facilitating access to local businesses. In addition, business viability could improve because the increased pedestrian traffic near the proposed stations would provide new potential customers. Therefore, this alternative would be expected to result in improved long-term economic conditions for local businesses. More information on economic impacts is provided in the Economic and Fiscal Impacts Report prepared for the project.

Business displacements would be required for this alternative, and the resulting social and economic impacts are discussed further in the following section (Displacement of Housing and People).

4.6.2.2 Displacement of Housing and People

To assess the types of potential displacement from the LRT Alternative, conceptual engineering plans for the proposed alignment, station options, and rights-of-way were reviewed. When an acquisition is required, it typically results in either a partial or full take of a parcel. A partial take would result if a portion of the parcel is necessary to accommodate the project. A full take would result under two circumstances: (1) when the majority of the property is required for the horizontal alignment because of insufficient right-of-way or the need to construct storage or maintenance facilities, and (2) when a severe loss of access reduces the useful operation of the property.

An easement is the right to use another person's land for a stated purpose. An easement can involve a general or specific portion of the property and can be either at the surface level or beneath the property. Easements can be temporary (for example, during construction) or permanent. Temporary construction easements are discussed further in Section 4.7 (Construction Impacts). Permanent underground easements are used when tunneling for a subway and during its operation. For the LRT Alternative, properties located above subway tunnels within a 10-foot vertical buffer from the exterior tunnel wall would require a permanent underground easement.

The majority of the LRT alignment would be constructed in the median of an existing roadway and would not require the displacement of businesses or residences along the majority of the project corridor. However, some areas of the project alignment would require commercial/industrial property acquisitions to accommodate the LRT facilities, including at the Sherman Way Station at Van Nuys Boulevard and Sherman Way, the Keswick Street Station at Van Nuys Boulevard and Keswick Street, the Roscoe Boulevard Station at Van Nuys Boulevard and Roscoe Boulevard, at the Pacoima Station at Van Nuys Boulevard and El Dorado Avenue, at San Fernando Road and Pinney Street, and along the Metro-owned railroad right-of-way between Maclay Avenue and Workman Street, and between Lazard Street and the Sylmar/San Fernando Metrolink Station. Partial property acquisitions would also be required at the Vanowen Station at Van Nuys Boulevard and Hartland Street, and along the Metro-owned railroad right-of-way between Wolfskill Street and Maclay Avenue. No residential properties would be displaced to accommodate the LRT alignment.

The LRT Alternative would also require full right-of-way acquisitions for the construction of the MSF. The exact location of the proposed LRT MSF has yet to be determined; however, three potential locations have been selected for consideration along Van Nuys Boulevard at Aetna, Keswick, and Arminta Streets. The property acquisitions for each site are listed in Table 4-2 below.

As shown in Table 4-2, the MSF site at Aetna Street would require 64 full property acquisitions, which includes two parcels for a connection to the LRT alignment. The MSF site at Keswick Street would require 48 full property acquisitions, which includes 11 parcels for a connection to the LRT alignment. The MSF site at Arminta Street would require 53 full property acquisitions, which also includes 11 parcels for a connection to the LRT alignment.

Table 4-2 – Number of Full Property Acquisitions by Land Use Type for the Potential LRT MSF Sites and Connections to the LRT Alignment

Potential MSF Site	Land Use Type					
	Medium Residential	Limited Manufacturing	Light Manufacturing	Commercial Manufacturing	General Commercial	Regional Commercial
Aetna Street	3	0	51	10	0	0
Keswick Street	0	0	35	0	13	0
Arminta Street	0	17	16	0	11	9

Source: KOA Corporation, 2014

The potential MSF sites are primarily located on properties zoned as limited manufacturing, light manufacturing, commercial manufacturing, general commercial, and regional commercial. Three parcels zoned as medium residential would be acquired for the MSF site at Aetna Street; however, these parcels are developed with a single parking lot serving an adjacent warehouse business. The displacement of businesses would be required to construct the MSF sites. In addition, for the MSF site at Aetna Street, the displacement of four residential units on a parcel zoned for light manufacturing use would be required.

In addition to these property acquisitions, partial property acquisitions would be required for TPSSs, which would be located near potential stations or at the MSF site, mostly in vacant lots, parking lots, and commercial sites. These partial acquisitions would not be expected to require the displacement or relocations of businesses.

Right-of-way acquisitions are discussed in further detail in the Real Estate and Acquisitions Impacts Report prepared for the project. Each business and residence displaced as a result of the LRT Alternative would be given advance written notice and would be informed of their eligibility for relocation assistance and payments under the Uniform Act, described in Section 2.1.1 (Federal Regulations). Relocation assistance for the residents of the four residential units may not be required because these units are rental housing and would likely be vacated in advance of right-of-way acquisitions.

While displaced businesses and residences required for the LRT facilities and MSF site may need to be relocated, the project corridor is in an area developed largely with commercial and residential uses; therefore, it is assumed that replacement buildings for displaced businesses and residences would be available within a reasonable distance from their existing locations, and the displacement would not necessitate the construction of a substantial number of additional buildings on properties that are currently undeveloped. Therefore, the LRT Alternative would not be expected to result in substantial changes to existing population and housing characteristics in the project study area, or result in substantial development impacts to accommodate business or residential displacements.

The economic impacts related to business displacements and relocations are discussed in further detail in the Economic and Fiscal Impacts Report. Because it is anticipated that most displaced businesses would be relocated to nearby properties, the LRT Alternative would not be expected to

result in substantial changes to the local economic conditions in the project study area from the displacements. Local business viability may be temporarily affected by the relocations as customers become accustomed to accessing businesses at their new locations; however, after the businesses become established in their new sites, business viability would be expected to return to existing conditions. It is anticipated that where relocation would be required, it would result in the relocation of most of the jobs that would be potentially displaced. Therefore, there would be no net loss of jobs overall.

Public controversy among community members and business owners could result from business displacements; therefore, early and ongoing public outreach would be required to discuss potential concerns and communicate with property owners and community members.

4.6.2.3 Changes in Community Cohesion and Interaction

By providing additional transit services in the region, the LRT Alternative would increase connectivity within the eastern San Fernando Valley area, and would result in more unified communities. Therefore, this alternative would be expected to enhance long-term community cohesion and interaction.

Business displacements required for the LRT alignment and MSF site could result in substantial changes to local neighborhood character, and potentially the social fabric of the local community. Neighborhood residents or visitors may be accustomed to accessing businesses in their existing locations, and the displacement of those businesses could be psychologically or socially disruptive, and could affect professional and social interactions. However, if relocation sites are available within proximity to the existing business sites, the disruptions to professional and social interactions may be temporary as residents become accustomed to accessing the displaced businesses at their new locations.

4.6.2.4 Changes in Quality of Life or Social Values

When long-term operational benefits are considered for the LRT Alternative, an overall improved quality of life would be expected for the communities and neighborhoods in the project study area through the availability of new transit access to businesses and between communities. The LRT Alternative would permanently improve community mobility by providing a new means of access that does not rely solely on driving. Connections to other neighborhoods within the project study area and across the region would be strengthened by the LRT line. Business viability would be expected to improve because the increased pedestrian traffic near the proposed stations would provide new potential customers. Therefore, this alternative would be expected to result in social and economic benefits for the communities and neighborhoods in the project study area.

4.6.3 Physical Impacts

4.6.3.1 Changes in Land Use Patterns

The LRT Alternative would not be expected to result in substantial changes in land use patterns. While there would be some modifications to the project corridor (e.g., changes in bicycle lanes and turning movements, the loss of curbside parking, and the addition of an OCS, TPSSs, and MSF), the project corridor is an existing transportation route in an urbanized area with ongoing bus transit service, and therefore, the proposed LRT operations would be consistent with existing transportation uses.

The LRT Alternative could indirectly affect development in the project study area by focusing growth in housing, employment, and commercial development within walking distance of the proposed transit stations along the project corridor. TOD near station areas would be consistent with the proposed City of San Fernando TOD Overlay Zone, and would enhance the City's downtown area. In addition, because this alternative would be located in an urban area containing a limited number of vacant or underutilized parcels, this alternative would not be expected to change existing growth and development patterns substantially.

4.6.3.2 Changes in Aesthetic Character

The project corridor is an existing transportation route in an urbanized area with ongoing bus transit service; therefore, the proposed LRT operations would be consistent with existing transportation uses, and no substantial changes in aesthetic character would result from this alternative along the majority of the project corridor. In addition, stations would include aesthetic enhancements, such as landscaping and canopies, which would be compatible with the existing character of surrounding communities and neighborhoods.

This alternative would require a number of elements to support vehicle operations, including median fences, an OCS, TPSSs, signaling, a pedestrian bridge at the Sylmar/San Fernando Metrolink station, and an MSF. These additional elements would result in substantial changes to the aesthetic character of some areas, particularly residential and recreational areas along the project corridor.

The following parks are in proximity to the proposed improvements and could be affected by visual changes from this alternative:

- Blythe Street Park, 14740 Blythe Street, Van Nuys: This park is in proximity to the proposed MSF site at Arminta Street.
- Tobias Avenue Park, 9122 Tobias Avenue, Panorama City: This park is adjacent to the project corridor on Van Nuys Boulevard to the north of Nordhoff Street.
- Pacoima Wash Greenway: This greenway is a future proposed project that crosses under the project corridor south of Van Nuys Boulevard and Arleta Avenue, and at Metro-owned railroad right-of-way to the south of La Rue Street in San Fernando.
- Recreation Park (and San Fernando Regional Pool Facility), 208 Park Avenue, San Fernando: The park and pool facility are adjacent to the project corridor at the Metro-owned railroad right-of-way and Park Avenue.

Residential areas adjacent to the project corridor are in the following locations:

- Low-density residential areas are located adjacent to and south of the proposed MSF site at Aetna Street.
- Medium-density residential areas are located adjacent to and north of the proposed MSF site at Arminta Street.
- Medium-density residential areas are located adjacent to Van Nuys Boulevard between Parthenia Street and Plummer Street in Panorama City.
- Medium-, low-medium-, and low-density residential areas are located adjacent to Van Nuys Boulevard between just south of Woodman Avenue and Remick Avenue in Arleta.
- High-medium-density residential areas are located adjacent to the Metro-owned railroad right-of-way between La Rue Street and North Brand Boulevard.

- Low-medium density residential areas are located adjacent to and north/northeast of the Sylmar/San Fernando Metrolink Station.

The median fences, OCS, and pedestrian bridge, in particular, would introduce additional vertical elements that could substantially change the existing visual character and quality in these areas of the project corridor, especially for residents, pedestrians, and bicyclists, who would be expected to have high viewer sensitivity to their surroundings. Therefore, changes in aesthetic character from the LRT Alternative would be expected to be substantial in areas where sensitive viewers are located, and will need to be addressed during community outreach efforts. Potential impacts on aesthetic character from the LRT Alternative are also addressed in more detail in the Visual and Aesthetics Impacts Report prepared for the project.

4.6.3.3 Safety Impacts and Other Physical Intrusions

The LRT Alternative would not be expected to introduce substantial physical intrusions (e.g., noise, dust, or odors) to the project corridor. While there would be some modifications to the project corridor (e.g., changes in bicycle lanes and turning movements, the loss of curbside parking, and the addition of an OCS and TPSSs, median fences, a pedestrian bridge at the Sylmar/San Fernando Metrolink Station, and an MSF site), the project corridor is an existing transportation route in an urbanized area with ongoing bus transit service, and therefore, the proposed LRT operations would be consistent with existing transportation uses.

The development of new LRT facilities in the project corridor could pose security concerns because public gathering may increase at station areas, which could attract criminals and result in a higher potential for assault, robbery, or terrorist attacks. However, these concerns would be addressed both through design considerations (e.g., security cameras in station areas) and by coordinating with law enforcement personnel, including the Los Angeles Police Department's Foothill Community Police Station and the Van Nuys Community Police Station, the City of San Fernando Police Department, the Los Angeles County Sheriff's Department Transit Services Bureau, and the Transportation Security Administration. In addition, potential LRT improvements under this alternative would be subject to Metro's System Safety Program Plan, which is implemented to ensure worker and passenger safety, prevent crime, and allow for an adequate emergency response. A complete Threat and Vulnerability Assessment in compliance with FTA regulations would also be conducted for the alternative. Therefore, the LRT Alternative is not expected to result in a substantial increase in security risks in the project study area, as detailed in the Safety and Security Impacts Report prepared for the project.

The LRT would run in a dedicated guideway along Van Nuys Boulevard from the Metro Orange Line to San Fernando Road, and then within the existing Metro-owned railroad right-of-way on separate dedicated tracks from Van Nuys Boulevard to the Sylmar/San Fernando Metrolink Station. Therefore, this alternative would not be expected to result in a substantial increase in accidents or collisions between LRT vehicles and other motor vehicles.

Light rail vehicles would not exceed the posted adjacent roadway speed limit, which is typically 35 mph. The LRT Alternative would have an average speed of 30 mph travel speed when underground. In addition, Metro would prepare grade crossing applications in coordination with local public agencies to further increase safety and reduce the potential for conflicts, accidents, and collisions.

The LRT Alternative could result in several pedestrian safety concerns. Pedestrian safety issues would mostly apply to proposed at-grade stations, and less to the proposed underground LRT facilities as the latter can be designed to avoid these concerns. At-grade stations could present safety hazards if pedestrian traffic and movement are not considered, resulting in potential for collisions between

pedestrians and LRT vehicles. In addition, a potential safety hazard could result if pedestrians attempt to cross streets and tracks illegally.

Pedestrian traffic control and channelization techniques (e.g., barriers and designated walkways) would be used to control pedestrian movements at intersections and encourage the use of designated pedestrian crossings. A pedestrian bridge at the Sylmar/San Fernando Metrolink Station from the LRT platform to the parking lot is also proposed under this alternative. Metro would prepare grade crossing applications in coordination with local public agencies to further increase safety and reduce the potential for conflicts, accidents, and collisions.

While the proposed changes to the roadway network would be designed in compliance with Metro design guidelines to ensure pedestrian, motorist, and bicyclist safety, the removal of Class II bike lanes or replacement with shared bike lanes would increase the potential for conflicts between bicyclists and motor vehicles, reducing safety. Therefore, the LRT Alternative could result in safety impacts within the communities and neighborhoods in the project study area from the potential for bicycle collisions.

4.6.3.4 Physical Division of Communities

Under this alternative, all vehicle and pedestrian movements at unsignalized intersections would be blocked by a median fence. The installation of fencing could be considered a physical intrusion in the communities and neighborhoods in the project study area. However, the LRT would operate almost entirely within existing transportation corridors, and crossings at most signalized intersections would be maintained. In addition, the median fence would not encroach on residential properties. Therefore, this alternative would not introduce physical barriers that would substantially affect access between the existing communities and neighborhoods in the project study area.

4.6.4 Impact Conclusions

Under NEPA, the LRT Alternative would have substantial beneficial long-term effects on mobility, access, and social and economic conditions, because this alternative would improve connections to public transportation, improve access to businesses and community resources, and increase community cohesion and interaction. This alternative would also be expected to increase transit ridership over the long-term operation of the project, which would reduce traffic congestion and facilitate response times for emergency services; this would be a substantial beneficial effect. This alternative would not result in substantial noise, air quality, or odor impacts. However, this alternative could result in substantial adverse effects related to disruptions in social and community interactions from business displacements, and on aesthetic character from the construction of vertical elements (e.g., median fences, an OCS) that could substantially change the existing visual character in residential and recreational areas of the project corridor where there are sensitive viewer groups. In addition, this alternative could result in substantial adverse effects related to access and safety from the potential for bicycle and vehicle collisions. Mitigation measures are included in Section 5.2 (Operational Mitigation Measures) to reduce or minimize these potentially substantial adverse effects. However, after implementation of the proposed mitigation measures, potentially substantial adverse effects would remain.

Under CEQA, community and neighborhood impacts from the LRT Alternative would be less than significant for population and housing, noise, air quality, and land use, because this alternative would not result in substantial population growth, displace people or housing requiring the construction of replacement housing, result in substantial noise, air quality, or odor impacts, or physically divide an established community. However, this alternative would result in potentially significant impacts on

visual and aesthetics, as this alternative could substantially degrade the existing visual character or quality in residential and recreational areas of the project corridor where there are sensitive viewer groups. In addition, this alternative would result in potentially significant impacts on transportation and hazards, because this alternative could affect bicycle access and safety. Mitigation measures are included in Section 5.2 (Operational Mitigation Measures) to reduce or minimize these potentially significant impacts. However, after implementation of the proposed mitigation measures, impacts would remain significant and unavoidable. By increasing transit ridership over the long-term operation of the project, the LRT Alternative would reduce traffic congestion and consequently facilitate response times for emergency services, which would be a less than significant and beneficial impact.

4.7 Construction Impacts

4.7.1 No-Build Alternative

The No-Build Alternative would not involve new transportation or infrastructure improvements aside from projects currently under construction or funded for future construction. Therefore, under NEPA and CEQA, the No-Build Alternative would have no construction impacts on communities and neighborhoods.

4.7.2 TSM Alternative

The TSM Alternative would include increased bus frequencies and minor modifications to the roadway network. Additional TSM Alternative transit improvements that may be considered include, but are not limited to, traffic signalization improvements, bus stop amenities/improvements, and bus schedule restructuring. There would be minimal construction under the TSM Alternative. Therefore, under NEPA and CEQA, the TSM Alternative would not have substantial construction impacts on communities and neighborhoods.

4.7.3 Build Alternatives 1 through 4

Construction impacts would vary for the build alternatives, with less severe impacts resulting from the Curb-Running and Median-Running BRT Alternatives, moderately severe impacts resulting from the Low-Floor LRT/Tram Alternative, and the most severe impacts resulting from the LRT Alternative. The two BRT alternatives would require less infrastructure; therefore, construction activities would be shorter in duration and the least disruptive to communities and neighborhoods in the project study area. The Low-Floor LRT/Tram and LRT Alternatives would require more infrastructure, including an OCS, TPSSs, a pedestrian bridge at the Sylmar/San Fernando Metrolink Station, an MSF, and larger station platforms than the BRT alternatives, requiring a longer construction period. The LRT Alternative would require tunneling to construct underground portions of the alignment, as well as underground stations, which would result in the most severe construction impacts among the build alternatives. Specific construction impacts on communities and neighborhoods from the build alternatives are discussed in the following sections.

4.7.3.1 Mobility and Access Impacts

Construction of stations and the alignment would require temporary sidewalk, lane, and road closures, and temporary removal of parking on Van Nuys Boulevard, San Fernando Road, Truman

Street, and their cross streets. These closures could reduce pedestrian, bicycle, and vehicle mobility between communities and neighborhoods along the project corridor during construction.

Road and sidewalk closures and the addition of construction vehicles and equipment on major City of Los Angeles and San Fernando streets could also reduce public access to annual festivals and events in the various communities along the alignment. In addition, construction could disrupt traffic patterns and make public access to businesses and community resources more difficult. Lane closures, traffic detours, and designated truck routes associated with construction could also result in decreased access for emergency vehicles and delayed response times for emergency services.

Lane and/or road closures would be scheduled to minimize disruptions, and a Traffic Management Plan would be approved, in coordination with both the Cities of Los Angeles and San Fernando, prior to construction.

4.7.3.2 Social and Economic Impacts

Construction of the build alternatives would not be expected to result in substantial changes to the existing population in the project study area. The LRT Alternative would be the most costly and take the longest to construct; therefore, it would generate the greatest number of construction jobs. However, a substantial employment base and residential population currently exist in the San Fernando Valley within commuting distance of the project corridor, and the employment opportunities would not be expected to result in substantial migration of additional residents to the project study area. In addition, because of the temporary nature of construction jobs, the employment opportunities resulting from construction would not be expected to induce substantial population growth in communities and neighborhoods in the project study area.

Construction activities would likely result in a decrease in accessibility to many businesses and could reduce on-street and off-street parking. This could negatively affect business activity levels because the number of customers may temporarily decline. All attempts would be made to provide adequate detours and to minimize road closures; however, some consumers may avoid the area altogether, which could have an indirect effect on businesses within the project area. However, these impacts would be temporary, and after construction the project would provide improved mobility for more transit riders. The proposed project would also not be expected to result in urban decay impacts, as the project is a transit improvement project and not a development project that would displace several small businesses and other storefronts for the opening of a big box retailer or other development that would drastically change the character of the businesses and storefronts along Van Nuys Boulevard.

The required construction easements (i.e., the areas needed temporarily during construction in addition to the actual project footprint) would vary along the alignment, depending on the type of construction and the adjacent land use. The Low-Floor LRT and LRT Alternatives would have greater needs for construction easements than the two BRT alternatives.

Storage areas for construction equipment and materials would be established near the project alignment and used for equipment and material storage. The storage areas would be located within the right-of-way, parking lots, vacant land, or on the parcels for the proposed MSF sites for the Low-Floor and LRT Alternatives. No parcels would be acquired for the BRT alternatives, and no businesses would be displaced for the construction of these alternatives.

During construction, the contractor would choose staging locations among the parcels along the alignment to be acquired as needed for construction of the Low-Floor LRT/Tram and LRT Alternatives. However, construction of the Low-Floor LRT/Tram and LRT Alternatives may require additional permanent right-of-way acquisitions and the permanent displacement of businesses.

Because it is anticipated that most businesses displaced during construction of the Low-Floor LRT/Tram and LRT Alternatives would be relocated to nearby properties, construction of these alternatives would not be expected to result in substantial changes to the local economic conditions in the project study area. Local business viability may be temporarily affected by the relocations as customers become accustomed to accessing businesses at their new locations; however, after the businesses become established in their new sites, business viability would be expected to return to existing conditions.

Business displacements required for construction of the Low-Floor LRT/Tram and LRT Alternatives could result in substantial changes to local neighborhood character, and potentially the social fabric of the local community. Neighborhood residents or visitors may be accustomed to accessing businesses in their existing locations, and the displacement of those businesses could be psychologically or socially disruptive, and could affect professional and social interactions. However, if relocation sites are available within proximity to the existing business sites, the disruptions to professional and social interactions may be temporary as residents become accustomed to accessing the displaced businesses at their new locations.

Public controversy among community members and business owners could result from business displacements; therefore, early and ongoing public outreach is required to discuss potential concerns and communicate with property owners and community members.

4.7.3.3 Physical Impacts

Construction of the build alternatives would not likely result in changes to land use patterns or physical division of communities, because construction would be short-term and would not affect land use designations or introduce barriers that would divide communities. However, construction activities would result in a number of other physical impacts and intrusions, including noise, dust, odors, and traffic delays resulting from haul trucks and construction equipment in public streets and staging areas. Local neighborhoods, businesses, and community facilities may be inconvenienced temporarily, and community activities could be disrupted by these activities. However, because these impacts would be temporary and would be avoided or minimized with implementation of mitigation measures, these impacts would be minor adverse under NEPA and less than significant under CEQA.

Construction of the build alternatives may also result in several visual impacts within and surrounding the project corridor, which would temporarily change the aesthetic and visual setting of communities and neighborhoods along the project alignment. Construction areas could be visible from residential land uses on some of the adjacent parcels, either directly through fencing, through entrance gates, or over fencing from second story and higher windows. Construction activities at staging areas, proposed stations, and the selected MSF site for the Low-Floor LRT/Tram and LRT Alternatives may include the use of considerable heavy equipment such as cranes and associated vehicles, including bulldozers, backhoes, graders, scrapers, and trucks, which could be visible from public streets, sidewalks, and adjacent properties.

Viewers in the construction area may be affected by the presence of this equipment, as well as stockpiled construction-related materials. In addition, mature vegetation, including trees, could be temporarily removed from some areas. Construction impacts associated with noise, air quality, visual quality/aesthetics, and traffic would be reduced or minimized through construction management and abatement measures, as detailed in Section 5.3 (Construction Mitigation Measures). Because these impacts would be temporary and would be avoided or minimized with implementation of mitigation measures, these impacts would be minor adverse under NEPA and less than significant under CEQA.

Construction of the build alternatives could also have temporary effects on public safety and security within the communities and neighborhoods along the proposed project alignment. During construction, motorists, pedestrians, and bicyclists would be exposed to additional safety hazards because of proximity to construction activities. The potential for safety and security impacts would be minimized by compliance with Occupational Safety and Health Administration (OSHA), California Occupational Safety and Health Administration (Cal/OSHA), and Metro safety and security programs, which are designed to reduce potential construction effects. In addition, an adequate level of signage, construction barriers, and supervision of trained safety personnel would be maintained as part of the construction to ensure that pedestrian and motorist safety is maintained during construction. Because these impacts would be temporary and would be avoided or minimized with implementation of mitigation measures, these impacts would be minor adverse under NEPA and less than significant under CEQA.

Incidents of crime adjacent to the project alignment would not likely increase during construction of the build alternatives. Theft of construction machinery and materials could occur at construction sites, but these incidents would be minimized through implementation of standard site security practices. Because these impacts would be temporary and would be avoided or minimized with implementation of mitigation measures, these impacts would be minor adverse under NEPA and less than significant under CEQA.

4.7.3.4 Impact Conclusions

Under NEPA, the construction of the build alternatives could result in potentially adverse effects related to mobility and access, and emergency response resulting from temporary sidewalk, lane, and road closures, and temporary removal of parking; business viability through a temporary decrease in access to businesses; economic conditions, and social and community interactions from business displacements required for the Low-Floor LRT/Tram and LRT Alternatives; noise, air quality, and visual intrusions from construction activities and equipment; motorist, pedestrian, and bicycle safety from proximity to construction activities; and the potential for increased crime at construction sites.

Many of the construction effects would be short-term and temporary, and would be reduced through construction management and abatement measures, as detailed in Section 5.3 (Construction Mitigation Measures). In addition, mitigation measures are included in Sections 5.2 (Operational Mitigation Measures) and Section 5.3 (Construction Mitigation Measures) to reduce or minimize these potentially substantial adverse effects. With the implementation of mitigation measures, potential construction effects would be minor and adverse for mobility and access, noise, air quality, and visual intrusions, motorist, pedestrian, and bicycle safety, and crime. Economic and social effects from business displacement would remain substantial and adverse after implementation of mitigation measures.

Under CEQA, construction impacts from the build alternatives would be potentially significant because of the potential for construction activities to decrease bicycle and pedestrian safety, substantially degrade visual character and quality, interfere with emergency access and evacuation plans, substantially increase noise levels, and expose sensitive receptors (e.g., residential and recreational areas) to substantial dust and odor emissions. Construction impacts would be short-term and temporary, and would be reduced through construction management and abatement measures, as detailed in Section 5.3 (Construction Mitigation Measures). In addition, mitigation measures are included in Section 5.2 (Operational Mitigation Measures) and Section 5.3 (Construction Mitigation Measures) to reduce or minimize potentially significant impacts. With the implementation of mitigation measures, impacts would be less than significant.

4.8 Cumulative Impacts

Per CEQA Section 15130 (b), the cumulative impacts analysis can consider either a “list of past, present, and probable future projects producing related or cumulative impacts” or “a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.” The cumulative impacts analysis below is based on the approach that considers related projects.

4.8.1 No-Build Alternative

Under the No-Build Alternative, there would be no effects under NEPA or impacts under CEQA on communities and neighborhoods, and therefore, this alternative would not contribute to cumulative impacts on communities and neighborhoods.

4.8.2 TSM Alternative

The TSM Alternative would have minor beneficial effects on communities and neighborhoods in the project study area under NEPA, and less than significant impacts under CEQA, because this alternative would enhance mobility and access, and would not result in adverse effects or significant impacts on social, economic, or physical conditions in the project study area. Therefore, impacts from this alternative would not be expected to be cumulatively considerable.

4.8.3 Build Alternatives 1 through 4

The build alternatives would have some beneficial long-term effects, and impacts would be less than significant, related to mobility, access, and social and economic conditions, because these alternatives would improve connections to public transportation, improve access to businesses and community resources, and increase community cohesion and interaction. By increasing transit ridership, the build alternatives would reduce traffic congestion over the long-term operation of the project, and would consequently facilitate response times for police and fire protection services. These community and neighborhood benefits, when combined with other related projects in the Cumulative Impacts project study area, would be beneficial and less than cumulatively considerable under NEPA and CEQA.

During operation, all of the build alternatives could result in substantial adverse effects and potentially significant impacts related to access and safety from the potential for bicycle and vehicle collisions. Mitigation measures are included in Section 5.2 (Operational Mitigation Measures) to reduce or minimize these potentially substantial adverse effects and impacts. However, after implementation of the proposed mitigation measures, potentially substantial adverse effects and significant and unavoidable impacts would remain. These potentially substantial adverse effects and significant impacts, combined with the effects and impacts of other projects in the Cumulative Impacts project study area that could reduce bicycle access and safety, would be cumulatively considerable.

During construction, the build alternatives would result in temporary adverse effects and significant impacts on mobility and access, bicycle and pedestrian safety, emergency response, visual character and quality, noise, and air quality. Construction effects and impacts would be reduced or minimized through construction management and abatement measures, as detailed in Section 5.3 (Construction Mitigation Measures). In addition, these effects and impacts would be short-term and temporary, and

with the implementation of mitigation measures, these effects and impacts would be reduced to levels that are less than cumulatively considerable under NEPA and CEQA.

4.8.4 Build Alternatives 3 and 4

In addition to the potentially substantial adverse effects and significant impacts described in Section 4.8.3, the Low-Floor LRT/Tram and LRT Alternatives would result in potentially substantial adverse effects and significant impacts related to disruptions in social and community interactions from business displacements required for right-of-way acquisitions and/or temporary construction easements. Mitigation measures are included in Section 5.2 (Operational Mitigation Measures) and Section 5.3 (Construction Mitigation Measures) to reduce or minimize these potentially substantial adverse effects and significant impacts. However, after implementation of the proposed mitigation measures, potentially substantial adverse effects and significant and unavoidable impacts would remain. These potentially substantial adverse effects and significant impacts, combined with the effects and impacts of other projects in the project study area that would require business displacements, would be cumulatively considerable under NEPA and CEQA.

During operation, the Low-Floor LRT/Tram and LRT Alternatives would result in potentially substantial adverse effects and significant impacts on aesthetic character from the construction of vertical elements (e.g., median fences, an OCS) that could substantially change the existing visual character in residential and recreational areas of the project corridor where there are sensitive viewer groups. Mitigation measures are included in the Visual and Aesthetic Impacts Report prepared for the project. However, after implementation of the proposed mitigation measures, potentially substantial adverse effects and significant and unavoidable impacts would remain. These potentially substantial adverse effects and significant impacts, combined with the effects and impacts of other projects in the project study area that would degrade visual character and quality, would be cumulatively considerable under NEPA and CEQA.

5.1 Mitigation Measures

MM-CN-1A formal educational and public outreach campaign will be implemented to discuss potential community and neighborhood concerns, including relocations, visual/aesthetics changes, and fare policies, and to communicate information about the project with property owners and community members.

In addition, please see Chapter 3-Transportation, Transit, Circulation, and Parking; Section 4.5-Visual Quality and Aesthetics; Section 4.6-Air Quality; Section 4.8-Noise and Vibration; and Section 4.14-Safety and Security of this DEIS/DEIR, for mitigation measures related to those topics.

Chapter 6

Impacts Remaining After Mitigation

Mitigation measures are included in Chapter 5 to reduce or minimize potentially substantial adverse effects under NEPA, and potentially significant impacts under CEQA. Any effects and impacts remaining after implementation of the mitigation measures are discussed in the following sections.

6.1 Impacts Remaining Under NEPA

Under NEPA, all of the build alternatives would result in potentially substantial adverse effects related to access and safety from the potential for bicycle and vehicle collisions. Mitigation measures are included in Section 5.2 (Operational Mitigation Measures). However, after implementation of the proposed mitigation measures, potentially substantial adverse effects and cumulatively considerable effects would remain.

The Low-Floor LRT/Tram and LRT Alternatives would also result in potentially substantial adverse effects related to disruptions in social and community interactions from business displacements required for right-of-way acquisitions and/or temporary construction easements. In addition, these alternatives would result in potentially substantial adverse effects on aesthetic character from the construction of vertical elements (e.g., median fences, an OCS) that could substantially change the existing visual character and quality in residential and recreational areas of the project corridor where there are sensitive viewer groups.

Mitigation measures are included in Section 5.2 (Operational Mitigation Measures) and Section 5.3 (Construction Mitigation Measures) and in the Visual and Aesthetics Impacts Report prepared for the project to reduce or minimize these potentially substantial adverse effects. However, after implementation of the proposed mitigation measures, potentially substantial adverse effects and cumulatively considerable effects would remain.

All other effects on mobility and access, social and economic conditions, and physical conditions would not be substantial or adverse after implementation of mitigation measures.

6.2 Impacts Remaining Under CEQA

Under CEQA, all of the build alternatives would result in potentially significant impacts related to access and safety from the potential for bicycle and vehicle collisions. Mitigation measures are included in Section 5.2 (Operational Mitigation Measures). However, after implementation of the proposed mitigation measures, significant and unavoidable impacts, and cumulatively considerable and unavoidable impacts, would remain.

The Low-Floor LRT/Tram and LRT Alternatives would result in potentially significant impacts on aesthetic character from the construction of vertical elements (e.g., median fences, an OCS) that could substantially change the existing visual character and quality in residential and recreational areas of the project corridor where there are sensitive viewer groups. Mitigation measures are included in the Visual and Aesthetics Impacts Report prepared for the project to reduce or minimize these potentially significant impacts. However, after implementation of the proposed mitigation measures, significant and unavoidable impacts, and cumulatively considerable and unavoidable impacts, would remain.

All other impacts on mobility and access, social and economic conditions, and physical conditions would be less than significant after implementation of mitigation measures.

Chapter 7

CEQA Determination

According to CEQA, community and neighborhood impacts would be considered significant if the project would result in the following:

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.
- 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).
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- Displace substantial numbers of people necessitating the construction of replacement housing elsewhere.
- Substantially degrade the existing visual character or quality of the site and its surroundings.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.
- Physically divide an established community.

These criteria were used to evaluate impacts for the alternatives.

7.1 No-Build Alternative

The No-Build Alternative would have no impacts on communities and neighborhoods because this alternative would not decrease the performance or safety of public transit, bicycle, or pedestrian facilities, induce substantial population growth, displace people or housing, substantially degrade existing visual character or quality, interfere with emergency access, result in air quality, noise, or odor impacts, or physically divide established communities. This alternative would not contribute to cumulative impacts on communities and neighborhoods.

7.2 TSM Alternative

During operation, community and neighborhood impacts from the TSM Alternative would be less than significant because this alternative would enhance the performance of the public transit system, and would not decrease the performance of bicycle or pedestrian facilities, induce substantial

population growth, displace people or housing, substantially degrade existing visual character or quality, result in substantial noise, air quality, or odor impacts, or physically divide established communities. Potential construction impacts would be less than significant. In addition, impacts from this alternative would not be expected to be cumulatively considerable.

7.3 Build Alternative 1 – Curb-Running BRT Alternative

During operation, community and neighborhood impacts from this alternative would be less than significant for population and housing, aesthetics, noise, air quality, and land use, because this alternative would not result in substantial population growth, displace people or housing, substantially degrade the existing visual character or quality of the project corridor, result in substantial noise, air quality, or odor impacts, or physically divide an established community.

This alternative would result in potentially significant impacts on transportation and hazards, because this alternative could affect bicycle access and safety. These significant and unavoidable impacts would remain after implementation of proposed mitigation measures listed in Section 5.2 (Operational Mitigation Measures). In addition, when considered in combination with the impacts of other related projects, these impacts would be cumulatively considerable and unavoidable.

By increasing transit ridership over the long-term operation of the project, this alternative would reduce traffic congestion and consequently facilitate response times for emergency services, which would be a beneficial impact that is less than significant and would not contribute to adverse cumulative impacts.

During construction, impacts from this alternative would be potentially significant because of the potential for construction activities to decrease bicycle and pedestrian safety, substantially degrade visual character and quality, interfere with emergency access and evacuation plans, substantially increase noise levels, and expose sensitive receptors (e.g., residential and recreational areas) to substantial dust and odor emissions.

Construction impacts would be short-term and temporary, and would be reduced through construction management and abatement measures, as detailed in Section 5.3 (Construction Mitigation Measures). In addition, potential impacts would also be reduced to a level that is less than significant with the implementation of mitigation measures listed in Section 5.2 (Operational Mitigation Measures) and Section 5.3 (Construction Mitigation Measures). No cumulatively considerable impacts would result from the construction of this alternative.

7.4 Build Alternative 2 – Median-Running BRT Alternative

During operation, community and neighborhood impacts from this alternative would be less than significant for population and housing, aesthetics, noise, air quality, and land use, because this alternative would not result in substantial population growth, displace people or housing, substantially degrade the existing visual character or quality of the project corridor, result in substantial noise, air quality, or odor impacts, or physically divide an established community.

This alternative would result in potentially significant impacts on transportation and hazards, because this alternative could affect bicycle access and safety. These significant and unavoidable impacts would remain after implementation of proposed mitigation measures listed in Section 5.2 (Operational Mitigation Measures). In addition, when considered in combination with the impacts of other related projects, these impacts would be cumulatively considerable and unavoidable.

By increasing transit ridership over the long-term operation of the project, this alternative would reduce traffic congestion and consequently facilitate response times for emergency services, which would be a beneficial impact that is less than significant and would not contribute to adverse cumulative impacts.

During construction, impacts from this alternative would be potentially significant because of the potential for construction activities to decrease bicycle and pedestrian safety, substantially degrade visual character and quality, interfere with emergency access and evacuation plans, substantially increase noise levels, and expose sensitive receptors (e.g., residential and recreational areas) to substantial dust and odor emissions.

Construction impacts would be short-term and temporary, and would be reduced through construction management and abatement measures. In addition, potential impacts would be reduced to a level that is less than significant with the implementation of mitigation measures listed in Section 5.2 (Operational Mitigation Measures) and Section 5.3 (Construction Mitigation Measures). No cumulatively considerable impacts would result from the construction of this alternative.

7.5 Build Alternative 3 – Low-Floor LRT/Tram Alternative

During operation, community and neighborhood impacts from this alternative would be less than significant for population and housing, air quality, noise, and land use, because this alternative would not result in substantial population growth, displace people or housing requiring the construction or replacement of housing, result in substantial noise, air quality, or odor impacts, or physically divide an established community.

This alternative would result in potentially significant impacts on visual quality and aesthetics, as this alternative could substantially degrade the existing visual character or quality in residential and recreational areas of the project corridor where there are sensitive viewer groups. In addition, this alternative would result in potentially significant impacts on transportation and hazards, because this alternative could affect bicycle access and safety. These significant and unavoidable impacts would remain after implementation of proposed mitigation measures listed in Section 5.2 (Operational Mitigation Measures). In addition, when considered in combination with the impacts of other related projects, these impacts would be cumulatively considerable and unavoidable.

By increasing transit ridership over the long-term operation of the project, this alternative would reduce traffic congestion and consequently facilitate response times for emergency services, which would be a beneficial impact that is less than significant and would not contribute to adverse cumulative impacts. During construction, impacts from this alternative would be potentially significant because of the potential for construction activities to decrease bicycle and pedestrian safety, substantially degrade visual character and quality, interfere with emergency access and evacuation plans, substantially increase noise levels, and expose sensitive receptors (e.g., residential and recreational areas) to substantial dust and odor emissions.

Construction impacts would be short-term and temporary, and would be reduced through construction management and abatement measures. In addition, potential impacts would be reduced to a level that is less than significant with the implementation of mitigation measures listed in Section 5.2 (Operational Mitigation Measures) and Section 5.3 (Construction Mitigation Measures). No cumulatively considerable impacts would result from the construction of this alternative.

7.6 Build Alternative 4 – LRT Alternative

During operation, community and neighborhood impacts from this alternative would be less than significant for population and housing, air quality, noise, and land use, because this alternative would not result in substantial population growth, displace people or housing requiring the construction or replacement of housing, result in substantial noise, air quality, or odor impacts, or physically divide an established community.

This alternative would result in potentially significant impacts on visual quality and aesthetics, as this alternative could substantially degrade the existing visual character or quality in residential and recreational areas of the project corridor where there are sensitive viewer groups. In addition, this alternative would result in potentially significant impacts on transportation and hazards, because this alternative could affect bicycle access and safety. These significant and unavoidable impacts would remain after implementation of proposed mitigation measures listed in Section 5.2 (Operational Mitigation Measures). In addition, when considered in combination with the impacts of other related projects, these impacts would be cumulatively considerable and unavoidable.

By increasing transit ridership over the long-term operation of the project, this alternative would reduce traffic congestion and consequently facilitate response times for emergency services, which would be a beneficial impact that is less than significant and would not contribute to adverse cumulative impacts.

During construction, impacts from this alternative would be potentially significant because of the potential for construction activities to decrease bicycle and pedestrian safety, substantially degrade visual character and quality, interfere with emergency access and evacuation plans, substantially increase noise levels, and expose sensitive receptors (e.g., residential and recreational areas) to substantial dust and odor emissions.

Construction impacts would be short-term and temporary, and would be reduced through construction management and abatement measures. In addition, potential impacts would be reduced to a level that is less than significant with the implementation of mitigation measures listed in Section 5.2 (Operational Mitigation Measures) and Section 5.3 (Construction Mitigation Measures). No cumulatively considerable impacts would result from the construction of this alternative.

Chapter 8 References

- California Natural Resources Agency. 2010a. *State CEQA Guidelines, 14 CCR Section 15126.2(d)*. Available: <<http://ceres.ca.gov/ceqa/guidelines/art9.html>>. Accessed: February 15, 2013.
- _____. 2010b. *State CEQA Guidelines, 14 CCR Section 15358*. Available: <<http://ceres.ca.gov/ceqa/guidelines/art20.html>>. Accessed: February 15, 2013.
- _____. 2010c. *State CEQA Guidelines, 14 CCR Section 15382*. Available: <<http://ceres.ca.gov/ceqa/guidelines/art20.html>>. Accessed: February 15, 2013.
- Caltrans (California Department of Transportation). 2012. *Standard Environmental Reference, Environmental Handbook, Volume 1, Chapter 24, Community Impacts*. Last Updated July 11. Available: <<http://www.dot.ca.gov/ser/vol1/sec3/community/ch24cia/chap24cia.htm>>. Accessed: February 16, 2013.
- CEQ (Council on Environmental Quality). n.d. *Regulations for Implementing NEPA, 40 CFR Section 1508*. Available: <<http://ceq.hss.doe.gov/nepa/regs/ceq/1508.htm>>. Accessed: February 15, 2013.
- City of Los Angeles. n.d. *Great Streets LA, A Message from Mayor Eric Garcetti*. Available: <<http://www.lamayor.org/greatstreets>>. Accessed April 9, 2015.
- _____. 2013. *General Plan*. Available: <<http://cityplanning.lacity.org/>>. Accessed: March 1, 2013.
- _____. 2011. *2010 Bicycle Plan*. Available: <<http://planning.lacity.org/cwd/gnlpln/transelt/NewBikePlan/Txt/LA%20CITY%20BICYCLE%20PLAN.pdf>>. Accessed: April 6, 2015.
- _____. 2009a. *Housing Element of the General Plan 2006-2014*. Adopted January 14. Available: <http://cityplanning.lacity.org/HousingInitiatives/HousingElement/Final/HE_Final.pdf>. Accessed: February 13, 2013.
- _____. 2009b. Panorama City Business Improvement District. Approved March.
- _____. 2007. *Los Angeles River Revitalization Master Plan*. Available: <http://boe.lacity.org/lariverrmp/CommunityOutreach/masterplan_download.htm>. Accessed: November 25, 2014.
- _____. 2006a. *L.A. CEQA Thresholds Guide, H. Land Use*. Available: <<http://www.ci.la.ca.us/ead/programs/Thresholds/H-Land%20Use.pdf>>. Accessed: February 13, 2013.
- _____. 2006b. *L.A. CEQA Thresholds Guide, J. Population and Housing*. Available: <<http://www.ci.la.ca.us/ead/programs/Thresholds/J-Population%20and%20Housing.pdf>>. Accessed: February 15, 2013.
- _____. 2004. *Van Nuys Central Business District Community Design Overlay District (CDO) Design Guidelines and Standards*. Revised August 16. Available: <<http://cityplanning.lacity.org/complan/otrplan/pdf/vnycbdcdotxt.pdf>>. Accessed: February 13, 2013.

- _____. 2003a. *Pacoima Community Design Overlay (CDO) Design Guidelines and Standards*. Approved May 22. Available: <<http://cityplanning.lacity.org/complan/othrplan/pdf/PacoimaCDOGuidelines.pdf>>. Accessed: February 13, 2013.
- _____. 2003b. *Panorama City Community Design Overlay (CDO) Design Guidelines and Standards*. Approved March 27. Available: <http://cityplanning.lacity.org/complan/othrplan/pdf/PanoramaCityCDO_guidelines.pdf>. Accessed: February 15, 2013.
- _____. 2002. *Van Nuys Boulevard Targeted Neighborhood Initiative (TNI)*. Available: <<http://planning.lacity.org/complan/rproginfo/TNI/tniarea/vannuystni.htm>>. Accessed: November 18, 2011.
- _____. 2001a. *City of Los Angeles General Plan, Framework Element*. Re-Adopted August 8. Available: <<http://cityplanning.lacity.org/cwd/framwk/contents.htm>>. Accessed: February 16, 2013.
- _____. 2001b. *Osborne Corridor Targeted Neighborhood Initiative (TNI)*. Available: <<http://cityplanning.lacity.org/complan/rproginfo/TNI/tnimap/osborncor.pdf>>. Accessed: February 14, 2013.
- _____. 2001c. *Van Nuys Targeted Neighborhood Initiative (TNI II)*. Available: <<http://planning.lacity.org/complan/rproginfo/TNI/tniarea/vannuys2.htm>>. Accessed: February 13, 2013.
- _____. 2001d. *Ventura-Cahuenga Boulevard Corridor Specific Plan*. Amended August 18. Available: <<http://cityplanning.lacity.org/complan/specplan/pdf/ventura.pdf>>. Accessed: February 13, 2013.
- _____. 1999a. *City of Los Angeles General Plan, Transportation Element*. Adopted September 8. Available: <<http://cityplanning.lacity.org/cwd/gnlpln/transelt/index.htm>>. Accessed: February 13, 2013.
- _____. 1999b. *Mission Hills-Panorama City-North Hills Community Plan*. Adopted June 9. Available: <<http://cityplanning.lacity.org/complan/pdf/msscptxt.pdf>>. Accessed: February 13, 2013.
- _____. 1998a. *Encino – Tarzana Community Plan*. Adopted December 16. Available: <<http://cityplanning.lacity.org/complan/pdf/enccptxt.pdf>>. Accessed: February 16, 2013.
- _____. 1998b. *Pacoima Town Center Targeted Neighborhood Initiative*. Available: <<http://cityplanning.lacity.org/complan/rproginfo/TNI/tnimap/tni-paco.pdf>>. Accessed: February 13, 2013.
- _____. 1998c. *Sherman Oaks – Studio City – Toluca Lake – Cahuenga Pass Community Plan*. Adopted May 13. Available: <<http://cityplanning.lacity.org/complan/pdf/shrcptxt.pdf>>. Accessed: February 13, 2013.
- _____. 1998d. *Van Nuys-North Sherman Oaks Community Plan*. Adopted September 9. Available: <<http://cityplanning.lacity.org/complan/pdf/vnycptxt.pdf>>. Accessed: February 13, 2013.
- _____. 1997. *Map B.2, Transportation Element of the General Plan, Transit Priority Arterial Streets in the City of Los Angeles*. Available: <<http://planning.lacity.org/cwd/gnlpln/transelt/TEMaps/B2Trnt.gif>>. Accessed: October 1, 2015.

- _____. 1997. *Sylmar Community Plan*. Adopted August 8. Available: <<http://cityplanning.lacity.org/complan/pdf/sylcptxt.pdf>>. Accessed: February 16, 2013.
- _____. 1996. *Arleta-Pacoima Community Plan*. Approved November 6. Available: <<http://cityplanning.lacity.org/complan/pdf/arlcptxt.pdf>>. Accessed: February 13, 2013.
- _____. 1993. *City of Los Angeles/Planning Department Land Use/Transportation Policy*. Adopted November 2. Available: <http://www.metro.net/images/Land_Use-Transportation_Policy.pdf>. Accessed: February 16, 2013.
- City of Los Angeles Housing and Community Development Department. 2013. *2013-2017 Five-Year Consolidated Plan*. Available: <http://cdd.lacity.org/home_reports.html>. Accessed: March 1, 2013.
- City of Los Angeles Neighborhood Development Department. n.d. *Neighborhood Council Map*. Available < www.lacityneighborhoods.com/map.htm>. Accessed: February 11, 2013.
- City of San Fernando. 2009. *The City of San Fernando 2008-2014 Housing Element*. Adopted April 6. Available: <http://www.hcd.ca.gov/hpd/housing_element2/documents/san_fernando.pdf>. Accessed: February 21, 2013.
- _____. 2005. *The San Fernando Corridors Specific Plan*. Adopted January. Available: <http://www.ci.san-fernando.ca.us/sfold/news/specific_plan/sf_corridors_sp_final.pdf>. Accessed: February 13, 2013.
- _____. 1987. *City of San Fernando Revised General Plan*. Prepared by Castaneda & Associates. Available: <http://www.ci.san-fernando.ca.us/city_government/departments/comdev/forms_docs/General%20Plan%20-%20Complete.pdf>. Accessed: February 21, 2013.
- County of Los Angeles. 2012. *County of Los Angeles Bicycle Master Plan*. Available: <<http://dpw.lacounty.gov/pdd/bike/docs/bmp/FINAL%20Bicycle%20Master%20Plan.pdf>>. Accessed: April 6, 2015.
- CRA/LA. n.d. *Pacoima/Panorama City Earthquake Disaster Assistance Project*. Available: <<http://www.crala.org/internet-site/Projects/Pacoima/index.cfm>>. Accessed: March 1, 2013.
- Esri. 2013. *Esri - GIS Mapping Software, Solutions, Services, Map Apps, and Data*. Maps throughout this report were created using ArcGIS® software by Esri. ArcGIS® and ArcMap™ are the intellectual property of Esri and are used herein under license. Copyright © Esri. All rights reserved. For more information about Esri® software, please visit www.esri.com.
- Google, Inc. 2013. *Google Maps*. Available: <<http://maps.google.com/>>. Accessed: February 13, 2013.
- Metro. 2014. *Metro Complete Streets Policy*. Available: < http://media.metro.net/projects_studies/sustainability/images/policy_completestreets_2014-10.pdf>. Accessed: July 22, 2015.
- OPR (State of California, Governor's Office of Planning and Research). 1994. *Thresholds of Significance: Criteria for Defining Environmental Significance*. September. Available: < <http://ceres.ca.gov/ceqa/more/tas/Threshold.html>>. Accessed: February 12, 2013.
- President William J. Clinton. 1994. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Federal Register Volume 59,

- Number 32). February 11. Available: <<http://www.archives.gov/federal-register/executive-orders/pdf/12898.pdf>>. Accessed: February 27, 2013.
- SCAG (Southern California Association of Governments). 2008. *Final 2008 Regional Comprehensive Plan*. Available: <http://www.scag.ca.gov/rcp/pdf/finalrcp/f2008RCP_Complete.pdf>. Accessed: March 1, 2013.
- The Village at Sherman Oaks. n.d. *The Village at Sherman Oaks*. Available: <www.villageatshermanoaks.com>. Accessed: November 20, 2011.
- U.S. Census Bureau. 2010a. *American Community Survey, 2006-2010*. Detailed Tables Generated by Mandy Jones Using American FactFinder. Available: <<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>>. Accessed February 13, 2013.
- _____. 2010b. *2010 Census*. Detailed Tables Generated by Mandy Jones using American FactFinder. Available: <<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>>. Accessed February 13, 2013.
- _____. 2000. *2000 Census*. Detailed Tables Generated by Mandy Jones using American FactFinder. Available: <<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>>. Accessed: February 13, 2013.
- U.S. Congress. 1969. *National Environmental Policy Act of 1969, as amended, 42 USC Section 4331*. Available: <<http://ceq.hss.doe.gov/nepa/regs/nepa/nepaeqia.htm>>. Accessed: February 15, 2013.
- _____. 1964. *Title VI of the 1964 Civil Rights Act, 42 USC Section 2000d*. Available: <<http://www.justice.gov/crt/about/cor/coord/titlevistat.php>>. Accessed: March 4, 2013.
- U.S. Department of Transportation, Federal Highway Administration. 1996. *Community Impact Assessment: A Quick Reference for Transportation*. September. Available: http://www.ciatrans.net/CIA_Quick_Reference/Purpose.html. Accessed: March 7, 2013.