CHAPTER 4—ENVIRONMENTAL ANALYSIS, CONSEQUENCES, AND MITIGATION

This chapter of the Final Environmental Impact Statement/Environmental Impact Report (EIS/EIR) discusses the environmental analysis, consequences, and mitigation for the Westside Subway Extension (Project) Locally Preferred Alternative (LPA). The analysis is based on federal and state requirements as well as federal and state guidelines. The National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) require the evaluation of potential effects of proposed government actions on the environment. The U.S. Department of Transportation (USDOT), through the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA), has adopted regulations to implement NEPA. The LPA is described in Chapter 2, Alternatives Considered.

4.1 Land Use

This section has been updated from the Draft EIS/EIR to focus on the analysis of the affects of the LPA on land use and development. The analysis results have not changed from the Draft EIS/EIR. The LPA could either be constructed as a single phase under the America Fast Forward (30/10) Scenario (Concurrent Construction) or as three consecutive phases under the Los Angeles County Metropolitan Transportation Authority (Metro) Long Range Transportation Plan Scenario (Phased Construction). The opening of the LPA as a single phase or in three sequential phases does not substantially change the land use analysis that was presented in the Draft EIS/EIR. The analysis of all the Build and Transportation Systems Management (TSM) Alternatives in the Draft EIS/EIR is incorporated into this document by reference. Information in this section is summarized from the *Westside Subway Extension Land Use and Development Opportunities Technical Report* (Metro 2010b) prepared in support of the Draft EIS/EIR and the *Addendum to the Westside Subway Extension Land Use and Development Opportunities Technical Report (updated)* (Metro 2011b) prepared in support of the Final EIS/EIR, where additional detailed information and references are provided.

4.1.1 Regulatory Setting

Land use regulations are articulated in both regional and local plans. The Southern California Association of Governments (SCAG) defines regional planning principles for the corridor, and local municipalities define land uses for specific areas of the corridor.

SCAG serves as the Metropolitan Planning Organization (MPO) for the region. The SCAG *2008 Regional Transportation Plan* (RTP) (SCAG 2008a) and the *Regional Comprehensive Plan* (RCP) (SCAG 2008c) are tools used for identifying the transportation priorities of the Southern California region. The policies and goals of the RTP and RCPG focus on the need to coordinate land use and transportation decisions to manage travel demand within the region. The seven most relevant SCAG regional policies are as follows:

- Growth management policies
- Growth management policies to improve the regional standard of living
- Growth management policies to improve the regional quality of life

- Growth management policies related to social, political, and cultural equity
- Regional transportation plan
- Air quality core actions
- Open space ancillary goals

In addition to SCAG land use policies and goals, local jurisdictions have unique sets of policies to guide future land use development. The Study Area includes five local jurisdictions: the Cities of Los Angeles, West Hollywood, Beverly Hills, and Santa Monica and portions of unincorporated Los Angeles County. Figure 4-1 illustrates the location of the various jurisdictions and Los Angeles planning areas within the Study Area, and Table 4-1 briefly summarizes relevant land use policies for each of these five jurisdictions (refer to the *Westside Subway Extension Land Use and Development Opportunities Technical Report* [Metro 2010b] for more detail). These local policies can be grouped into six primary land use goals and policies:

- Reduce automobile use
- Increase the intensity of development and growth along the transit corridor
- Provide opportunities for joint development and cooperation
- Enhance regional connectivity
- Minimize environmental impacts
- Maximize ridership through design and location

These policies are important to understand in order to determine whether the LPA complies with applicable local land use policies.

The regulatory settings for the LPA are the same whether the LPA is constructed under the Concurrent Construction Scenario or the Phased Construction Scenario. Under the Phased Construction Scenario, Phase 1 and Phase 2 will extend through the cities of Los Angeles and Beverly Hills, and Phase 3 will extend through the City of Los Angeles and unincorporated portions of Los Angeles County.

4.1.2 Affected Environment/Existing Conditions

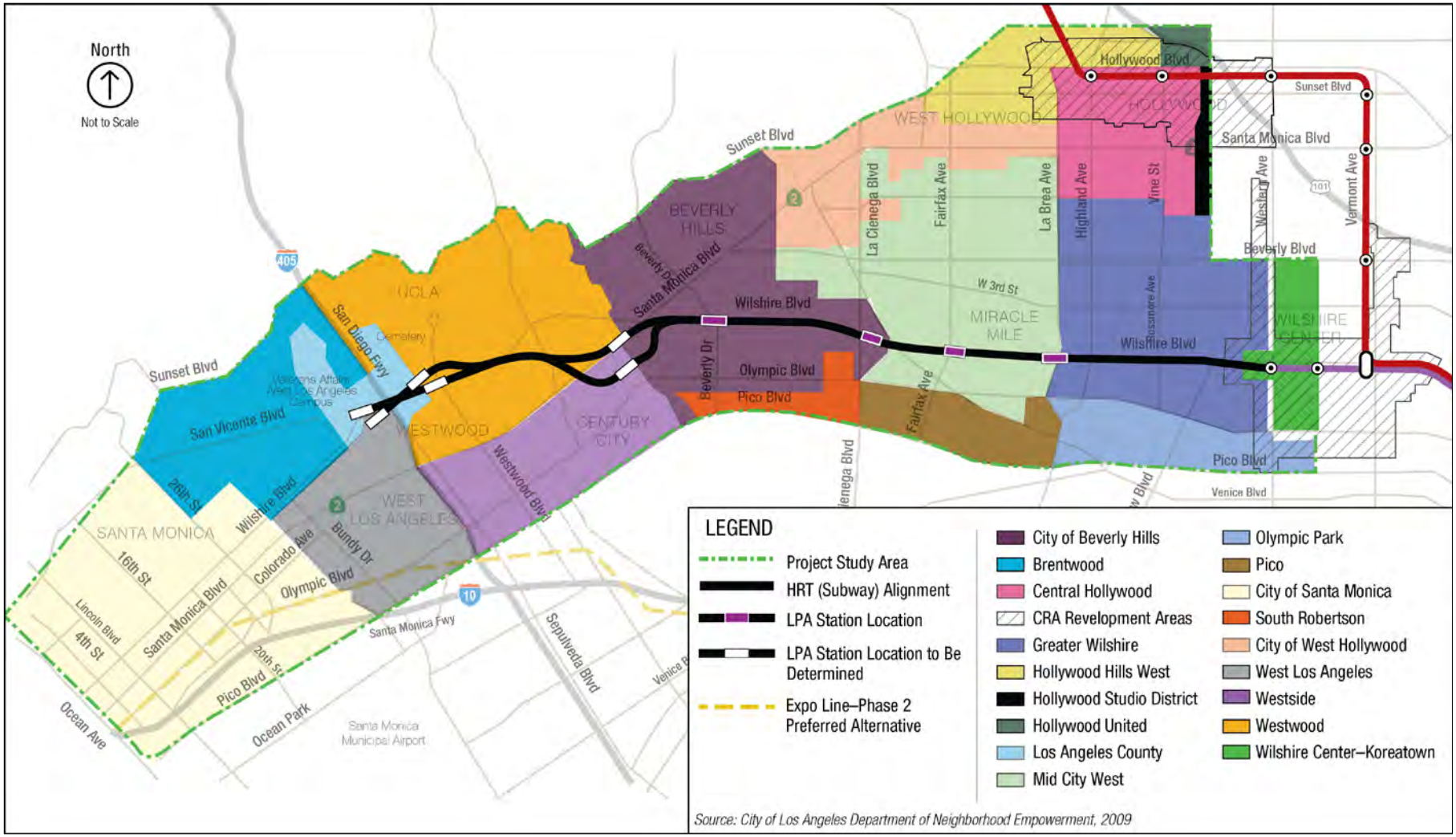
The Westside Study Corridor can be characterized as a dense urban environment with some of the highest employment and population densities in Los Angeles County. Existing land uses within the Study Area are varied and include a combination of residential, commercial, transportation and utilities, industrial, and public/institutional uses. Each station location along the Westside Subway Extension has a different character and a unique set of existing land use conditions. The affected environment and existing conditions for the LPA are the same whether the LPA is constructed under the Concurrent Construction Scenario or the Phased Construction Scenario.

Figure 4-2 and Figure 4-3 show the distribution of land use types within the Study Area and Figure 4-4 illustrates existing land use within one-quarter mile around each station location. The primary land uses in the Study Area are residential, the majority of which are single-family residential. In contrast, the predominant land use at most station areas is multi-family residential, particularly at Wilshire/La Brea.

Commercial land uses comprise approximately 10 percent of the total Study Area and are concentrated along major roadways, such as Wilshire, La Cienega, and Santa Monica Boulevards and Fairfax Avenue. Commercial land uses predominate at the Wilshire/Rodeo and Century City Stations. The employment centers surrounding the stations at Wilshire/Rodeo, Century City, Westwood/UCLA, and Westwood/VA Hospital create a "second downtown" of Los Angeles, which is comparable to the seventh largest downtown in the United States because of the high number of jobs. The Westwood/UCLA and Westwood/VA Hospital Stations are surrounded primarily by institutional land uses. The Westwood/UCLA Station is also located near Westwood Village, which is a large commercial center.

The existing vacant and parking lot parcels are an important consideration in determining the potential impact the LPA will have on adjacent and surrounding land uses as these parcels are more likely to be developed in the future. For example, the Westwood/UCLA Off-Street Station will be located within a developable parking lot. Wilshire/Fairfax and Westwood/UCLA, as described above, are projected to experience a greater increase in new employment and housing units and, as such, will result in increased pressure for redevelopment around those stations. The redevelopment around the Wilshire/Fairfax and Westwood/UCLA Stations would likely include the replacement of existing low-density uses with higher-density commercial and residential land uses.

SCAG housing and employment projections indicate that additional development will occur within the Westside Corridor, whether or not the LPA is implemented. According to SCAG growth projections, the Westside Corridor is forecast for an increase of 155,812 housing units and 285,143 new jobs between 2010 and 2035. A substantial portion of these housing units and new jobs are expected to be located close to the LPA's station locations, as illustrated in Figure 4-5. The highest population growth is expected to occur around the Wilshire/Fairfax and Wilshire/Rodeo Station locations. The greatest employment growth is expected to occur around the Wilshire/Fairfax, Westwood/UCLA, and Wilshire/Rodeo Station locations.



Source: City of Los Angeles Department of Neighborhood Empowerment, 2009

Figure 4-1. Jurisdiction and Planning Areas

Table 4-1. Relevant Local Land Use Policies

Jurisdiction	Land Use Policy	Summary of Relevant Land Use Policy Objectives and Goals
City of Los Angeles	Land Use/Transportation Policy	▪ Focus future growth of the City around transit stations ▪ Increase land use intensity in transit station areas, where appropriate ▪ Create a pedestrian-oriented environment in the context of an enhanced urban environment ▪ Accommodate mixed-use (commercial/residential) development
	Residential/Accessory Services Zones and Density Bonus Ordinance	▪ Density bonuses are provided for residential development projects that are located near transit stops leading to the increased development potential of transit corridors
	Citywide General Plan Framework	▪ The *Framework*'s land use and transportation policies encourage development in "targeted growth areas" by allowing transit-oriented development and calling for streamlined transportation analysis and mitigation procedures ▪ The *Framework's* land use policies identify transportation corridors and stations as the primary focal point of the City's development and establish the Wilshire Corridor as a priority corridor set to commence high-capacity transit service and develop programs to foster transit ridership along the corridor
	General Plan's Transportation Element	▪ Establish high capacity transit service post-2010, and develop programs to foster transit ridership along the Wilshire Corridor (Wilshire/Western to I-405, serving Century City and Westwood) ▪ Continue transit restructuring studies and other inter-agency efforts to reduce the cost and enhance the effectiveness of transit service, and improve coordination with adjoining jurisdictions in implementation of feasible measures as recommended in the transit restructuring studies; give full consideration to establish separate transit zones ▪ Develop interactive transit information systems that bring customers more timely, accurate, and complete transit information ▪ Promote the multi-modal function of transit centers (bus and rail) through improved station design and management of curb lanes to facilitate transfers between modes ▪ Identify and develop transit priority streets which serve regional centers, major economic activity areas, and rail stations to enhance speed, quality, and safety of transit service
	General Plan's Land Use Element	▪ Each Community Plan includes goals, objectives, and policies regarding the appropriate land uses that would support a public transit system that improves mobility with convenient alternatives to automobile travel, fostering of transportation demand strategies, the development of non- motorized transportation options, and the coordination of activities with other jurisdictions ▪ The Study Area includes the following Community Plan Areas: Brentwood-Pacific Palisades, Westwood, West Los Angeles, Hollywood, and Wilshire Community
	Specific Plans	▪ A Specific Plan effectively establishes a link between implementing policies of the general plan and the individual development proposals in a defined area ▪ The Study Area includes the following Specific Plans: Park Mile, West Los Angeles Transportation Improvement and Mitigation, Wilshire-Westwood Scenic Corridor, and Century City North
	Redevelopment Plans	▪ The principal goal of a Redevelopment Plan is to guide an agency's redevelopment efforts to eliminate blighting influences ▪ The Study Area includes the following Redevelopment Projects: CRA/LA Hollywood and CRA/LA Wilshire Center-Koreatown

Table 4-1. Relevant Local Land Use Policies (continued)

Jurisdiction	Land Use Policy	Summary of Relevant Land Use Policy Objectives and Goals
Multi-Jurisdictional	Westside Cities Multimodal Mobility Study	▪ Aim to identify multimodal mobile interface opportunities for the Westside Cities, which includes, but is not limited to, developing transportation networks, maximizing transit efficiency, balancing the use of public right-of-way, and linking facilities and coordinating services ▪ The Westside Cities include the Cities of Beverly Hills, Culver City, Santa Monica, and West Hollywood
West Hollywood	City of West Hollywood General Plan	▪ Encourage use of public transportation and minimizes use of automobiles and collaborates with regional transit agencies, including Southern California Regional Transit District (SCRTD), to explore the development of fixed-route service
Beverly Hills	City of Beverly Hills General Plan	▪ Collaborate with local transit agencies to promote mass transit ridership through careful planning of routes; support the extension of the Metro subway along Wilshire Boulevard through the City with stations at Beverly/Rodeo and La Cienega to enhance transit service and increase transit ridership within the City and West Los Angeles ▪ Work collaboratively with regional agencies and adjacent jurisdictions to improve transit service, accessibility, frequency, and connectivity resulting in increased ridership and fewer personal automobile trips ▪ Support increased frequency transit service and capital investment to serve high-density employment, commercial, residential, or mixed-use areas and activity centers ▪ Prioritize growth and accommodate the highest development densities in proximity to major transit corridors and rail transit stations as developed in the future and allow the greatest development on properties in proximity of public transit stops, stations, and corridors
Santa Monica	City of Santa Monica General Plan	▪ The City shall work with transit providers to pursue direct transit connections for Santa Monica residents to regional destinations and shall support a future Westside Subway Extension as a desirable project, with the City's first priority the completion of the Exposition Light Rail line to downtown Santa Monica ▪ The City shall support transit-oriented development patterns and uses that are known to generate a high level of transit ridership and shall design incentives to focus development in locations best served by transit
Los Angeles County	County of Los Angeles General Plan	▪ Promote the development of an improved public transportation system to link regional centers and support urban revitalization ▪ Promote a more concentrated urban pattern, focus new development in suitable locations, and focus intensive urban uses in an interdependent system of activity centers located to effectively provide services throughout the urban area and supported by adequate public transportation facilities ▪ Encourage the location of medium- and high-density housing in close proximity to regional multipurpose centers and promote and develop transit-oriented districts along major transit corridors ▪ Expand inter-jurisdictional cooperation to ensure a seamless, inter-modal, and multi-modal regional transportation system

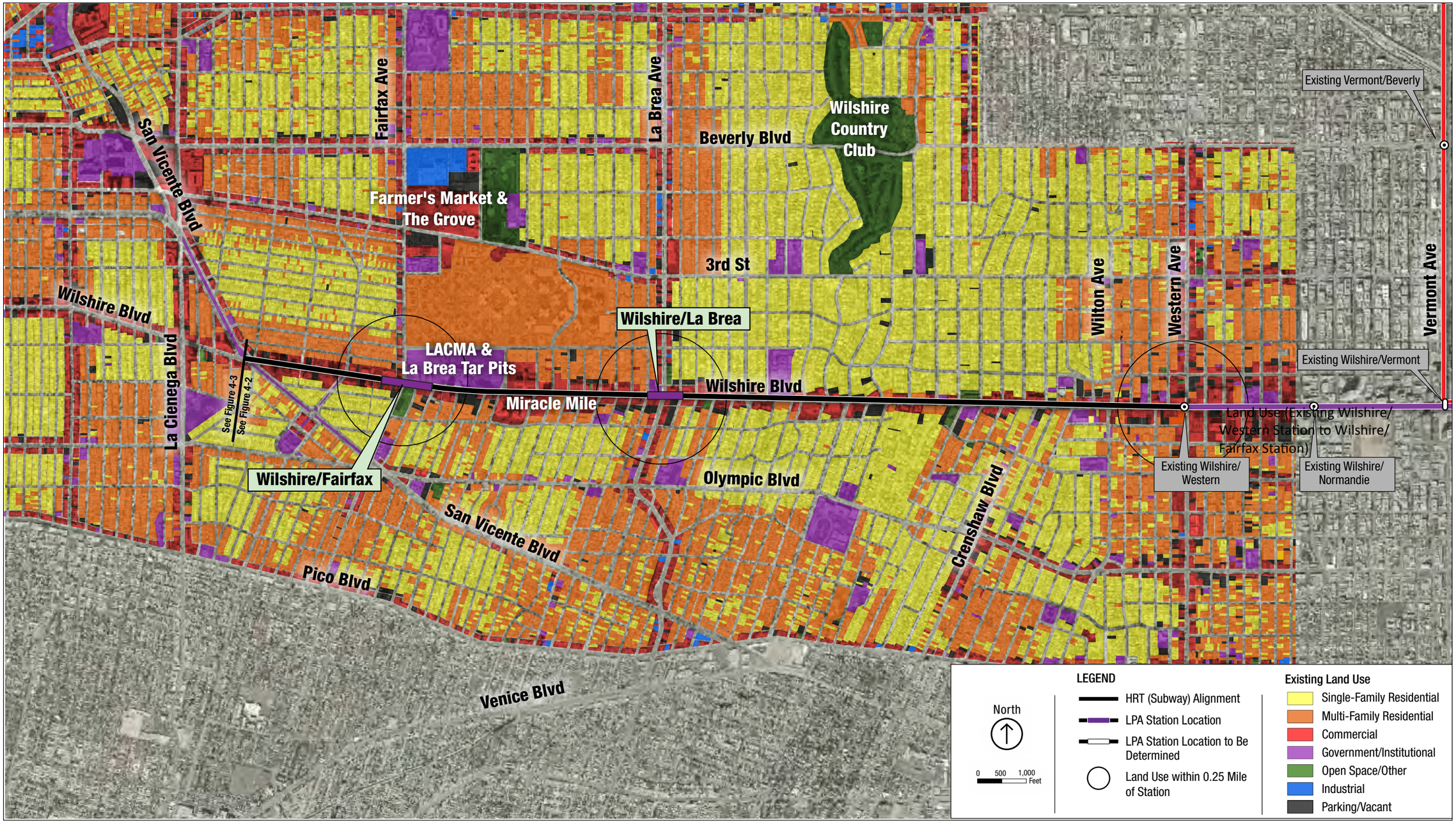


Figure 4-2. Land Use (Existing Wilshire/Western Station to Wilshire/Fairfax Station)

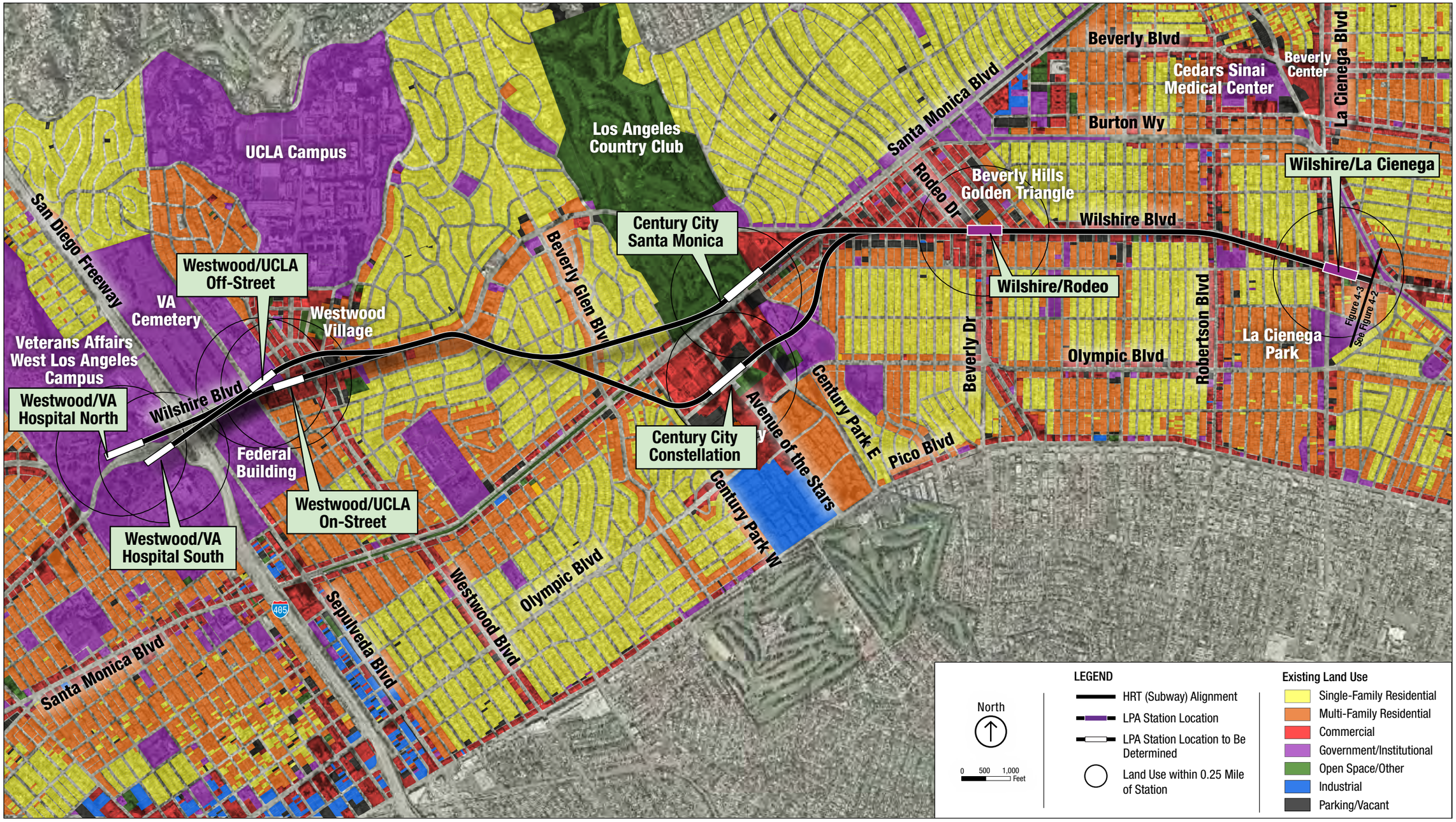


Figure 4-3. Land Use (Wilshire/La Cienega Station to Westwood/VA Hospital Station)

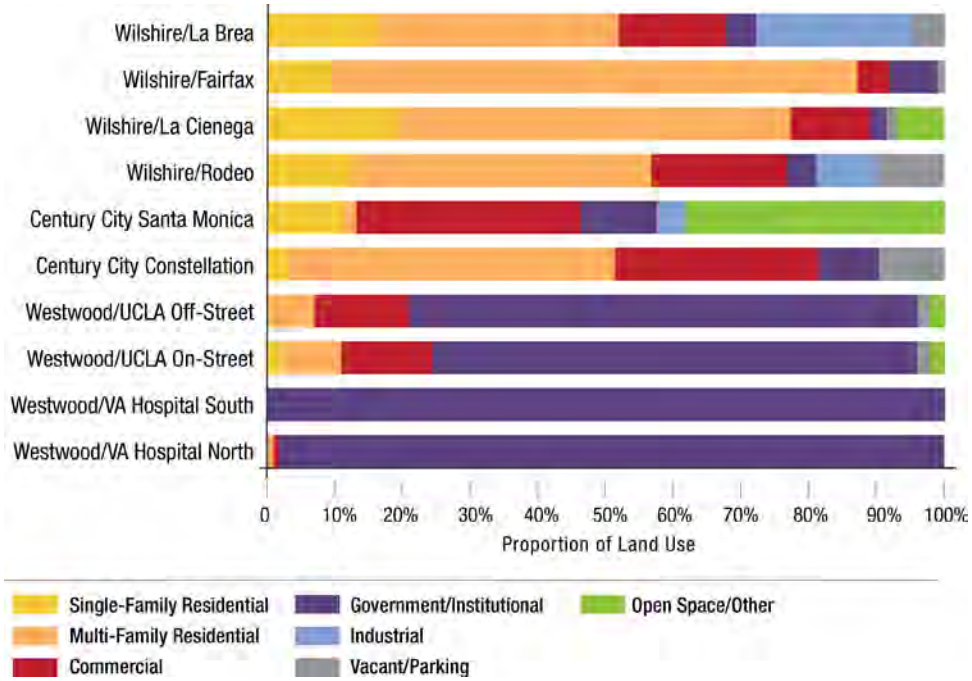


Figure 4-4. Land Use Distribution within One-quarter Mile of Station Locations

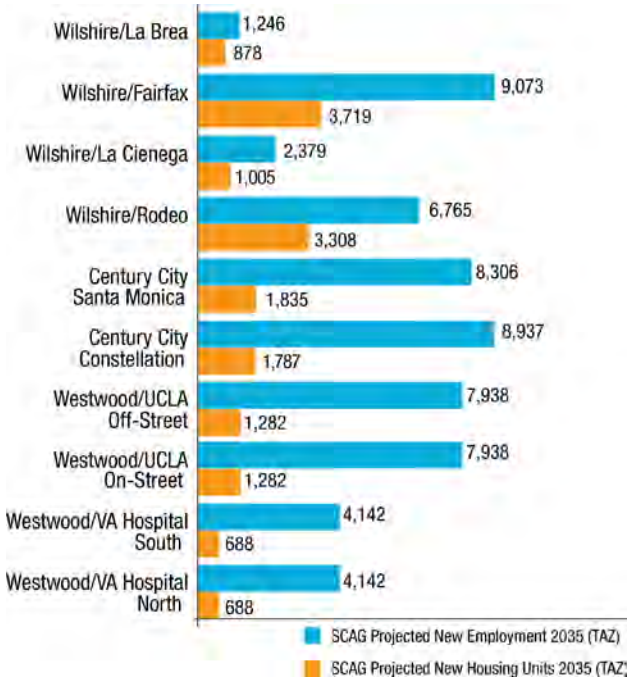


Figure 4-5. Development Opportunities—SCAG-projected New Employment and New Housing Units (2035) within One-quarter Mile of Station Locations

4.1.3 Environmental Impacts/Environmental Consequences

This section describes the anticipated effects of the No Build Alternative and the LPA on existing land uses, as well as their compatibility with existing plans, policies, and guidelines. The adverse effects are identified based on the status of regional and local planning efforts at this time and on currently available information.

In addition to affecting regional land use and development, the LPA could adversely affect local land use and development if it results in the following:

- Conflicts with regional land use policies
- Physically divides an established community
- Conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect
- Conflicts with the compatibility of surrounding land uses or adversely affects the development of surrounding land uses within the project area

Table 4-2 provides an overview of the anticipated impacts to land use as described in the following sections. Adverse effects may occur under the No Build Alternative with regard to conflicts with applicable land use plans.

Table 4-2. Summary of Impacts to Land Use

Alternative	Regional Land Use and Development	Division of an Established Community	Conflict with Applicable Land Use Plans	Incompatibility with Adjacent or Surrounding Land Uses	Proposed Mitigation
No Build	None	None	Adverse Effect	None	None
LPA (Concurrent Construction Scenario)	None	None	None	None	None
LPA (Phased Construction Scenario)	None	None	None	None	None

No Build Alternative

Under the No Build Alternative, no new major transportation infrastructure would be built within the Study Area, aside from projects currently under construction or projects funded for construction, environmentally cleared, planned to be in operation by 2035, and identified in the RTP (SCAG 2008a) and Long Range Transportation Plan (LRTP) (Metro 2008a). Therefore, the No Build Alternative would not result in adverse effects to regional land use and development, division of established community, and incompatibility with adjacent surrounding land uses.

Local land use policies and goals for jurisdictions in the Study Area would not be met under the No Build Alternative. The goals, described in Table 4-1, would not be achieved. Thus, adverse effects related to inconsistency with applicable policies would result for the No Build Alternative.

Locally Preferred Alternative

The LPA could either be constructed as a single phase under the Concurrent Construction Scenario or as three consecutive phases under the Phased Construction Scenario. The opening of the LPA as a single phase or in three sequential phases will not result in substantially differing long-term impacts to land uses.

Regional Land Use and Development

America Fast Forward (30/10) Scenario (Concurrent Construction)

The LPA, including all station, alignment, and station entrance options, will be consistent with SCAG regional policies and, therefore, will not result in adverse effects associated with regional land use and development. A comparison of the LPA, if constructed under the Concurrent Construction Scenario, to SCAG regional policy goals is provided in Table 4-3.

The LPA, including all station, alignment, and station entrance options, may indirectly affect development within the Study Area. These indirect impacts are discussed in more detail in the "Adjacent or Surrounding Land Uses" section below.

The extent to which the LPA will result in a redistribution of projected regional growth will depend on market conditions and supportive public policies. The LPA, when considered as part of Metro's LRTP, will play an important role in expanding regional transportation choices and in improving regional quality of life and overall mobility.

Metro Long Range Transportation Plan Scenario (Phased Construction)

Under the Phased Construction Scenario, the effects associated with regional land use and development are the same as under the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of potential for impacts to regional land use and development. Under the Phased Construction Scenario, the potential for impacts related to regional land use and development during Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential impacts related to regional land use and development along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

The potential effects associated with regional land use and development are discussed in the Concurrent Construction Scenario section above. All three phases of the LPA will be consistent with SCAG regional policies and, therefore, Phase 1, Phase 2, and Phase 3 of the LPA will not result in adverse effects associated with regional land use and development. A comparison of the LPA, if constructed under the Phased Construction Scenario, to SCAG regional policy goals is provided in Table 4-3.

Table 4-3. Comparison of LPA to SCAG Regional Policies

SCAG Regional Policy Goals	Consistent with Policy Goals				Compatibility of LPA under either Construction Scenario to Regional Goals
	LPA under the Concurrent Construction Scenario	LPA under the Phased Construction Scenario			
		Phase 1	Phase 2	Phase 3	
Growth management policies	✓	✓	✓	✓	▪ The LPA is an improvement to the regional transportation system and supports SCAG's regional growth policies.
Growth management policies to improve the regional standard of living	✓	✓	✓	✓	▪ The LPA is a transit improvement that will serve a highly developed area, thereby maximizing use of existing facilities. Metro has coordinated with the Cities of Los Angeles, West Hollywood, Beverly Hills, and Santa Monica, as well as the County of Los Angeles, to expedite the processing of the LPA.
Growth management policies to improve the regional quality of life	✓	✓	✓	✓	▪ The LPA is in an urbanized transit corridor that will provide the opportunity to reduce auto trips and vehicle miles traveled (VMT) and create opportunities for residents to have alternative means of transportation. The LPA will increase accessibility to urbanized areas and will maximize use of urban areas by reducing auto trips and VMT. ▪ The LPA will support increased density and transit-oriented development near the transit corridor, where appropriate, and increase accessibility to commercial and activity centers. The urban nature of the corridor reduces the potential for environmental impacts.
Growth management policies related to social, political, and cultural equity	✓	✓	✓	✓	▪ The LPA will provide mass transit service and reduce automobile usage, which will create more sustainable communities. The transit system will provide regional access to additional medical, social, and recreational services within the Wilshire Corridor.
Regional transportation plan	✓	✓	✓	✓	▪ The LPA will be responsive to SCAG's Regional Performance Indicators, which are summarized in Chapter 1, and will meet the requirements of a Transportation Control Measure. The LPA provides mitigation measures to reduce adverse environmental effects to acceptable levels. ▪ The LPA is planned within the existing regional transportation system and is vital to ensure safety, adequate maintenance, and operational efficacy in the existing multi-modal transportation system.
Air quality core actions	✓	✓	✓	✓	▪ The LPA will incorporate all applicable source reduction and control measures and will strive to identify other programs and actions throughout the life of the LPA so that options to command and control regulations can be assessed. ▪ The interrelationship between air quality, land use, and transportation is addressed specifically in the air quality analysis. Economic relationships are weighed with environmental impacts in the cost and performance analysis.
Open space and ancillary goals	✓	✓	✓	✓	▪ The LPA will increase access to open space and recreation centers, such as Hancock Park, La Cienega Park, Beverly Gardens Park, and Palisades Park. ▪ The LPA will be located below-grade and will not be subject to hillsides, canyons, high fire areas, flood zones, or emergency access routes hazards. The design of the LPA will comply with all earthquake safety standards to safeguard against seismic hazards.

Division of an Established Community

America Fast Forward (30/10) Scenario (Concurrent Construction)

Under the Concurrent Construction Scenario, the LPA, including all station, alignment, and station entrance options still under consideration, will adhere to local plans and zoning ordinances, will not introduce any physical barriers, and will not alter or divide the existing community. Thus, no adverse effects related to the division of an established community will result.

Planned development and redevelopment near station entrances will adhere to local zoning ordinances and will not introduce barriers that will alter or divide the existing community. The LPA will connect Westwood with West Los Angeles and the County of Los Angeles by adding a connection across the I-405 Freeway, an existing barrier within the community. Furthermore, the addition of stations in existing neighborhoods, such as Wilshire/Fairfax, Wilshire/Rodeo, and Westwood/UCLA, is expected to enhance community cohesion by encouraging increased pedestrian activity by community members.

Stations and adjacent station area development are expected to enhance pedestrian circulation patterns and connectivity to maximize ridership, resulting in a more unified community. Thus, no adverse effects related to the division of an established community will result for the LPA, including all station, alignment, and station entrance options still under consideration.

Metro Long Range Transportation Plan Scenario (Phased Construction)

Under the Phased Construction Scenario, the effects related to the division of an established community are the same as under the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of potential division of an established community. Under the Phased Construction Scenario, the potential division of an established community along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential division of an established community along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

The potential effects related to the division of an established community are discussed in the Concurrent Construction Scenario section above. All three phases of the LPA are expected to enhance pedestrian circulation patterns and connectivity to maximize ridership, resulting in a more unified community. As a result, Phase 1, Phase 2, and Phase 3 of the LPA will not result in adverse effects related to the division of an established community. Phase 3 will connect Westwood with West Los Angeles and the County of Los Angeles by adding a connection across the I-405 Freeway, an existing barrier within the community.

Applicable Local Land Use Policies

America Fast Forward (30/10) Scenario (Concurrent Construction)

The LPA, including all station, alignment, and station entrance options still under consideration, will be consistent with the goals and policies of the applicable jurisdictions along the alignment. A detailed comparison of the LPA, if constructed under the Concurrent Construction Scenario, to local land use policies and goals is provided in the *Westside Subway Extension Land Use and Development Opportunities Technical Report* (Metro 2010b) and *the Addendum to the Westside Subway Extension Land Use and Development Opportunities Technical Report (updated)*(Metro 2011b) and is summarized in Table 4-4.

The LPA will reduce automobile usage, provide opportunities for joint development and cooperation, enhance regional connectivity, minimize environmental impacts, and maximize ridership. Therefore, the LPA, including station, alignment, and station entrance options still under consideration, will be consistent with applicable local land use policies, and no adverse effects will result.

Metro Long Range Transportation Plan Scenario (Phased Construction)

Under the Phased Construction Scenario, all three phases of the LPA will be consistent with the goals and polices of the applicable jurisdictions along the alignment. The only difference between the two scenarios is the timing of any potential inconsistency with local land use policies. Under the Phased Construction Scenario, any potential inconsistency with local land use policies along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for any potential inconsistency with local land use policies along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

A detailed comparison of the LPA, if constructed under the Phased Construction Scenario, to local land use policies and goals is provided in the *Westside Subway Extension Land Use and Development Opportunities Technical Report* (Metro 2010b) and the *Addendum to the Westside Subway Extension Land Use Report and Development Opportunities Technical Report (updated)* (Metro 2011b) and is summarized in Table 4-4. All three phases of the LPA will reduce automobile usage, provide opportunities for joint development and cooperation, enhance regional connectivity, minimize environmental impacts, and maximize ridership. The greatest benefits will result from the implementation of Phase 3, which will complete the LPA in its entirety. Therefore, Phase 1, Phase 2, and Phase 3 of the LPA will not result in any adverse effects.

Table 4-4. Comparison of LPA to Local Land Use Policies and Goals

Local Land Use Policies and Goals	Local Jurisdictions Identifying Policy Goal	Consistent with Policy Goals				Compatibility of LPA under either Construction Scenario to Regional Goals
		LPA under the Concurrent Construction Scenario	LPA under the Phased Construction Scenario			
			Phase 1	Phase 2	Phase 3	
Reduce automobile use	City of Los Angeles, City of Beverly Hills, and County of Los Angeles	✓	✓	✓	✓	▪ The LPA is located in a mass transit corridor that will provide the opportunity to reduce auto trips and VMT, as well as opportunities for joint development, which will create opportunities for residents to walk or take transit to necessary services.
Increase the intensity of development and growth along the transit corridor	City of Los Angeles, CRA/LA, City of Beverly Hills, and County of Los Angeles	✓	✓	✓	✓	▪ The LPA will increase the attractiveness of potential development sites along the corridor to provide mixed-use and transit-oriented development, increasing accessibility to commercial and activity centers. ▪ The LPA will reflect a substantial capital investment that will revitalize older sections of the commercial corridors and improve the character of the surrounding neighborhoods. ▪ The LPA will establish station areas that are located in areas that can support smart development intensity and maximize transit ridership. The LPA does not contain a residential component.
Provide opportunities for joint development and cooperation	City of Los Angeles and County of Los Angeles	✓	✓	✓	✓	▪ The LPA has sited stations in close proximity to regional centers, activity centers, and areas of major economic activity and will improve the attractiveness of sites in need of revitalization along the corridor to developers. ▪ Metro will pursue joint development opportunities for the LPA. Metro has coordinated extensively with local public agencies to maximize the efficacy and ridership of the system.
Enhance regional connectivity	City of Los Angeles, Westside Cities, City of Beverly Hills, and County of Los Angeles	✓	✓	✓	✓	▪ The LPA will expand transportation services and enhance neighborhood accessibility. The LPA will provide the mass transit service identified in community plans.
Minimize environmental impacts	City of Los Angeles, City of Beverly Hills, and County of Los Angeles	✓	✓	✓	✓	▪ The LPA will support and encourage smart development in an appropriate location along a mixed-use corridor that connects many commercial centers. The urban nature of the corridor reduces the potential for environmental impacts. Reduction in VMT will lead to better air quality and less energy usage.
Maximize ridership through design and location	City of Los Angeles, City of Beverly Hills, and County of Los Angeles	✓	✓	✓	✓	▪ The LPA will establish a fully underground system that provides the highest and safest levels of transit service and will serve the high-priority Wilshire Corridor. ▪ The LPA has undergone extensive station area planning efforts to ensure that station entrance locations maximize direct links to adjacent commercial development and will link multiple modes of transport.

Adjacent or Surrounding Land Uses

America Fast Forward (30/10) Scenario (Concurrent Construction)

The LPA, including all station, alignment, and station entrance options still under consideration, will not result in adverse direct or indirect effects associated with land use compatibility. The LPA stations are located in areas with existing bus transit service and, therefore, will not introduce a new land use type into the area. Station entrances located in or adjacent to open plazas will be integrated into current and future developments. A comparison of the land use compatibility of the station entrances under consideration at each station is discussed in more detail in the *Westside Subway Extension Station Entrance Location Report and Recommendations* (Metro 2012f). While some station entrance locations will be more compatible with surrounding land uses than others, none of the entrances under consideration will be incompatible. Therefore, the LPA, including all station, alignment, and station entrance options still under consideration, will not result in a direct effect associated with land use compatibility.

The development of these stations and the forecasted growth in the area may indirectly provide an opportunity for transit-oriented development (TOD). As shown in Figure 4-5, SCAG forecasts substantial growth for 2035 at many stations. The highest growth is projected to occur near the Wilshire/Fairfax, Wilshire/Rodeo, and Westwood/UCLA Stations.

Transit-Oriented Development (TOD) is generally compact, medium- to high-density development near transit facilities and high-quality walking environments. Experience gained from existing Metro projects, such as the Metro Purple and Red Lines, suggests that developers in the Los Angeles area are interested in creating transit- and pedestrian-oriented mixed-use development, and that these types of developments can be very successful in accommodating regional growth while limiting VMT/auto use.

Initial development opportunities would likely be concentrated at currently existing vacant parcels and parking lots. In addition to existing vacant parcels and parking lots, Metro will acquire several parcels during construction of the LPA for the storage of equipment and materials and other construction-related activities (refer to Section 4.2 and Appendix C, Acquisitions). Because the acquired parcels will be Metro-owned and adjacent to station areas, they will create additional opportunities for TOD. Metro's role in the ownership of these parcels will be limited to that of a property owner and the parcels will be subject to the land use controls of local jurisdictions. Figure 4-4 shows which station locations have the highest proportion of vacant parcels and parking lots that could be developable in the future.

Since the corridor is located in an already dense urban area, further opportunity for development will result from the redevelopment of lower-density uses. The redevelopment of existing uses will be constrained by the level of existing development and the stringency of land use controls, such as density requirements and limits on the number of vehicle trips generated by buildings within the planning areas. Figure 4-6 illustrates the level of existing development at each station location based on the estimated building square footage. More highly developed areas, such as Westwood and Century City, have limits to how much further development could occur. Figure 4-7 summarizes the existing land use controls at each station location. Areas with strict land use regulations, such as Westwood/VA Hospital, will also provide less opportunity for future development.

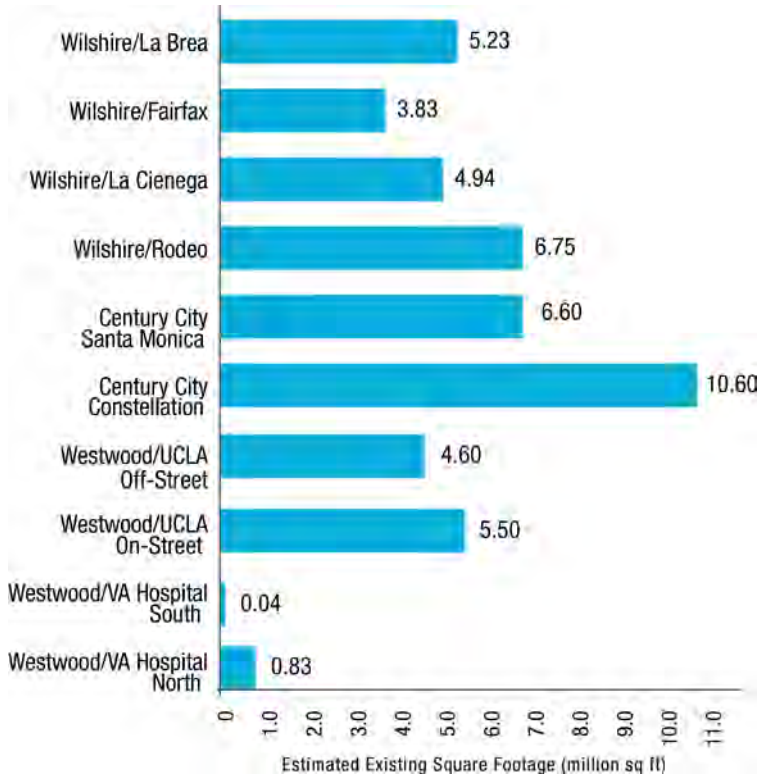


Figure 4-6. Existing Level of Development at Each Station Location—One-quarter Mile from Stations

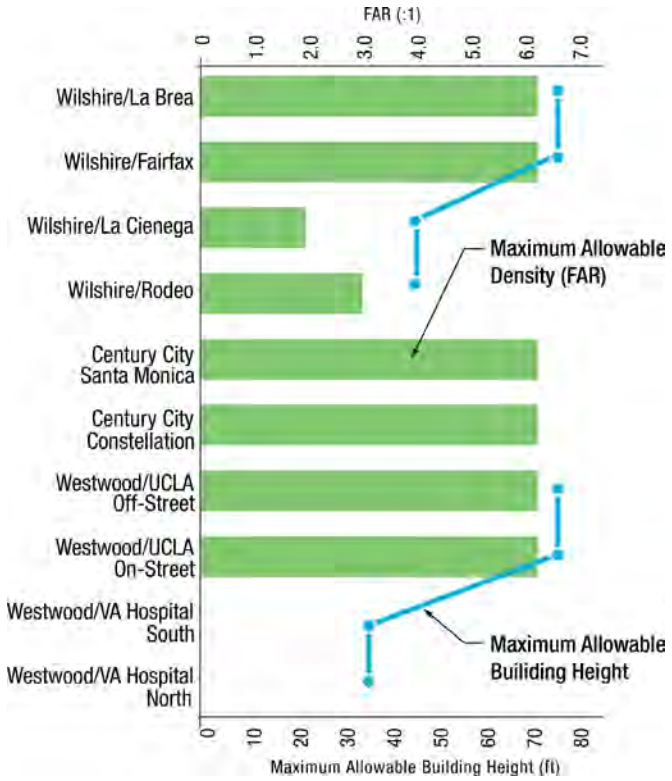


Figure 4-7. Existing Land Use Controls at Each Station Location

Considering all of these factors (number of vacant parcels, lower levels of existing development, and least restrictive land use controls) as well as SCAG growth forecasts for 2035, the areas with the highest potential for development are at the Wilshire/ La Brea and Wilshire/Fairfax Station locations.

The applicable local jurisdictions will coordinate with each other and Metro to the extent feasible to implement policies during station area planning to address the development pressure of accommodating potential growth. Any TOD that could occur as a result of the LPA is anticipated to be consistent with current growth projections and will not substantially alter the composition and character of existing land uses. Therefore, the LPA will not result in adverse indirect effects associated with land use compatibility. The opening of the LPA, including station, alignment, and station entrance options still under consideration, as a single phase or in three sequential phases will not result in differing indirect effects associated with land use compatibility.

Metro Long Range Transportation Plan Scenario (Phased Construction)

Under the Phased Construction Scenario, the potential for adverse direct or indirect effects associated with land use compatibility is the same as under the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of any impacts related to land use compatibility, which depends in large part on the timing of acquisitions. Under the Phased Construction Scenario, any impacts related to land use compatibility along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. Acquiring property and securing easements along Phase 2 will occur during pre- and early construction activities for Phase 2, which is scheduled for 2018–2019. Obtaining easements along Phase 3 will occur during pre- and early construction activities for Phase 3, which is scheduled for 2028–2029. The timing for any impacts related to land use compatibility along Phase 1 of the LPA will occur at the same time as under the Concurrent Construction Scenario. Acquiring property and obtaining easements along Phase 1 will occur during pre- and early construction activities for Phase 1, which is scheduled for 2012–2013.

The potential effects associated with land use compatibility are discussed in the Concurrent Construction Scenario section above. Most property acquisition will occur during pre- and early construction for each phase. The acquired properties will be used for construction staging activities soon after acquisition and will not sit vacant for an extended period of time prior to construction. However, there may be some instances where Metro would acquire properties along Phase 2 and Phase 3 in advance of pre-construction to secure the integrity of the station box or station entrance location, but this would be dealt with on a case-by-case basis. If the property is acquired in advance of pre-construction, Metro would likely lease the property so that it would not be vacant. Because the acquired parcels will be Metro-owned and adjacent to station areas, they will create additional opportunities for TOD following construction. Metro's role in the ownership of these parcels will be limited to that of a property owner, and the parcels will be subject to the land use controls of local jurisdictions. The two station areas identified above as having the highest potential for development (Wilshire/La Brea and Wilshire/Fairfax) will be constructed as part of Phase 1. The applicable local jurisdictions will coordinate with each other and Metro to the extent feasible to implement policies

during station area planning to address the development pressure of accommodating potential growth. Any TOD that could occur as a result of Phase 1, Phase 2, or Phase 3 is anticipated to be consistent with current growth projections and will not substantially alter the composition and character of existing land uses. Therefore, Phase 1, Phase 2, and Phase 3 of the LPA will not result in adverse direct or indirect effects associated with land use compatibility.

4.1.4 Mitigation Measures

The No Build Alternative would conflict with applicable land use plans and policies, but no mitigation is planned. The LPA, including all station, alignment, and station entrance options under both the Concurrent Construction Scenario and the Phased Construction Scenario, will not result in adverse effects related to land use; therefore, no mitigation measures will be required. For a more detailed discussion of impacts during construction and mitigation measures, refer to Section 4.15.

4.1.5 California Environmental Quality Act Determination

The CEQA determination compares the effects of the LPA under both the Concurrent Construction Scenario and the Phased Construction Scenario with the existing conditions described in the affected environment/existing conditions section. The evaluation of the potential for land use effects of the LPA, under both the Concurrent Construction Scenario and the Phased Construction Scenario, is provided above. According to CEQA, land use impacts will be considered significant if the LPA results in the following:

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

These criteria were used to evaluate land use impacts for the LPA, as described above in Section 4.1.3.

The LPA rail system, including all station, alignment, and station entrance options under both the Concurrent Construction Scenario and the Phased Construction Scenario, will be fully underground and will not introduce any physical barriers that could divide a community. Planned development and redevelopment near station entrances will adhere to local zoning ordinances and will not introduce barriers that will alter or divide the existing community, and no significant impacts will result.

Table 4-4 summarizes the consistency of the LPA with applicable land use plans and policies. The LPA, including all stations, alignments, and station entrance options still under consideration under both the Concurrent Construction Scenario and the Phased Construction Scenario, will reduce automobile usage, provide opportunities for joint development and cooperation, enhance regional connectivity, minimize environmental impacts, and maximize ridership. Therefore, the LPA will be consistent with applicable local land use policies, and no significant impacts will result.

The LPA, including all stations, alignments, and station entrance options under both the Concurrent Construction Scenario and the Phased Construction Scenario, require land acquisition for construction laydown areas to construct stations and the siting of station entrances, which will provide vertical circulation to the system. Location of these station entrances will occur in or adjacent to commercial development along a major transportation corridor and will not conflict with local land use compatibility. Therefore, the LPA will be compatible with adjacent and surrounding land uses.

Based on the analysis of the land use implications, the LPA, including all stations, alignments, and station entrance options under both the Concurrent Construction Scenario and the Phased Construction Scenario, will not result in any significant land use impacts.

The opening of the LPA as a single phase under the Concurrent Construction Scenario or in three sequential phases under the Phased Construction Scenario will not result in differing land use impacts during operation of the LPA, as discussed in Section 4.1.3. The only difference between the two scenarios is the timing of potential operational land use impacts. Under the Phased Construction Scenario, the potential for land use impacts along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential land use impacts along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

4.2 Socioeconomic Characteristics

This section has been updated from the Draft EIS/EIR to focus on the analysis of the effects of the LPA on socioeconomic resources. The LPA could either be constructed as a single phase under the America Fast Forward (30/10) Scenario (Concurrent Construction), or as three consecutive phases under the Metro Long Range Transportation Plan Scenario (Phased Construction). The opening of the LPA as a single phase or in three sequential phases does not substantially change the socioeconomic analysis that was presented in the Draft EIS/EIR. The analysis results have not changed from the Draft EIS/EIR. The analysis of all the Build and TSM Alternatives in the Draft EIS/EIR is incorporated in this document by reference. Information in this section is summarized from the *Westside Subway Extension Community and Neighborhood Technical Report* (Metro 2010d), *Addendum to the Westside Subway Extension Community and Neighborhood Technical Report* (Metro 2011d), the *Westside Subway Extension Analysis of Environmental Justice Technical Report* (Metro 2010u), the *Westside Subway Extension Analysis of Environmental Justice Memorandum* (Metro 2011r), the *Westside Subway Extension Displacement and Relocation Supplemental Technical Report* (Metro 2011c), the *Westside Subway Extension Economic and Fiscal Impacts Analysis and Mitigation Report* (Metro 2010p), and the *Westside Subway Extension Economic and Fiscal Impacts Analysis and Mitigation Memorandum* (Metro 2011o) prepared in support of the LPA.

4.2.1 Affected Environment/Existing Conditions

This section describes the socioeconomic characteristics of the Study Area, including population, housing and households characteristics, employment, fiscal and economic characteristics, and environmental justice (EJ) considerations (along with a description

of neighborhood areas). The affected environment and existing conditions for the LPA are the same whether the LPA is constructed under the Concurrent Construction Scenario or the Phased Construction Scenario. Under the Phased Construction Scenario, Phase 1 and Phase 2 will extend through the cities of Los Angeles and Beverly Hills, and Phase 3 will extend through the City of Los Angeles and unincorporated portions of Los Angeles County.

Population

In 2006, the population of the Study Area was 504,000, about 5 percent of Los Angeles County's population. According to the 2035 population projected by SCAG, there will be 554,000 people in the Study Area, a growth of 10 percent over 2006. The population density in the Study Area is among the highest in the metropolitan region, averaging approximately 13,100 persons per square mile. According to SCAG's forecasts, population density in the Study Area will increase to over 14,000 persons per square mile by 2035. Figure 4-8 illustrates the population densities across the Study Area. The highest population densities within the Study Area are in the Koreatown, Hollywood, West Hollywood, Westwood, Olympic Park, and South Robertson communities.

The Study Area is a racially and ethnically diverse population with 38 percent of the population identified as a racial or ethnic minority. As indicated in Figure 4-9 and Figure 4-10, the largest group is White (56 percent) followed by Hispanic or Latino (18.5 percent) and Asian (15.1 percent). In both Los Angeles County and the Study Area, Hispanics/Latinos comprise the largest minority group. Compared to Los Angeles County, which has a population that is 71 percent minority, the Study Area has a higher proportion of Whites and Asians and a lower proportion of Hispanics/Latinos and African-Americans.

Within the Study Area, persons over the age of five with limited English proficiency (LEP) comprise about 12 percent of the population. In comparison, the total for the County is 27 percent (and, of this percentage, 71 percent speak only Spanish).

Figure 4-11 illustrates the population breakdown by age within the Study Area. The percentage of elderly (age 65 and older) is 13 percent of the total Study Area population, compared to 11 percent for the total Los Angeles County population. Within the Study Area, children and adults up to 44 years old comprise the majority of the population (67 percent). Compared to Los Angeles County, children comprise a smaller proportion of the Study Area population.

Housing and Household Characteristics

The Study Area has a higher proportion of renters than Los Angeles County (75 percent versus 52 percent) and, therefore, also has a lower proportion of owner-occupied housing units. As illustrated in Figure 4-12 and Figure 4-13, a greater proportion of rental units are single-person households than owner-occupied units. Half of the rental units in the Study Area are single-person households and nearly 80 percent of rental units are either one or two person households.

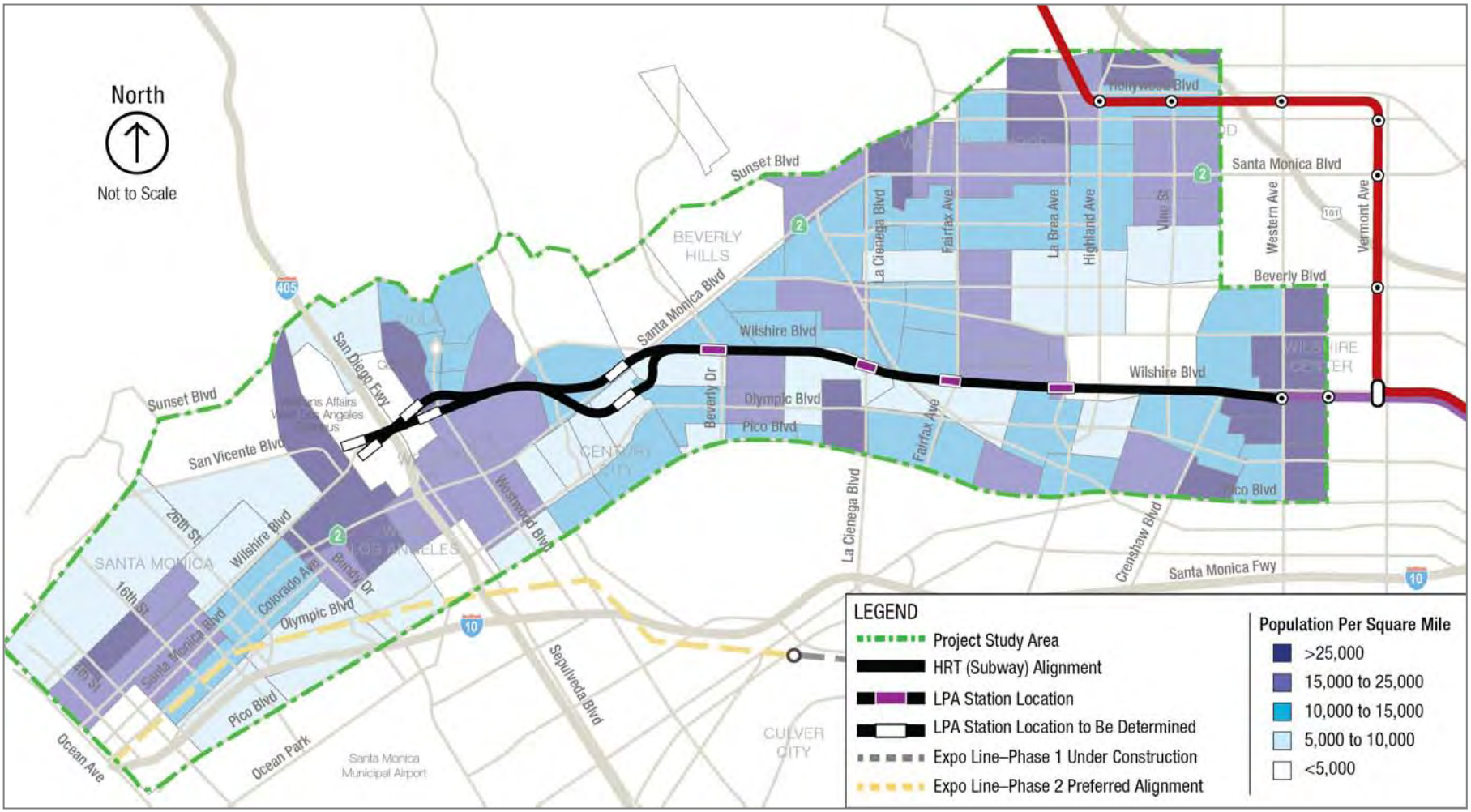
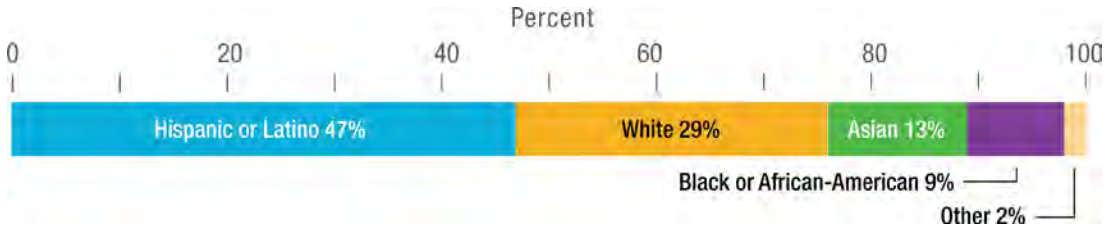
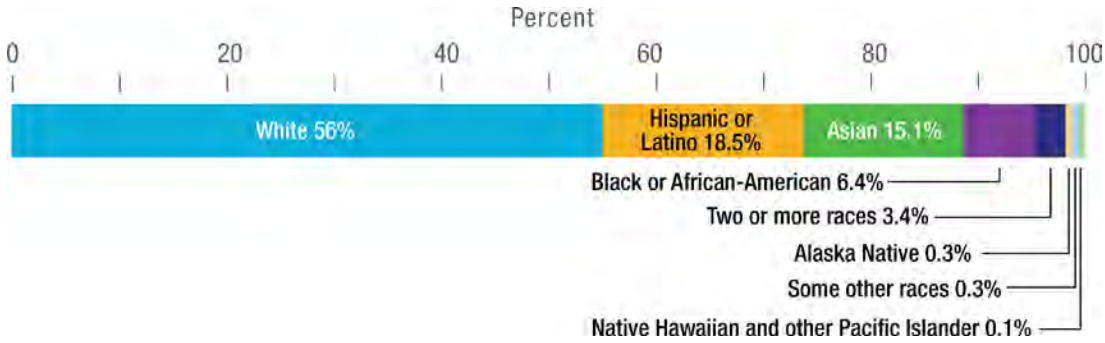


Figure 4-8. Study Area Population Density, 2006



Sources: US Census 2000; Terry A. Hayes Associates (TAHA) 2010

Figure 4-9. Racial and Ethnic Distribution of Population within Los Angeles County

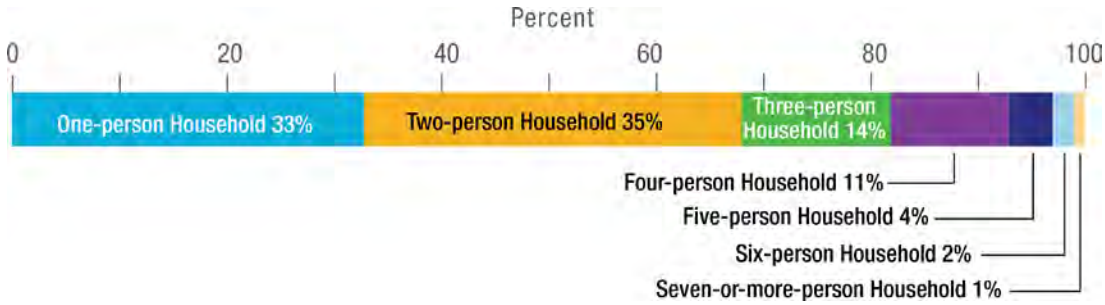


Sources: US Census 2000; TAHA 2010

Figure 4-10. Racial and Ethnic Distribution of Population within Study Area

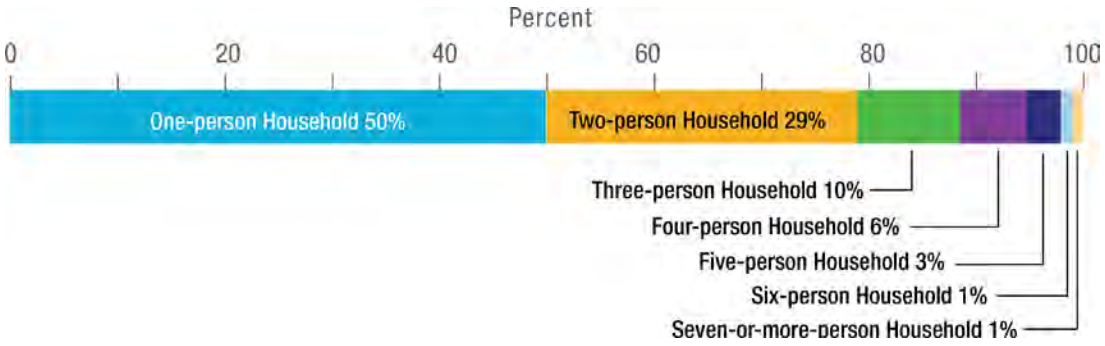
Sources: US Census 2000; TAHA 2010

Figure 4-11. Age Distribution within Study Area



Sources: US Census 2000; TAHA 2010

Figure 4-12. Study Area Owner-Occupied Housing Units—Distribution of Household Sizes



Sources: US Census 2000; TAHA 2010

Figure 4-13. Study Area Renter-Occupied Housing Units—Distribution of Household Sizes

Employment

As of September 2009, the unemployment rate within the Study Area was 9.5 percent, less than the 11.5-percent unemployment rate of Los Angeles County. Of the cities within the Study Area, the City of Los Angeles has the highest unemployment rate at 12.7 percent, while the City of Beverly Hills has the lowest unemployment rate at 8 percent.

The Study Area contains 10 percent of all employment in Los Angeles County and 6 percent of all employment in the larger Los Angeles metropolitan area with 479,000 jobs in 2006. Furthermore, the density of employment in the Study Area is among the highest in the metropolitan region, averaging approximately 12,500 jobs per square mile, which is about 11 times that of Los Angeles County. While the employment density is lower than that of Downtown Los Angeles, it is much higher than that of Long Beach and Pasadena. The Koreatown, Beverly Hills, Century City, and UCLA/Westwood areas have the highest density of jobs. Within these areas, the greatest employment densities in the Study Area are found along the Wilshire and Santa Monica Boulevard corridors. Figure 4-14 illustrates employment densities within the Study Area.

The total number of jobs in the Study Area is projected to grow by 12 percent by 2035. This anticipated employment growth rate is higher than the rate of forecasted population growth for the Study Area population during the same period.

Fiscal and Economic Characteristics

Income Levels

The median household income within the Study Area ($56,849) is slightly higher than the median household income of Los Angeles County ($55,192). However, the Study Area also has a slightly higher percentage of residents with incomes below the poverty level (17 percent) than Los Angeles County (15 percent). The City of Beverly Hills has the highest median household income ($88,014) while the City of Los Angeles has the lowest median household income ($48,610). The City of Beverly Hills also has the lowest proportion of the population with incomes below the poverty line (6 percent), while the City of Los Angeles has the greatest proportion of the population with incomes below the poverty line (19 percent) (US Census 2000, US Census 2006–2008; USBLS 2009).

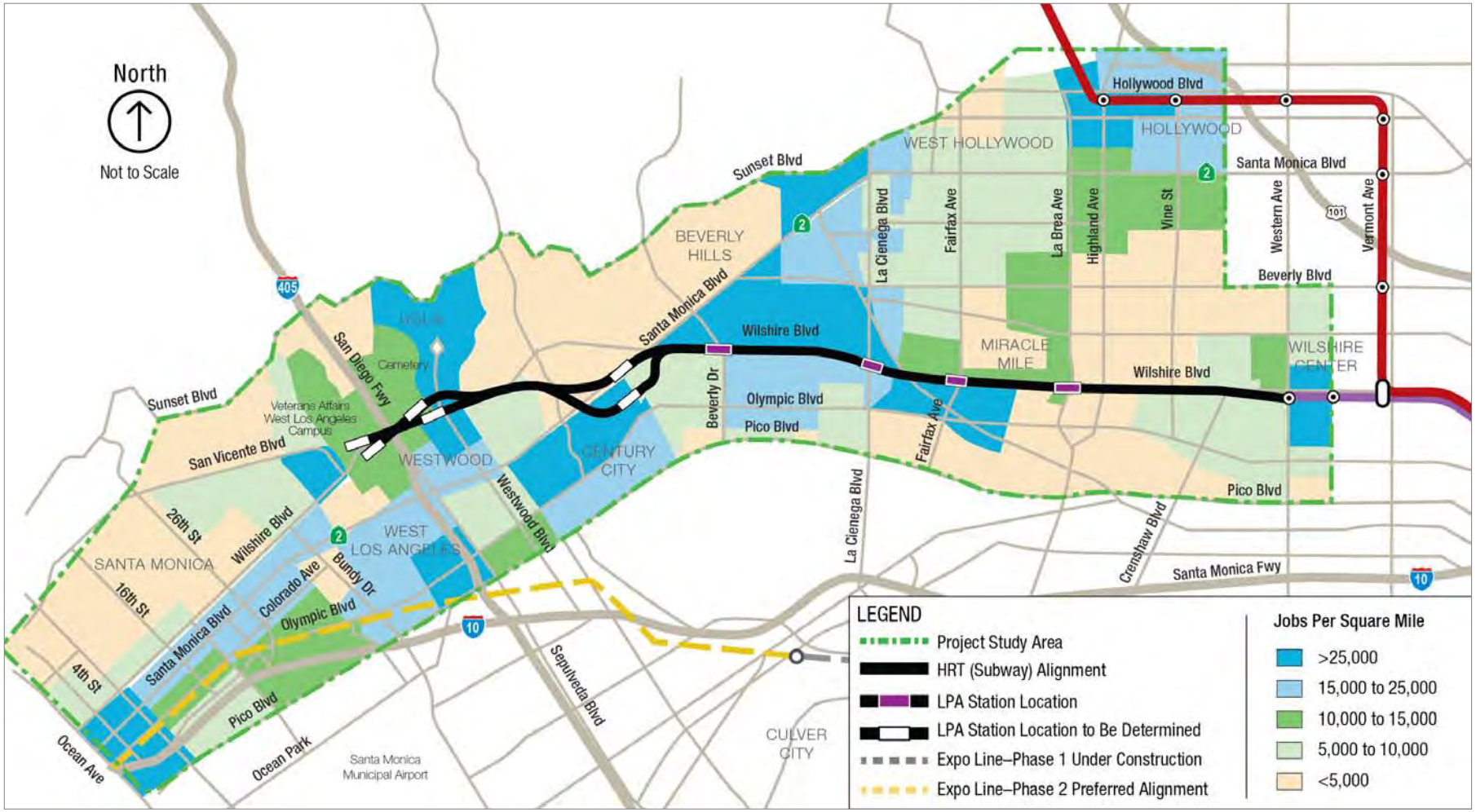
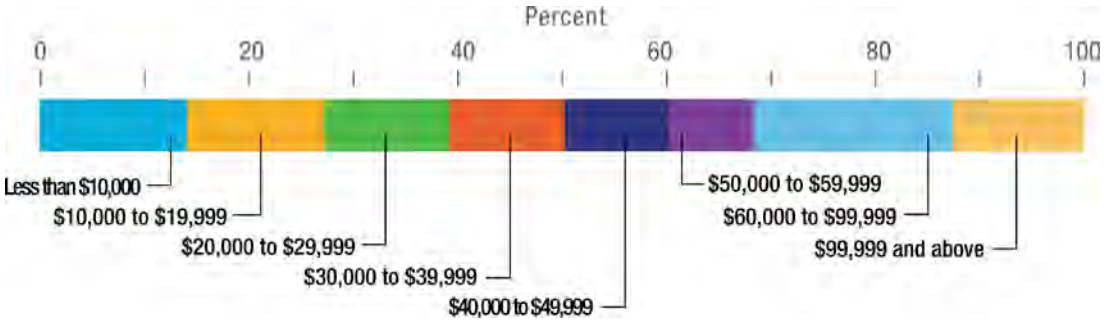


Figure 4-14. Study Area Employment Densities, 2006

For those who reside within the Study Area, household incomes are fairly evenly distributed; nearly the same percentage of households within the Study Area earn less than $10,000 (13 percent) as earn more than $100,000 (12.2 percent). In comparison, 10 percent of Los Angeles County earns less than $10,000 and 15 percent earns more than $100,000. In addition, 60 percent of households within the Study Area earn less than $50,000 compared to 57 percent of Los Angeles County. Figure 4-15 summarizes the distribution of household incomes within the Study Area.



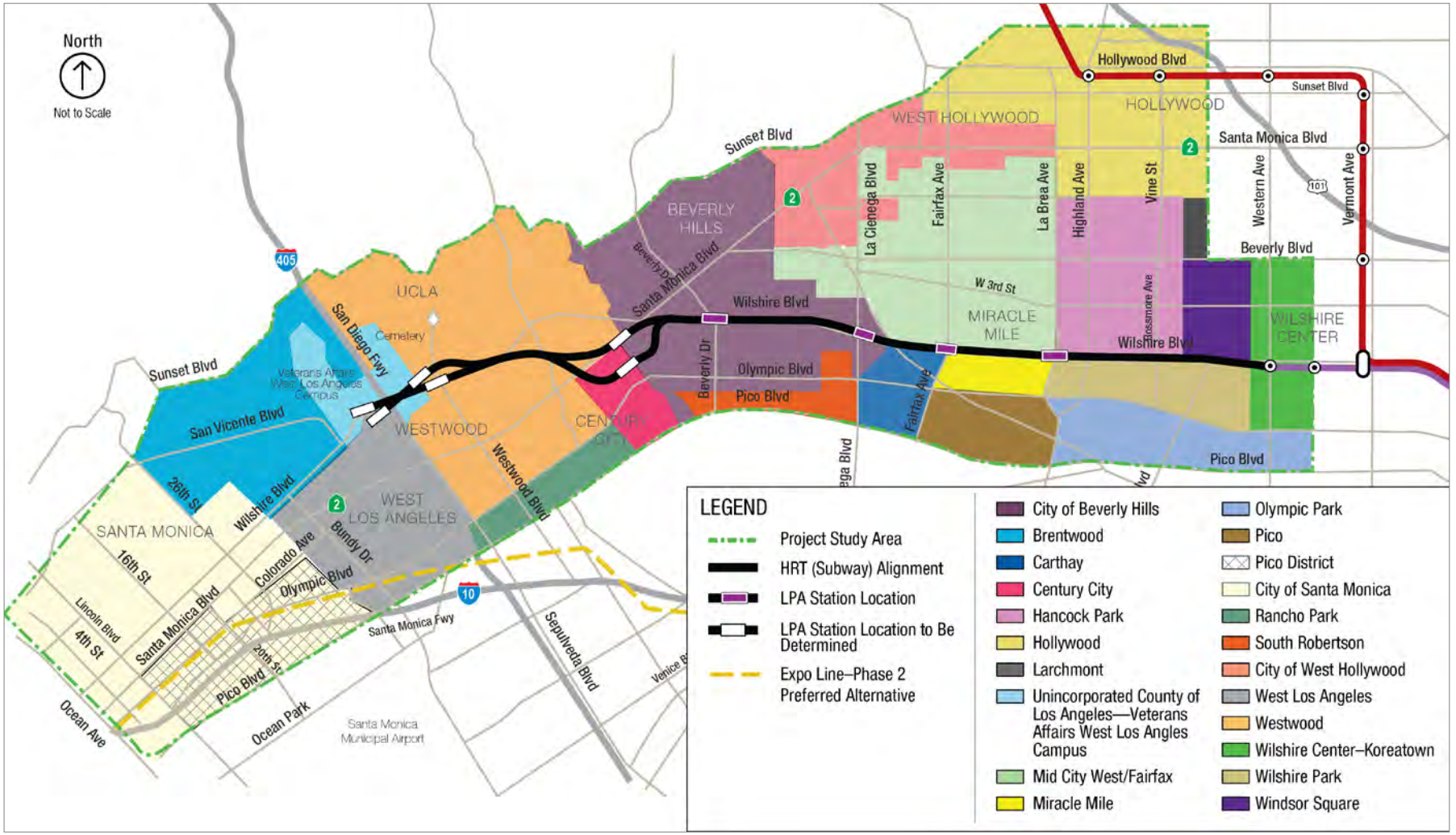
Source: US Census 2000; TAHA 2010

Figure 4-15. Distribution of Annual Household Income within Study Area, 2000

Within the Study Area, household incomes are more divergent geographically. The communities of Wilshire Center-Koreatown, Olympic Park, Hollywood, and Westwood have the highest proportion of residents with incomes below the poverty line, while Larchmont, Brentwood, Hancock Park, and Rancho Park have the lowest proportion of residents with incomes below the poverty line.

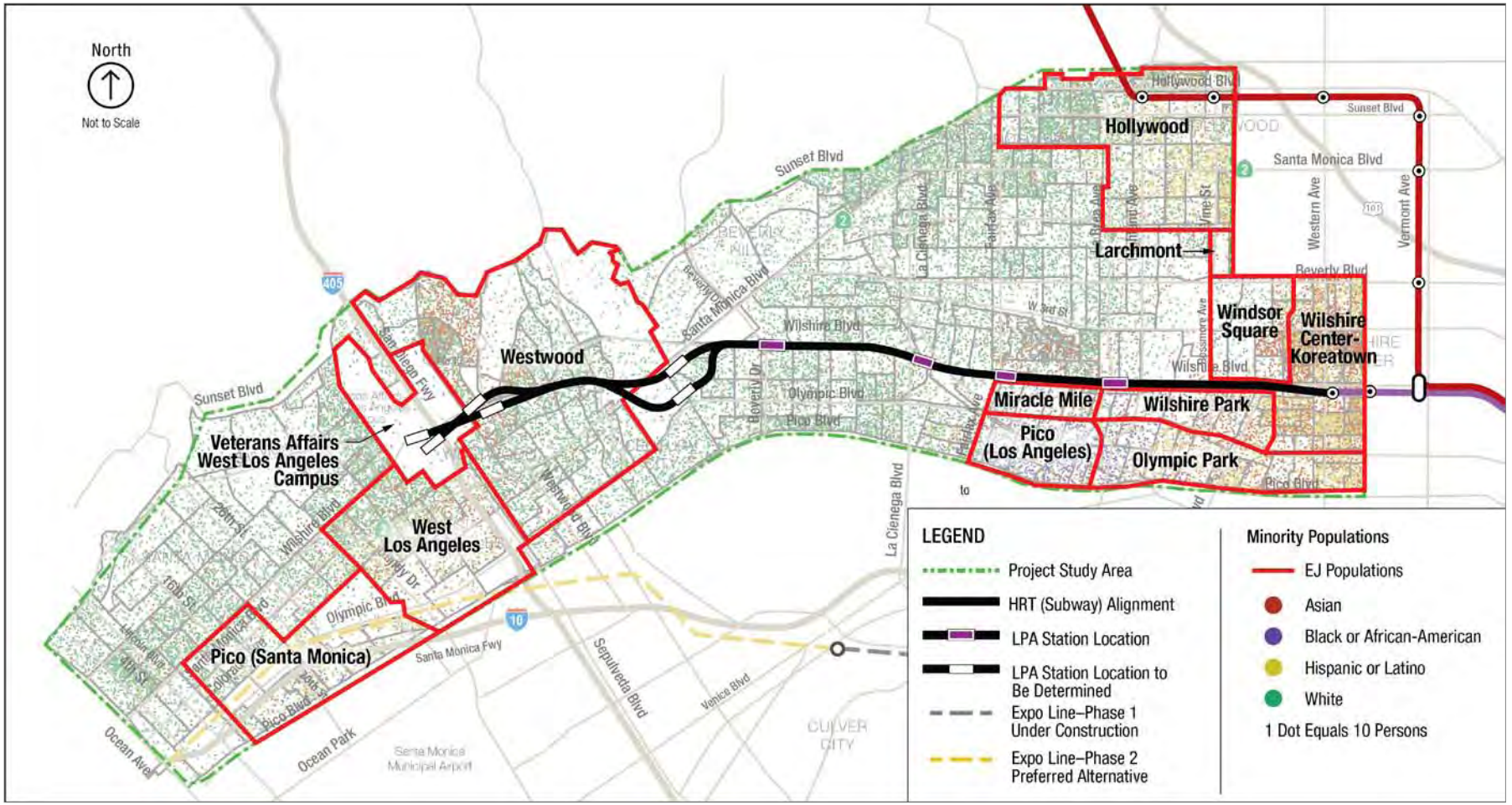
Communities and Neighborhoods

This section describes the 22 communities and neighborhoods in the Study Area (Figure 4-16). The distribution of minorities within the Study Area is illustrated in Figure 4-17. Table 4-5 summarizes the demographic and socioeconomic information for each of the Study Area communities. A more detailed discussion of each community and neighborhood, including community assets, can be found in the *Westside Subway Extension Community and Neighborhood Technical Report* (Metro 2010d) and the *Addendum to the Westside Subway Extension Community and Neighborhood Technical Report* (Metro 2011d), as well as the *Westside Subway Extension Analysis of Environmental Justice Technical Report* (Metro 2010u) and the *Westside Subway Extension Environmental Justice Memorandum* (Metro 2011r).



Sources: Los Angeles Times 2009; TAHA 2009

Figure 4-16. Study Area Communities and Neighborhoods



Source: US Census 2000

Figure 4-17. Minority Population Distribution

Table 4-5. Demographic and Socioeconomic Information for Study Area Communities

Community	Environmental Justice (EJ) Population or Community of Concern	Percent Minority	Percent Hispanic or Latino	Median Household Income[1]	Percent Population Living Below Poverty Level[2]	Percent Limited English Proficiency Population Over 5 Years Old[3]
County of Los Angeles	**Basis of Comparison**	**71%**	**47.3%**	**$55,192**	**15%**	**27%**
Unincorporated County of Los Angeles—Veterans Affairs West Los Angeles Campus	EJ population	**54.4%**	6.9%	$42,391	**53.7%**	0.8%
Brentwood	No	15.7%	4.5%	$88,263	6.5%	1.9%
Carthay	No	37.9%	17.8%	$54,112	12.4%	7.8%
Century City	No	14.8%	2.5%	$93,353	8.7%	2.3%
Hancock Park	No	26.2%	6.9%	$90,246	7%	4.6%
Hollywood	EJ population	**50.2%**	33.6%	$26,699	**22.4%**	18.1%
Larchmont	EJ population	**57.3%**	17.2%	$86,442	3.2%	4.7%
Mid City West/Fairfax	No	24.9%	6.3%	$49,726	11.5%	6.0%
Miracle Mile	EJ population	**50.8%**	11.2%	$46,538	8.4%	4.9%
Olympic Park	EJ population	**92.4%**	**48.0%**	$33,306	**23.3%**	28.5%
Pico, Los Angeles	EJ population	**76.0%**	17.2%	$41,816	13.7%	3.6%
Rancho Park	No	19.4%	5.1%	$74,859	7.1%	2.4%
South Robertson	No	22.9%	5.8%	$49,294	12.8%	8.5%
West Los Angeles	EJ population	**50.1%**	22.3%	$40,748	**18.2%**	12.0%
Westwood	EJ population	34.6%	6.8%	$66,356	**22.4%**	3.6%
Wilshire Center-Koreatown	EJ population and community of concern	**92.3%**	44.4%	$25,603	**29.9%**	**36.8%**
Wilshire Park	EJ population	**84.0%**	32.0%	$44,647	**20.2%**	24.4%
Windsor Square	EJ population	**73.8%**	27.3%	$73,954	8%	15%
City of Beverly Hills (within Study Area)	No	18.7%	4.6%	$97,726	9.5%	5.9%
City of Santa Monica (within Study Area)	No	29.3%	14.0%	$67,540	11.2%	4.9%
Pico, Santa Monica	EJ population	**63.1%**	38.7%	$36,728	**17.8%**	10.6%
City of West Hollywood (within Study Area)	No	18.8%	9.0%	$41,550	11.5%	10.5%

Source: US Census 2000, American Community Survey 2008

Numbers in bold indicate criteria that qualify a community as an environmental justice population or community of concern.
[1]Median income was determined by averaging the median income of Census Block Groups that were one-quarter mile away from each station area.
[2]Poverty status is based upon 2008 U.S. Census Poverty Thresholds.
[3]Persons counted as Limited English Proficiency (LEP) are those over the age of 5 who speak a non-English language at home and fall into the Census English speaking ability categories of "Speak English Not Well" or "Speak English Not at All."

Unincorporated Los Angeles County—Veterans Affairs West Los Angeles Campus

The Veterans Affairs (VA) West Los Angeles Campus is located in unincorporated Los Angeles County. This area includes the VA Hospital building (VA Greater Los Angeles Healthcare System) south of Wilshire Boulevard. The Westwood/VA Hospital (South or North) Station options will be located in this area. The Los Angeles National Cemetery, between Sepulveda Boulevard and Veteran Avenue, is a place of burial for 85,000 veterans and family members from the Mexican War to the present. Westwood Park is a community adjacent to the Wilshire/VA Hospital Station.

VA Hospital has a population of approximately 670 persons with a population density of 740 persons per square mile, which is one of the least dense communities in the Study Area. Approximately 53 percent of the households in the VA Hospital area live below the poverty level and 54 percent of the portion of the County of Los Angeles located in the Study Area, which includes the VA Hospital, is minority.

Brentwood

To the north of West Los Angeles, Brentwood is also one of the largest neighborhoods in Los Angeles as it extends into the hills above the city. It is generally bounded by Wilshire Boulevard on the south, the San Diego Freeway/Sepulveda Boulevard on the east, Pacific Palisades and the City of Santa Monica on the west, and Mulholland Drive on the north.

Brentwood is known as one of the wealthiest areas in Los Angeles, with affluent professionals, political figures, and celebrities residing in this neighborhood. Brentwood's northern portion consists primarily of single-family residences, while the southern area is a mix of single-family and multi-family condominiums and apartments. South of San Vicente Boulevard, the neighborhood includes mostly multi-family residences.

Brentwood has a population of approximately 19,500 persons with a population density of 9,287 persons per square mile. Approximately 7 percent of the households in Brentwood live below the poverty level and approximately 16 percent of Brentwood's population is characterized as minority, with the largest minority population being Asian (approximately 6 percent of the total population). The LEP population in Brentwood is 2 percent.

Carthay

The Carthay neighborhood is generally bounded by Wilshire Boulevard (and the City of Beverly Hills) to the north, Pico Boulevard to the south, Fairfax Avenue to the east, and La Cienega Boulevard to the west. The neighborhood includes low-density single-family homes. The Wilshire/Fairfax Station will be located in the northeast corner of this community.

Carthay has a population of approximately 5,300 persons with a population density of 1,825 persons per square mile. Approximately 12 percent of the households in Carthay live below the poverty level, and approximately 38 percent of Carthay's population is characterized as minority, with the largest minority population being Hispanic or Latino (approximately 18 percent of the total population). The LEP population in Carthay is 8 percent.

Century City

Directly west of Beverly Hills is the employment center of Century City. Either of the Century City Station locations will be within the Century City neighborhood. Century City is bounded on the east by the City of Beverly Hills, on the south by Pico Boulevard, on the west by Century Park West, and on the north by Santa Monica Boulevard. Century City includes numerous high-rise office buildings and serves as an important commercial and residential center. Several medium- to high-density residential areas are located beyond the high-rise commercial frontages. Although Century City includes a relatively small population of just over 3,550 residents, the daytime population is estimated to be 48,343 and is one of the densest areas in Los Angeles County. With an area of 0.4 square miles, the population density of Century City is 8,870 persons per square mile. Approximately 9 percent of the households in Century City live below the poverty level, and approximately 15 percent of Century City's population is characterized as minority, with the largest minority population being Asian (approximately 8 percent of the total population). The LEP population in Century City is 37 percent.

Hancock Park

To the west of Larchmont and Windsor Square, the Hancock Park neighborhood is comprised of office uses along Wilshire Boulevard and single-family residential uses (including numerous historic homes) located behind commercial frontages. Hancock Park is generally bound by Wilshire Boulevard on the south, Rossmore Avenue on the east, Melrose Avenue on the north, and La Brea Avenue on the west. Hancock Park is one of the least-dense neighborhoods in the Study Area. The Wilshire/La Brea Station will be located on the southwest corner of the neighborhood.

Hancock Park has a population of approximately 11,350 persons with a population density of 740 persons per square mile. Approximately 7 percent of the households in Hancock Park live below the poverty level, and approximately 26 percent of Hancock Park's population is characterized as minority, with the largest minority population being Asian (approximately 11 percent of the total population). The LEP population in Hancock Park is 5 percent.

Hollywood

Hollywood is located in the northeast portion of the Study Area in the City of Los Angeles and is one of the largest neighborhoods in the Study Area. Hollywood is generally bounded by Western Avenue on the east, Melrose Avenue on the south, the City of West Hollywood on the west, and Franklin Avenue on the north. Hollywood historically has been the center of movie studios and stars; however, while motion picture production still occurs in Hollywood, most major studios have dispersed to other locations. Most recently, new high-density mixed-use developments, loft conversions, and high-end restaurants and hotels have contributed to revitalization of the neighborhood.

Hollywood has a population of approximately 51,190 persons with a population density of 21,328 persons per square mile. Approximately 22 percent of the households in Hollywood live below the poverty level, and approximately 50 percent of Hollywood's population is characterized as minority, with the largest minority population being Hispanic or Latino (approximately 34 percent of the total population). The LEP population in Hollywood is 18 percent.

Larchmont

Located north of Windsor Square, the Larchmont neighborhood serves as a commercial center for the surrounding residential communities. The Larchmont neighborhood is bound by Melrose Avenue on the north, Western Avenue on the east, Beverly Boulevard on the south, and Arden Boulevard on the west. Larchmont has a population of approximately 470 persons with a population density of 4,660 persons per square mile. Approximately 3 percent of the households in Larchmont live below the poverty level, and approximately 57 percent of Larchmont's population is characterized as minority, with the largest minority population being Asian (approximately 37 percent of the total population). The LEP population in Larchmont is 5 percent.

Mid City West/Fairfax

Mid City West/Fairfax District is one of the largest neighborhoods in the study corridor and is generally bounded by the City of Beverly Hills on the west, the City of West Hollywood on the north, La Brea Avenue on the east, and Wilshire Boulevard on the south. The Mid City West/Fairfax District includes low-density single-family homes, neighborhood commercial uses, and several destination shopping centers. Mid City West/Fairfax has a population of approximately 47,630 persons with a population density of 14,099 persons per square mile. Approximately 12 percent of the households in Mid City West/Fairfax live below the poverty level, and approximately 25 percent of Mid City West/Fairfax's population is characterized as minority, with the largest minority population being Asian (approximately 10 percent of the total population). The LEP population in Mid City West/Fairfax is 6 percent.

Miracle Mile

Just north of the Pico community is the Miracle Mile neighborhood, which generally extends from Wilshire Boulevard north and is bounded by La Brea Avenue on the east, Olympic Boulevard on the south, and Fairfax Avenue on the west. The Miracle Mile neighborhood includes commercial and medium- to high-density residential uses. The Wilshire/La Brea and Wilshire/Fairfax Stations are located in the Miracle Mile. Miracle Mile has a population of approximately 6,415 persons with a population density of 16,040 persons per square mile. Approximately 8 percent of the households in Miracle Mile live below the poverty level, and approximately 51 percent of Miracle Mile's population is characterized as minority, with the largest minority population being African-American (approximately 18 percent of the total population). The LEP population in Miracle Mile is 5 percent.

Olympic Park

The Olympic Park neighborhood is located south of Wilshire Center-Koreatown and Wilshire Park, and the alignment does not pass directly through this community. It is one of the most densely populated neighborhoods in the Study Area. Olympic Park has a population of approximately 26,565 persons with a population density of 22,137 persons per square mile. Approximately 23 percent of households in Olympic Park live below the poverty level, and approximately 92 percent of Olympic Park's population is characterized as minority, with the largest minority population being Hispanic or Latino (approximately 48 percent of the total population, Asians with 27 percent, and Blacks or African-Americans at 15 percent). The LEP population in Olympic Park is 29 percent.

Pico

The Pico community is located west of the Olympic Park neighborhood, along the southern boundary of the Study Area, and is generally bounded on the north by Olympic Boulevard, on the south by Venice Boulevard, on the east by La Brea Avenue, and on the west by Fairfax Avenue. The alignment will not pass directly though the Pico community.

The Pico community has a population of approximately 12,547 persons with a population density of 3,585 persons per square mile. Approximately 14 percent of the households in the Pico community live below the poverty level, and approximately 76 percent of Pico's population is characterized as minority, with the largest minority population being African-American (approximately 48 percent of the total population). The LEP population in the Los Angeles Pico District is 4 percent.

Rancho Park

The Rancho Park neighborhood lies west of Century City and south of Westwood and is generally bounded by Olympic Boulevard on the north, Santa Monica Freeway (I-10) on the south, Century Park West on the east, and San Diego Freeway (I-405) or Sepulveda Boulevard on the west. The Rancho Park neighborhood is located in the Study Area, but no stations will be located within one-quarter mile of this neighborhood, and the alignment does not pass directly through this community.

Rancho Park has a population of approximately 7,220 persons with a population density of 12,032 persons per square mile. Approximately 7 percent of the households in Rancho Park live below the poverty level, and approximately 19 percent of Rancho Park's population is characterized as minority, with the largest minority population being Asian (approximately 9 percent of the total population). The LEP population in Rancho Park is 2 percent.

South Robertson

To the west of Carthay and to the south of the City of Beverly Hills is the South Robertson community. South Robertson neighborhood is generally bounded by the City of Beverly Hills on the north, 18th Street/Monte Mar Drive on the south, La Cienega Boulevard on the east, and Roxbury Drive on the west. The alignment does not pass directly through the South Robertson community. South Robertson includes low-density, single-family housing, condominiums and apartment buildings, and a strip of high-end retail along the north end of Robertson Boulevard.

South Robertson has a population of approximately 12,560 persons with a population density of 27,697 persons per square mile. Approximately 13 percent of the households in South Robertson live below the poverty level, and approximately 23 percent of South Robertson's population is characterized as minority, with the largest minority population being Hispanic or Latino (approximately 6 percent of the total population). The neighborhood also has a large Jewish population as is evidenced by the approximately 30 synagogues within the area. The LEP population in South Robertson is 9 percent.

West Los Angeles

West Los Angeles is generally bounded by Federal Avenue on the east, I-10 on the south, the Santa Monica city line on the west, and Wilshire Boulevard on the north. The Sawtelle neighborhood within West Los Angeles includes a commercial corridor of predominantly Japanese businesses and restaurants along Sawtelle Boulevard. No specific community facilities are located immediately adjacent to the stations in this neighborhood.

West Los Angeles has a population of approximately 28,475 persons with a population density of 15,819 persons per square mile. Approximately 18 percent of the households in West Los Angeles live below the poverty level, and approximately 50 percent of West Los Angeles's population is characterized as minority, with the largest minority population being Hispanic or Latino (approximately 22 percent of the total population). The LEP population in West Los Angeles is 12 percent.

Westwood

Westwood is one of the largest neighborhoods in the Study Area. The Westwood/UCLA Station will be located within Westwood. Westwood is home to the University of California, Los Angeles (UCLA). Westwood is generally bounded by Olympic Boulevard on the south, the City of Beverly Hills on the northeast, and Sunset Boulevard on the north; its southwestern boundary is I-405 between Olympic and Wilshire Boulevards and Veteran Avenue between Wilshire and Sunset Boulevards. The neighborhood includes residential high-rise buildings along Wilshire Boulevard in addition to commercial areas, such as "Westwood Village." Single-family homes are located in all directions of UCLA but, in general, the area is comprised of low- to medium-density apartments. Due to the proximity of UCLA, the Westwood neighborhood includes a large student population; it is comprised primarily of White and Asian residents. Community assets near the Westwood/UCLA (On-Street or Off-Street) Station options include UCLA.

Westwood has a population of approximately 58,475 persons. With an area of 4.6 square miles, the population density of Westwood is 12,771 persons per square mile. Approximately 22 percent of the households in Westwood live below the poverty level. However, this data is largely reflective of the student population at UCLA. Approximately 35 percent of Westwood's population is characterized as minority, with the largest minority population being Asian (approximately 21 percent of the total population). In fact, Westwood is comprised primarily of White and Asian residents. The LEP population in Westwood is 4 percent.

Wilshire Center-Koreatown

The starting point for the extension of the subway begins at the existing Wilshire/ Western Station in the Wilshire Center-Koreatown neighborhood. Wilshire Center-Koreatown is generally bounded by Hoover Avenue on the east, Pico Boulevard on the south, Beverly Boulevard on the north, and Wilton Place on the west. This neighborhood includes high-density commercial uses and medium- to high-density condominium residential uses.

The Wilshire Center-Koreatown neighborhood has a population of approximately 55,115 persons, with a population density of 42,609 residents per square mile, the highest of all study corridor communities. Wilshire Center-Koreatown is comprised primarily of Asian (40.1 percent) and Hispanic (44.4 percent) residents, with nearly half the households earning less than $25,603 annually. Consequently, approximately 30 percent of the households live below the poverty level, and approximately 92 percent of Wilshire Center-Koreatown's population is characterized as minority, with the largest minority population being Hispanic or Latino (approximately 44 percent of the total population). The LEP population in Wilshire Center-Koreatown is 37 percent.

Wilshire Park

Wilshire Park is located directly west of the Wilshire Center-Koreatown community and extends along the southern portion of the alignment. Wilshire Park is generally bounded by Wilshire Boulevard on the north, Olympic Boulevard on the south, Wilton Place on the east, and La Brea Avenue on the west. The Wilshire Park neighborhood includes older single-family residences and condominiums. Wilshire Park has a population of approximately 15,272 persons with a population density of 3,359 persons per square mile. Approximately 20 percent of the households in Wilshire Park live below the poverty level, and approximately 84 percent of Wilshire Park's population is characterized as minority, with the largest minority population being Asian (approximately 40 percent of the total population). The LEP population in Wilshire Park is 24 percent.

Windsor Square

The Windsor Square neighborhood is bound by Wilshire Boulevard on the south, Wilton Place on the east, Beverly Boulevard on the north, and Arden Boulevard on the west. This neighborhood includes office and low- and medium-density residential uses.

Windsor Square has a population of approximately 14,275 persons with a population density of 4,216 persons per square mile. Approximately 8 percent of the households in Windsor Square live below the poverty level, and approximately 74 percent of Windsor Square's population is characterized as minority, with the largest minority population being Asian. The percentage of LEP in Windsor Square is 15 percent. Windsor Square has a higher-than-average percentage of residents under 18 years of age, indicating that the area is home to a large number of families (LAC/NI 2007).

City of Beverly Hills

The Wilshire/La Cienega and Wilshire/Rodeo Stations will be within the City of Beverly Hills. Beverly Hills is bounded on the north by the Santa Monica Mountains, on the east by the City of West Hollywood and the Los Angeles neighborhoods of Carthay and Mid City West, on the south by South Robertson, and on the west by Century City and

Westwood. Beverly Hills contains some of the largest homes in Los Angeles County and the nation. It also includes several high-end shopping districts comprised of low- to medium-density commercial corridors. The population in Beverly Hills is largely White.

As of 2008, the City of Beverly Hills had a population of approximately 34,500 persons and approximately 16,000 housing units. With an area of 5.7 square miles, the population density of the City of Beverly Hills is 6,043 persons per square mile. Approximately 6 percent of the households in the City of Beverly Hills live below the poverty level, and the median household income in 2008 dollars was $88,014. Approximately 15 percent of the City of Beverly Hills' population is characterized as minority, with the largest minority population being Asian (approximately 8 percent of the total population). The City of Beverly Hills had an unemployment rate of 8.6 percent as of February 2010 (USBLS 2010). The LEP population in the City of Beverly Hills is 17 percent. Farsi-speakers make up a substantial percentage (19 percent in 2000) of the LEP population.

City of Santa Monica

The City of Santa Monica is surrounded by the City of Los Angeles on three sides and Santa Monica Bay/Pacific Ocean on the west. Santa Monica is comprised of several neighborhoods, including Downtown, Wilshire/Montana, and Mid-City, each with a distinct character and a mix of housing, shopping, dining, and entertainment options.

As of 2008, the City of Santa Monica has a population of approximately 87,700 persons and approximately 49,600 housing units. With an area of 15.9 square miles, the population density of the City of Santa Monica is 5,513 persons per square mile. Approximately 11 percent of the households in the City of Santa Monica live below the poverty level, and the median household income in 2008 was $67,581. Approximately 28 percent of the City of Santa Monica's population is characterized as minority, with the largest minority population being Hispanic (approximately 12 percent of the total population). The City of Santa Monica had an unemployment rate of 10.2 percent as of February 2010 (USBLS 2010). The LEP population in the City of Santa Monica is 5 percent (of which 34 percent speak only Spanish).

Pico District (in the City of Santa Monica)

Santa Monica's Pico District is in the southern portion of Santa Monica. The Pico District is generally bounded by Lincoln Boulevard on the west, Centinela Avenue on the east, Colorado Avenue on the north, and Pico Boulevard on the south. The LPA alignment does not pass directly through the Pico District. The Santa Monica Pico District has a population of approximately 13,270 persons with a population density of 8,846 persons per square mile. Approximately 18 percent of the households in the Santa Monica Pico District live below the poverty level, and approximately 63 percent of the Pico District's population is characterized as minority, with the largest minority population being Hispanic or Latino (approximately 39 percent of the total population). The LEP population in the Santa Monica Pico District is 11 percent.

City of West Hollywood

West Hollywood is bounded on the north by the Hollywood Hills, on the east by Hollywood, on the west by the City of Beverly Hills, and on the south by the Mid City West neighborhood. Although the City was not incorporated until 1984, the area has a long history based on a thriving music and club scene at its famed Sunset Strip and as a center for its lesbian-gay-bisexual-transgender and Russian Jewish communities. As of 2008, the City of West Hollywood had a population of approximately 36,000 persons and approximately 24,000 housing units. With an area of 1.9 square miles, the population density of the City of West Hollywood is 18,950 persons per square mile, the highest in Los Angeles County. Approximately 12 percent of the households in the City of West Hollywood live below the poverty level, and the median household income in 2008 was $53,122, which is slightly below the County average. Approximately 24 percent of the City of West Hollywood's population is characterized as minority, with the largest minority population being Hispanic or Latino (approximately 13 percent of the total population). Persons of Russian-descent represent 12 percent of the population of the City of West Hollywood (WH 2009b). As of February 2010, the City of West Hollywood had an unemployment rate of 10.3 percent (USBLS 2010). The LEP population in the City of West Hollywood is 19 percent. Russian-speakers make up a substantial percentage (17 percent in 2000 [US Census 2000]) of the LEP population

4.2.2 Acquisition and Displacement of Existing Uses

This section addresses the effects of land ownership and leasing agreements that will change due to the LPA under either the Concurrent Construction Scenario or the Phased Construction Scenario. Although the LPA under either scenario maximizes the use of publicly owned rights-of-way, this analysis discusses the LPA's impacts to persons and businesses with leases on Metro-owned property along the corridor and to privately owned properties. For additional information and references, see Appendix C, Acquisitions, and the *Westside Subway Extension Displacement and Relocation Supplemental Technical Report* (Metro 2011c).

Regulatory Framework

The regulatory settings for the LPA are the same whether the LPA is constructed under the Concurrent Construction Scenario or the Phased Construction Scenario.

Federal

The *Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970,* as amended (USC 1995b), 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 Relocation Assistance and Real Property Acquisitions 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 will 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.

State of California

The provisions of the California Relocation Assistance Act (CCR 2011) 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 Relocation Assistance Act, which is consistent with the intent and guidelines of the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b), 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.

Methodology

To assess the types of potential displacements due to the LPA under either scenario, conceptual engineering plans for the alignments, station options, staging areas, and rights-of-way were reviewed.

When an acquisition occurs, it typically results in either a partial or full take of a parcel. A partial take will occur if a portion of the parcel is necessary to accommodate the project. A full take will occur 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, during construction for example, or permanent. Temporary construction easements are used when there is a need to use a portion of a property for construction staging or equipment use. Permanent underground easements are used when tunneling for a subway and during its operation. For the LPA under either scenario, properties located above subway tunnels within a 5-foot vertical buffer from the exterior tunnel wall will require a permanent underground easement.

To assess impacts, the type of acquisition or easement was analyzed, as well as how much of the area on the parcels will be affected. All types of acquisitions will be subject to application of the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b) guidelines; acquisitions were determined to have an adverse effect if the acquisition displaced jobs, residents, or residences.

Summary of Acquisitions and Easements

No Build Alternative

Under the No Build Alternative, there would be no displacement or acquisition of properties for transit infrastructure. Therefore, no direct adverse impacts associated with displacements or relocations are anticipated.

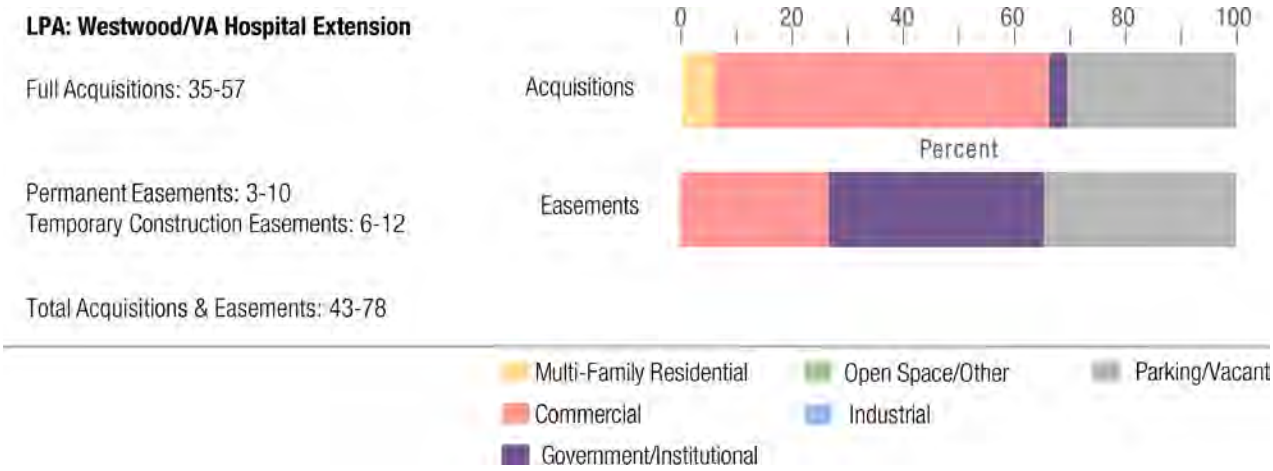
Locally Preferred Alternative

The LPA could either be constructed as a single phase under the Concurrent Construction Scenario or as three consecutive phases under the Phased Construction Scenario. The opening of the LPA as a single phase or in three sequential phases will not result in substantially differing impacts resulting from the acquisition or displacement of properties.

America Fast Forward (30/10) Scenario (Concurrent Construction)

The LPA will result in full acquisitions, partial acquisitions, permanent easements, and temporary construction easements surrounding station locations for the purposes of station boxes, station entrances, and construction staging. Some station plans have multiple entrance and construction laydown options, although only one entrance will be constructed at each station with the exception of Westwood/UCLA Station, which will have two station entrances. In these cases, all takings and easements for station entrances are identified and evaluated. Permanent underground easements will be required where the alignment or station boxes are beneath private property. Under the Concurrent Construction Scenario, all acquisitions and easements along the entire LPA alignment will be obtained during early construction activities in 2013.

Figure 4-18 summarizes the number of acquisitions and easements (excluding permanent underground easements) that will be required under the LPA and the current land uses of these acquisition and easement properties. Since there are several options for station locations, entrances, and construction staging and laydown areas, a range is provided. Table 4-6 provides the number of acquisitions and easements for each of the station combination options for the location of the Century City, Westwood/UCLA, and Westwood/VA Hospital Stations. Appendix C, Acquisitions, identifies the locations of all full acquisitions, partial acquisitions, permanent easements, temporary construction easements, and permanent underground easements with the LPA. Further information pertaining to specific acquisitions and easements required is detailed in the *Westside Subway Extension Displacement and Relocation Supplemental Technical Report* (Metro 2011c).



Source: TAHA 2010

The number of acquisitions and easements is dependent on the location of the station entrance and construction staging site. Since several stations have multiple locations under consideration, there is a range of the possible number of acquisitions and easements for these stations. This does not include subsurface easements.

Figure 4-18. Acquisitions and Easements for the LPA under the Concurrent Construction Scenario

Table 4-6. Acquisitions and Easements for Station Combinations

Phase	Station Combination			Full Acquisition	Permanent Easements	Temporary Construction Easement
Concurrent Construction Scenario						
LPA	Century City Santa Monica	Westwood/UCLA On-Street	Westwood/VA Hospital South	36-57	5-9	8-10
			Westwood/VA Hospital North	36-57	6-10	7-8
		Westwood/UCLA Off-Street	Westwood/VA Hospital South	36-57	4-7	8-10
			Westwood/VA Hospital North	36-57	5-8	7-8
	Century City Constellation	Westwood/UCLA On-Street	Westwood/VA Hospital South	35-40	4-9	7-12
			Westwood/VA Hospital North	35-40	5-10	6-10
		Westwood/UCLA Off-Street	Westwood/VA Hospital South	35-40	3-7	7-12
			Westwood/VA Hospital North	35-40	4-8	6-10
Phased Construction Scenario						
Phase 1	Wilshire/Western to Wilshire/La Cienega			30-32	1-2	1
Phase 2	Wilshire/Rodeo		Century City Santa Monica	6-25	2-4	1-2
	Wilshire/Rodeo		Century City Constellation	5-8	1-4	0-4
Phase 3	Westwood/UCLA On-Street		Westwood/VA Hospital South	0	2-3	6-7
			Westwood/VA Hospital North	0	3-4	5
	Westwood/UCLA Off-Street		Westwood/VA Hospital South	0	1	6-7
			Westwood/VA Hospital North	0	2	5

Source: TAHA 2010

The number of acquisitions and easements is dependent on the location of the station entrance and construction staging site. Since several stations have multiple locations under consideration, there is a range of the possible number of acquisitions and easements for these stations.

For the LPA, the majority of acquisitions will be of current commercial properties and vacant/parking lot parcels. The LPA will also result in the acquisition of one two-unit multi-family residence at the Wilshire/Crenshaw construction staging and laydown site, one mixed-use building containing two residential units at the Wilshire/LaBrea Station site, two four-unit multi-family residences at the Wilshire/Fairfax Station site, and one six-unit multi-family residence at the Wilshire/La Cienega Station site. These residential properties will be acquired for the purpose of construction staging. Each resident displaced as a result of the LPA will be given advance written notice and will be informed of his or her eligibility for relocation assistance and payments under the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b). Therefore, no substantial displacement of housing or people is anticipated for the LPA, including all station, alignment, and station entrance options still under consideration, and no adverse impacts are expected.

For the LPA, permanent easements will be required for station entrances on these parcels, as summarized in Figure 4-18. Owners and tenants of these parcels will be given advance written notice and will be informed of their eligibility for payments for use of their space for the station entrances. No adverse impacts are anticipated due to these permanent easements.

In addition to permanent easements, a number of temporary construction easements will be required for the LPA, as summarized in Figure 4-18. The use of these parcels will be temporary. No adverse impacts are anticipated due to these temporary construction easements.

Since many acquisitions and easements will be of commercial or industrial properties, the LPA will impact businesses and displace jobs. These job losses are discussed in more detail in Section 4.2.3. Each business displaced as a result of the LPA will be given advance written notice and will be informed of its eligibility for relocation assistance and payments under the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b). Therefore, the acquisition of these properties will not result in adverse impacts associated with job loss.

Likewise, many of the acquisitions or easements will be of existing parking lots. In most locations where parking will be acquired, the associated business or residence will also be acquired. However, there are a few locations along the alignment where parking will be removed (either permanently or temporarily), but the associated business will not be acquired. These parking losses could potentially inconvenience patrons of these businesses but, in all locations, there are public lots or garages in the immediate vicinity that could absorb additional demand for parking. Refer to the *Westside Subway Extension Displacement and Relocation Supplemental Technical Report* (Metro 2011c) for a detailed discussion of parking losses due to acquisitions.

Where tunneling will occur beneath private property, a number of permanent underground easements will be required, including easements beneath residential properties. Figure 4-19 illustrates the segments of the alignment that will require permanent underground easements between the Wilshire/Rodeo and Westwood/UCLA Stations. The location of the alignments in this area is in part dependent on the location of the Century City and Westwood/UCLA Stations.

Figure 4-19. Wilshire/Rodeo to Westwood/UCLA Station and Alignment Options

Table 4-7 summarizes the number of properties that will be tunneled beneath with the various station option combinations. Since many of these alignment options will require tunneling beneath heavily residential neighborhoods, the number of residential permanent underground easements is included in the permanent underground easement table. Condominium units in the same building are counted as a single property. It is assumed that Metro will negotiate with the homeowners' association for each condominium building to secure a single permanent underground easement for each building.

Table 4-7. Permanent Underground Easements

Phase	Station Combination			Permanent Underground Easements by Property[1]		
				Residential Properties[2]	Non-Residential Properties	Total Properties
Concurrent Construction Scenario						
LPA	Century City Santa Monica	Westwood/UCLA On-Street	Westwood/VA Hospital South	78	17	**95**
			Westwood/VA Hospital North	78	15	**93**
		Westwood/UCLA Off-Street	Westwood/VA Hospital South	82	26	**108**
			Westwood/VA Hospital North	82	24	**106**
	Century City Constellation	Westwood/UCLA On-Street	Westwood/VA Hospital South	86	38	**124**
			Westwood/VA Hospital North	86	36	**122**
		Westwood/UCLA Off-Street	Westwood/VA Hospital South	90	47	**137**
			Westwood/VA Hospital North	90	45	**135**
Phased Construction Scenario						
Phase 1	Wilshire/Western to Wilshire/La Cienega			0	1	**1**
Phase 2	Wilshire/Rodeo	Century City Santa Monica		0	6	**6**
	Wilshire/Rodeo	Century City Constellation		10	22	**32**
Phase 3	Century City Santa Monica	Westwood/UCLA On-Street	Westwood/VA Hospital South	78	10	**88**
			Westwood/VA Hospital North	78	8	**86**
		Westwood/UCLA Off-Street	Westwood/VA Hospital South	82	19	**101**
			Westwood/VA Hospital North	82	17	**99**
	Century City Constellation	Westwood/UCLA On-Street	Westwood/VA Hospital South	76	15	**91**
			Westwood/VA Hospital North	76	13	**89**
		Westwood/UCLA Off-Street	Westwood/VA Hospital South	80	24	**104**
			Westwood/VA Hospital North	80	22	**102**

Source: TAHA 2010

[1]Property = Condominium units in the same building counted as a single property
[2]Residential easements include single-family dwellings, individual condominium units/condominium buildings, and multi-family apartment buildings

None of these permanent underground easements will result in displacement or relocation of any structures on the surface of the parcels. Therefore, no adverse impacts are anticipated under operation of the LPA, including all station, alignment, and station entrance options still under consideration.

The LPA will require the expansion of the Metro Division 20 Rail Yard to house and maintain rail cars. Expansion of the Metro Division 20 Rail Yard option will require full acquisition of eight properties and the partial acquisition of one property, as detailed in Appendix C, Acquisitions. The expansion of the Division 20 Maintenance Yard will not displace any residences, people, or jobs. Therefore, no adverse impacts are anticipated.

Metro Long Range Transportation Plan Scenario (Phased Construction)

Under the Phased Construction Scenario, the acquisition and displacement of properties are the same as under the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of when the acquisition and displacement of properties will occur. Under the Phased Construction Scenario, potential impacts related to acquisition and displacement of properties along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential impacts related to acquisition and displacement of properties along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

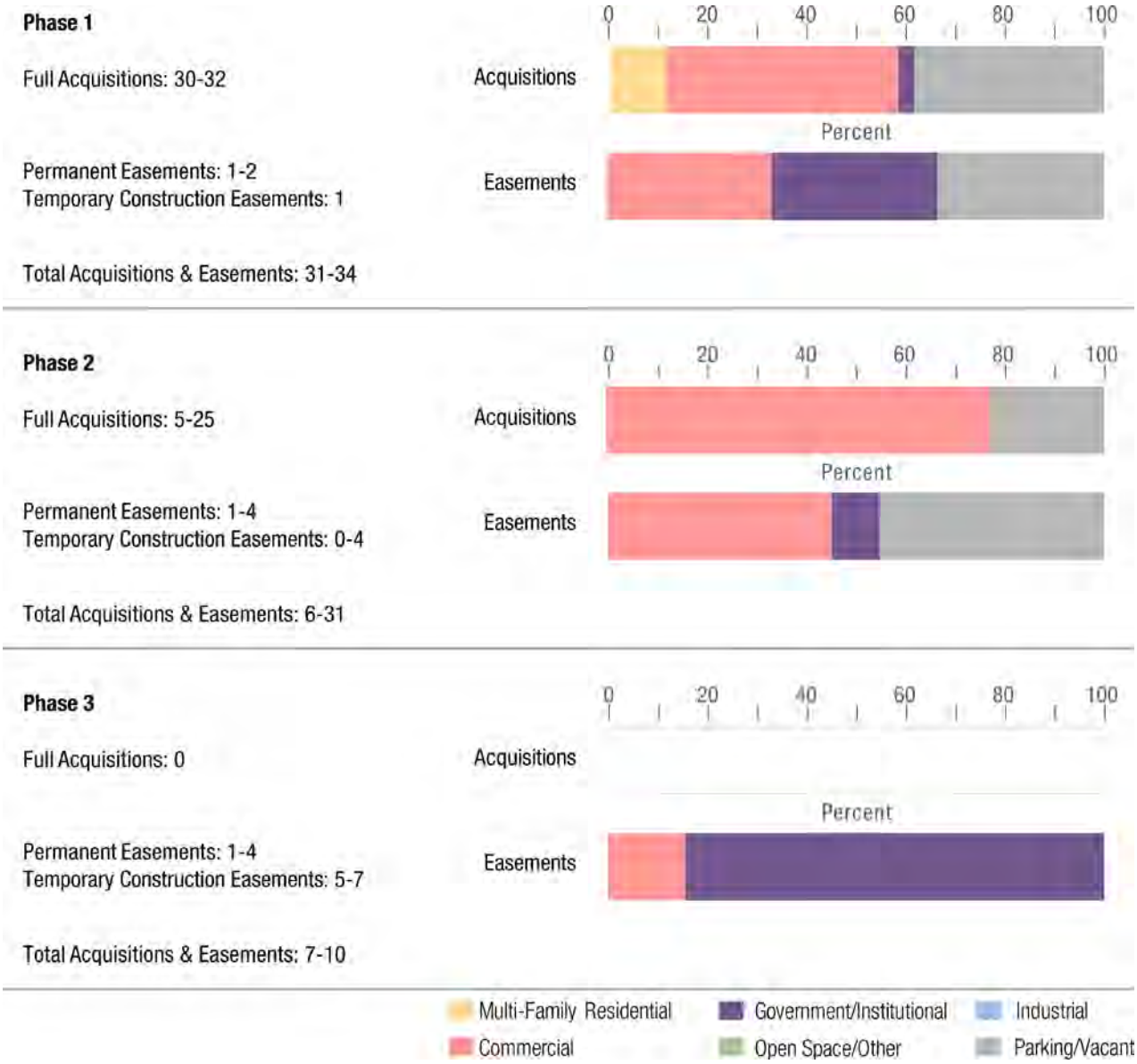
All three phases of the LPA will result in full acquisitions, partial acquisitions, permanent easements, and temporary construction easements surrounding station locations for the purposes of station boxes, station entrances, and construction staging as described above and in the following sections. Table 4-6 and Figure 4-20 summarize the number of acquisitions and easements (excluding permanent underground easements) that will be required for Phase 1, Phase 2, and Phase 3. Table 4-7 summarizes the number of permanent underground easements required for Phase 1, Phase 2, and Phase 3. Refer to Appendix C, Acquisitions, and the *Westside Subway Extension Displacement and Relocation Supplemental Technical Report* (Metro 2011c) for a more detailed discussion.

Phase 1 to Wilshire/La Cienega

Under Phase 1, the LPA will operate to the Wilshire/La Cienega Station. Acquiring property and obtaining easements along Phase 1 will occur during pre- and early construction activities for Phase 1, which is scheduled for 2012–2013.

Phase 1 will result in the full acquisition of between 30 and 32 properties. The majority of acquisitions for this phase of the LPA will be of commercial properties and vacant/parking lot parcels. This phase will also result in acquisition of one single-family residence at the Wilshire/Crenshaw construction staging and laydown site, two four-unit multi-family residences at the Wilshire/Fairfax Station site, and one six-unit multi-family residence at the Wilshire/La Cienega Station site. These residential properties will be acquired for the purpose of construction staging. Each resident displaced as a result of Phase 1 of the LPA will be given advance written notice and will be informed of his or her eligibility for relocation assistance and payments under the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b). Therefore, no

substantial displacement of housing or people is anticipated for Phase 1 of the LPA, including all station, alignment, and station entrance options still under consideration, and no adverse impacts are expected.



Source: TAHA 2010

The number of acquisitions and easements is dependent on the location of the station entrance and construction staging site. Since several stations have multiple locations under consideration, there is a range of the possible number of acquisitions and easements for these stations. This does not include subsurface easements.

Figure 4-20. Acquisitions and Easements for the LPA under the Phased Construction Scenario

Between one and two permanent easements will be required for station entrances for Phase 1 of the LPA, as summarized in Figure 4-20. The owners and tenants of these parcels will be given advance written notice and will be informed of their eligibility for payments for use of their space for the station entrances. No adverse impacts are anticipated due to these permanent easements. One temporary construction easement will be required for Phase 1 of the LPA at the Wilshire/La Cienega Station.

Since many acquisitions and easements under Phase 1 will be of commercial properties and existing parking, impacts on businesses, jobs, and parking will be the same as discussed in the Concurrent Construction Scenario above. Each business displaced as a result of Phase 1 of the LPA will be given advance written notice and will be informed of its eligibility for relocation assistance and payments under the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b). Therefore, the acquisition of these properties will not result in adverse impacts.

A permanent underground easement will be obtained beneath one private property along Phase 1 of the LPA, as shown in Table 4-7. This permanent underground easement will not result in displacement or relocation of any structures on the surface of the parcel. Therefore, no adverse impacts related to permanent underground easements are anticipated under Phase 1 of the LPA.

Phase 1 of the LPA also includes expansion of the Division 20 Storage Yard and Maintenance Facility to house and maintain rail cars. Required acquisitions for this facility will be the same as those discussed in the Concurrent Construction Scenario above—full acquisition of eight properties and the partial acquisition of one property, as detailed in Appendix C, Acquisitions. Expansion of the Division 20 Storage Yard and Maintenance Facility will not displace any residences, people, or jobs. Therefore, no adverse impacts are anticipated.

Phase 2 to Century City

Under Phase 2, the LPA will operate to the Century City Station (either Santa Monica or Constellation Boulevard). Acquiring property and securing easements along Phase 2 will occur during pre- and early construction activities for Phase 2, which is scheduled for 2018–2019. However, there may be some instances where Metro will acquire properties and obtain easements along Phase 2 in advance of pre-construction to secure the integrity of the station box or station entrance location, but this will be dealt with on a case-by-case basis. If the property is acquired in advance of pre-construction, Metro will likely lease the property so that it will not sit vacant for an extended period of time.

Phase 2 will result in the full acquisition of between 5 and 25 properties. The majority of acquisitions for this phase of the LPA will be of commercial properties. Each property owner displaced as a result of Phase 2 of the LPA will be given advance written notice and will be informed of his or her eligibility for relocation assistance and payments under the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b). Therefore, no substantial displacement is anticipated for Phase 2 of the LPA, including all station, alignment, and station entrance options still under consideration, and no adverse impacts are expected.

Between one and four permanent easements will be required for station entrances and construction staging under Phase 2, as summarized in Figure 4-20. The owners and tenants of these parcels will be given advance written notice and will be informed of their eligibility for payments for use of their space for the station entrances. No adverse impacts are anticipated due to these permanent easements.

In addition to permanent easements, between zero and four temporary construction easements will be required under Phase 2, as summarized in Figure 4-20. The use of these parcels will be temporary. No adverse impacts are anticipated due to these temporary construction easements.

Many acquisitions and easements during Phase 2 will be of commercial properties and existing parking, similar to Phase 1. Impacts on businesses, jobs, and parking will be the same as discussed for the Concurrent Construction Scenario above. Each business displaced as a result of Phase 2 will be given advance written notice and will be informed of its eligibility for relocation assistance and payments under the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b). Therefore, the acquisition of these properties will not result in adverse impacts.

Where tunneling will occur beneath private property between the Wilshire/Rodeo and Century City Stations, a number of permanent underground easements will be required, which could include several residential properties. Figure 4-19 illustrates the segments of the alignment that will require permanent underground easements between the Wilshire/Rodeo and Century City Station options.

Table 4-7 summarizes the number of properties that will be tunneled beneath with the two Century City Station options. Only the Century City Constellation Station option will require tunneling beneath residential properties under Phase 2. The number of residential permanent underground easements is included in the permanent underground easement table. Condominium units in the same building are counted as a single property. It is assumed that Metro will negotiate with the homeowners' association for each condominium building to secure a single permanent underground easement for each building.

None of these subsurface easements will result in displacement or relocation of any structures on the surface of the parcels. Therefore, no adverse impacts are anticipated under operation of Phase 2 of the LPA, including all station, alignment, and station entrance options still under consideration.

Phase 3 to Westwood/VA Hospital

Under Phase 3, the LPA will be opened in its entirety to the Westwood/VA Hospital Station. No full acquisitions will be required for this phase of the LPA, but several easements will be necessary. Obtaining easements along Phase 3 will occur during pre- and early construction activities for Phase 3, which is scheduled for 2028–2029. However, there may be some instances where Metro will obtain easements for properties along Phase 3 in advance of pre-construction to secure the integrity of the station box or station entrance location, but this will be dealt with on a case-by-case basis. If a property is acquired in advance of pre-construction, Metro will likely lease the property so that it will not sit vacant for an extended period of time.

Between one and four permanent easements will be required for station entrances for Phase 3 of the LPA, as summarized in Figure 4-20. The owners and tenants of these parcels will be given advance written notice and will be informed of their eligibility for payments for use of their space for the station entrances. No adverse impacts are anticipated due to these permanent easements.

Between five and seven temporary construction easements will be required for Phase 3 of the LPA, as summarized in Figure 4-20. The use of these parcels will be temporary. No adverse impacts are anticipated due to these temporary construction easements.

Several permanent underground easements will be required under Phase 3 of the LPA, with the majority occurring beneath residential properties. Figure 4-19 illustrates the segments of the alignment that will require permanent underground easements between the Century City Station options and Westwood/UCLA Station options.

Table 4-7 summarizes the number of properties under Phase 3 of the LPA that will be tunneled beneath with the various station option combinations. Since many of these alignment options will require tunneling beneath heavily residential neighborhoods, the number of residential permanent underground easements is included in the permanent underground easement table. As stated above in the discussion of Phases 1 and 2, none of these permanent underground easements will result in displacement or relocation of any structures on the surface of the parcels. Therefore, no adverse impacts are anticipated under operation of Phase 3 of the LPA, including all station, alignment, and station entrance options still under consideration.

4.2.3 Environmental Consequences

No Build Alternative

Under the No Build Alternative, there would be no displacement or acquisition of properties for transit infrastructure. Therefore, no direct adverse demographic or economic impacts associated with displacements and relocations are anticipated.

Locally Preferred Alternative

Major infrastructure projects, such as the Westside Subway Extension, can affect and benefit the regional and local economies. The property acquisitions for right-of-way and construction staging areas described in the preceding section for both the Concurrent Construction Scenario and the Phased Construction Scenario will result in two direct impacts: (1) property tax revenue losses to the County and local jurisdictions where the parcels are located and (2) job losses as businesses on the acquired parcels are required to close or relocate out of the area. In addition to impacts due to long-term property acquisitions, the construction phase of the LPA under either the Concurrent Construction Scenario or the Phased Construction Scenario will result in both impacts and benefits, including construction-related economic losses (due to construction disruptions), construction-related employment gains, and construction expenditure that will benefit the regional economy. Ongoing operating and maintenance (O&M) expenditures can also benefit the regional economy through employment gains and increased expenditures. Finally, improved accessibility to and within the Westside corridor will result in long-term economic benefits for the entire region.

Property Tax Revenue Loss

America Fast Forward (30/10) Scenario (Concurrent Construction)

The fiscal impact analysis shows that the LPA, including all station, alignment, and station entrance options still under consideration, will not lead to property tax losses in excess of 1 percent of the Project's Study Area tax base. Estimated property tax losses vary slightly depending on the location of the entrances and construction staging areas at each station, and ranges from 0.06 percent of Study Area property taxes ($0.74 million) to 0.09 percent of Study Area property taxes ($1.08 million) as listed in Table 4-8. Therefore, there will be no adverse effect.

Table 4-8. Estimated Property Tax Losses for the LPA

Phase	Estimated Property Tax Revenue Loss (2009)	% Loss of Study Area Property Taxes Levied in 2009
Concurrent Construction Scenario		
LPA	$741,373–$1,077,572	0.06%–0.09%
Phased Construction Scenario		
Phase 1	$429,976–$443,353	0.03%–0.04%
Phase 2	$311,397–$634,219	0.02%–0.05%
Phase 3	$0	0%

Source: Los Angeles County Assessor, Los Angeles County Auditor-Controller

Furthermore, property tax losses will not adversely affect any one tax district within the Study Area. As shown in Table 4-9, no tax district is expected to experience a loss of more than 0.009 percent in property tax revenue as a result of property acquisitions. Therefore, no adverse effect will occur from losses in property tax revenues.

Table 4-9. Estimated Tax Revenues/Losses by Tax District

Phase	Los Angeles County % Loss of Property Taxes Levied in 2009	Cities % Loss of Property Taxes Levied in 2009	School Districts % Loss of Property Taxes Levied in 2009	Special Districts % Loss of Property Taxes Levied in 2009	Redevelopment Agencies % Loss of Property Taxes Levied in 2009	Total % Loss of Property Taxes Levied in 2009
Concurrent Construction Scenario						
LPA	0.009%	0.009%	0.009%	0.008%	0.008%	0.009%
Phased Construction Scenario						
Phase 1	0.003%	0.004%	0.004%	0.003%	0.003%	0.004%
Phase 2	0.005%	0.005%	0.005%	0.005%	0.005%	0.005%
Phase 3	0%	0%	0%	0%	0%	0%

Source: Los Angeles County Assessor, Los Angeles County Auditor-Controller

If transit-oriented development, as discussed in Section 4.1, occurs around the stations on currently vacant parcels, the property tax revenues may increase as an indirect result of the LPA. Since these properties are currently not generating their full tax revenue potential, the development of the parcels could increase the tax base for jurisdictions in the Study Area.

Metro Long Range Transportation Plan Scenario (Phased Construction)

Under the Phased Construction Scenario, the property tax revenue losses are the same as under the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of when property tax revenue losses will occur. Under the Phased Construction Scenario, potential impacts related to property tax revenue along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential impacts related to property tax revenue along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

The fiscal impact analysis shows that none of the three phases of the LPA, including all station, alignment, and station entrance options still under consideration, will lead to property tax losses in excess of 1 percent of the Project's Study Area tax base. Therefore, there will be no adverse effect. Estimated property tax losses vary slightly for each phase of the LPA depending on the location of the entrances and construction staging areas at each station. Furthermore, property tax losses for each phase of the LPA will not adversely affect any one tax district within the Study Area.

Phase 1 to Wilshire/La Cienega

Under Phase 1, the LPA will operate to the Wilshire/La Cienega Station. Estimated property tax revenue losses resulting from Phase 1 range from 0.03 percent of Study Area property taxes ($0.43 million) to 0.04 percent of Study Area property taxes ($0.44 million) as listed in Table 4-8. As shown in Table 4-9, no tax district is expected to experience a loss of more than 0.004 percent in property tax revenue as a result of property acquisitions. Therefore, no adverse effect will occur from losses of property tax revenues under Phase 1 of the LPA.

Phase 2 to Century City

Under Phase 2, the LPA will operate to the Century City Station (either Santa Monica or Constellation Boulevard). Estimated property tax revenue losses resulting from Phase 2 range from 0.02 percent of Study Area property taxes ($0.31 million) to 0.05 percent of Study Area property taxes ($0.63 million) as listed in Table 4-8. As shown in Table 4-9, no tax district is expected to experience a loss of more than 0.005 percent in property tax revenue as a result of property acquisitions. Therefore, no adverse effect will occur from losses of property tax revenues under Phase 2 of the LPA.

Phase 3 to Westwood/VA Hospital

Under Phase 3, the LPA will be opened in its entirety to the Westwood/VA Hospital Station. No property acquisition is expected to occur as part of Phase 3. Therefore, no property tax revenue losses will occur during this phase.

Employment Effects

America Fast Forward (30/10) Scenario (Concurrent Construction)

Under the LPA, job losses are projected due to the acquisitions of commercial properties. Job losses will come from retail, general stores, restaurants, parking lots, and service stations where their removal will likely lead to disruption and termination of the business. These are treated as permanent job losses, lasting through the 20-year forecast period. However, businesses in commercial office buildings were assumed to be able to relocate within the county, a reasonable assumption due to vacancies in the area.

For the LPA, including all station, alignment, and station entrance options still under consideration, employment loss as a result of property acquisitions will not result in an adverse effect. Estimated job losses for the LPA vary slightly depending on the location of the entrances and construction staging areas at each station. Employment losses will range from 231 jobs to 279 jobs, or 0.05 to 0.06 percent, of the estimated 2009 employment in the Study Area. The anticipated employment loss for the LPA is listed in Table 4-10.

Table 4-10. Employment Loss in Study Area due to Property Acquisitions

Phase	Project Study Area		Job Losses		
	Estimated 2009 Employment	Estimated 2035 Employment	Number of Jobs	Job Loss as Percent of Total Jobs	
				2009	2035
Concurrent Construction Scenario					
LPA	436,957	536,840	231–279	0.05%–0.06%	0.04%–0.05%
Phased Construction Scenario					
Phase 1	436,957	536,840	208–210	0.05%	0.04%
Phase 2			23–69	0.01%–0.02%	0%–0.01%
Phase 3			0	0%	0%

Source: Los Angeles Metro; State of California Employment Development Department, Labor Market Information Division

Metro Long Range Transportation Plan Scenario (Phased Construction)

Under the Phased Construction Scenario, the employment effects are the same as under the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of when employment effects will occur. Under the Phased Construction Scenario, potential impacts related to employment along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential impacts related to employment along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

The analysis of employment effects is discussed in the Concurrent Construction Scenario above. For all three phases of the LPA, including all station, alignment, and station entrance options still under consideration, employment loss as a result of property acquisitions will not result in an adverse effect. Estimated job losses for each phase of the LPA vary slightly depending on the location of the entrances and construction staging areas at each station.

Phase 1 to Wilshire/La Cienega

Under Phase 1, the LPA will operate to the Wilshire/La Cienega Station. As shown in Table 4-10, employment losses will range from 208 jobs to 210 jobs (0.05 percent) of the estimated 2009 employment in the Study Area.

Phase 2 to Century City

Under Phase 2, the LPA will operate to the Century City (Santa Monica or Constellation) Station. As shown in Table 4-10, employment losses will range from 23 jobs to 69 jobs (0.01 to 0.02 percent) of the estimated 2009 employment in the Study Area.

Phase 3 to Westwood/VA Hospital

Under Phase 3, the LPA will be opened in its entirety to the Westwood/VA Hospital Station. No property acquisition is expected to occur in Phase 3 of the LPA. Therefore, no employment losses will occur during this phase.

Operating and Maintenance Expenditures

America Fast Forward (30/10) Scenario (Concurrent Construction)

Similar to construction spending, which is described in Section 4.15, projected O&M expenditures can be expected to have a significant beneficial "ripple" effect. This will be in the form of jobs generated by O&M spending, which then will result in increased economic output for the region. The O&M-related economic impacts were quantified using the Bureau of Economic Analysis Regional Input-Output Modeling System multipliers.

This analysis uses the annual O&M cost estimates for the LPA in 2035, from the *Westside Subway Extension Draft Financial Plan* (Metro 2010ah), which is approximately $62.94 million in year-of-expenditure (YOE) dollars. It assumes that RIMS II industry code 30 (Rail Transportation) can be directly attributed to each 2035 design year O&M cost estimate.

Table 4-11 shows O&M-related employment for the LPA, which is expected to be 344 person-years. As illustrated in Figure 4-21, projections indicate that most of these jobs will receive compensation above $40,000 per year, which will help stimulate the local economy. A variety of industries will be affected by the annual O&M expenditures, with transportation and warehousing realizing the most job creation. Other industries with employment gains include retail trade, health care, administration and waste management, professional services, food services, and real estate.

Table 4-11. Full-Time Employment Generated by Annual O&M Expenditures

	Direct On-site Employment (person years)	Direct Off-site Employment (person years)	Indirect/Induced Employment (person years)	Total Employment (person years)
LPA	88	38	218	344

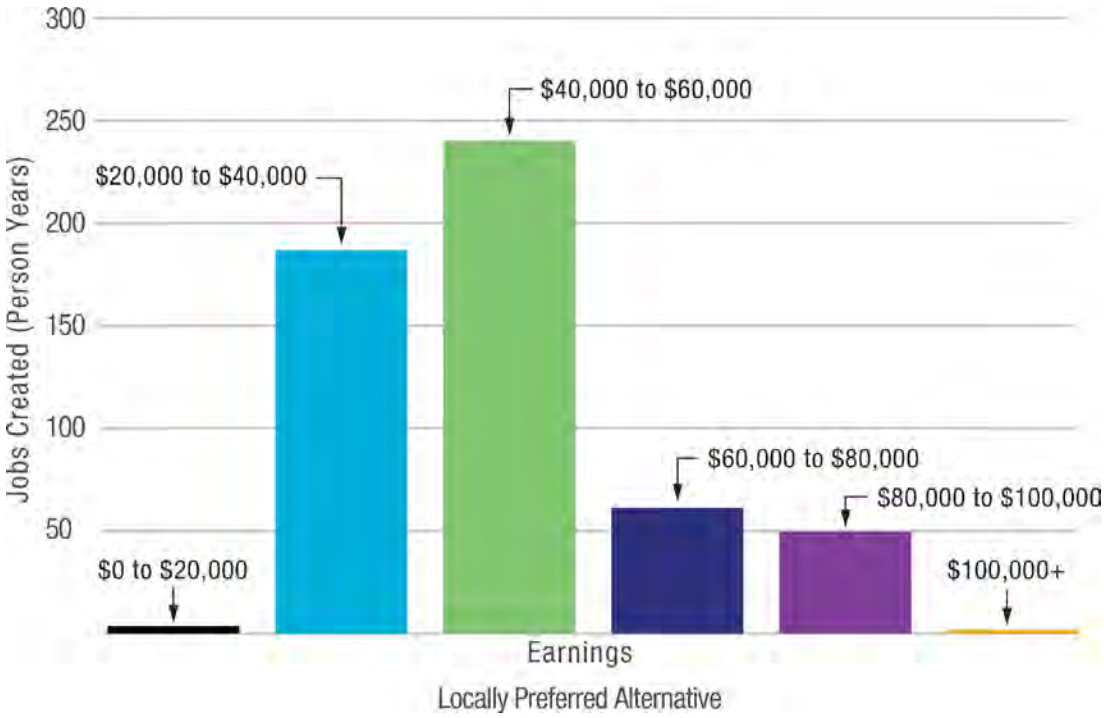


Figure 4-21. O&M-related Job Creation by Earnings for Locally Preferred Alternative

Jobs created as a result of O&M spending will increase economic output for the Los Angeles region. The economic output for the LPA, based on projected 2035 design year spending, is shown in Table 4-12. Total economic output is estimated to be $80 million for the LPA.

Table 4-12. Estimated O&M-related Economic Output

	Direct Output ($2010 millions)	Indirect/Induced Output ($2010 millions)	Total Output ($2010 millions)
LPA	$36	$45	$80

Metro Long Range Transportation Plan Scenario (Phased Construction)

Under the Phased Construction Scenario, the operation and maintenance expenditures are expected to have the same beneficial effect as under the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of when increased economic output for the region will occur as a result of jobs generated by O&M

spending. Under the Phased Construction Scenario, employment generation from O&M spending along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for employment generation from O&M spending along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

The analysis of O&M-related employment is discussed in the Concurrent Construction Scenario above. Under the Phased Construction Scenario, the LPA will open in three phases over a longer period of time compared to the LPA under the Concurrent Construction Scenario. Therefore, the creation of jobs as a result of O&M spending will occur more slowly, taking longer for the full economic output benefits of the LPA to be realized.

Long-term Economic and Real Property Effects

The LPA, including all station, alignment, and station entrance options still under consideration under both the Concurrent Construction Scenario and the Phased Construction Scenario, is expected to result in long-term economic benefits, primarily because of improved accessibility to and within the corridor. The primary beneficiaries will be *existing* or baseline transit users (i.e., those who already rely on or prefer to use transit to access destinations within the corridor and those who would use transit in the future under the No Build Alternative). This also is an equity benefit, as transit-dependent persons are a high percentage of direct beneficiaries. Finally, enhanced real estate values and redevelopment opportunities around stations are likely within one-quarter to one-half mile, particularly at high-volume stations.

Economic Benefits due to Improved Accessibility

America Fast Forward (30/10) Scenario (Concurrent Construction)

The Study Area's economy is highly dependent on commuters from outside the Study Area, as it has more jobs (504,000) than workers (265,000). Currently, and under the No Build Alternative, the fastest commute option is by car. As most workers in Los Angeles drive to work (approximately 89 percent according to the 2000 Census), any increase in auto commuting distance makes it more difficult for Study Area businesses to attract and retain qualified workers.

Under the No Build Alternative, travel times to the Study Area are expected to increase due to increased vehicular demand for existing roads, resulting in congestion and slower travel speeds. However, the LPA will provide a transit option that is more competitive with, and in some cases faster than, auto travel times, with benefits in worker and business productivity resulting from reduced travel times and more direct transit access. In addition, the LPA will provide corridor employers with an increased ability to find qualified employees. With reductions in travel times, the available work force effectively increases as the travel radius for a given commute expands outward from the workplace.

The LPA, including all station, alignment, and station entrance options still under consideration, will reduce transit travel times and make transit more competitive with auto travel, particularly during peak commuting hours. Chapter 3, Transportation, details the anticipated transit travel time savings provided by the LPA. This analysis is

supported by transportation research literature, which finds that providing high-volume public transit that significantly improves access in dense and highly congested urban areas results in positive long-term economic benefits.

Metro Long Range Transportation Plan Scenario (Phased Construction)
Under the Phased Construction Scenario, economic benefits due to improved accessibility are the same as described for the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of when economic benefits due to improved accessibility will occur. Under the Phased Construction Scenario, the benefits related to improved accessibility resulting from Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential benefits related to improved accessibility along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020. Therefore, under the Phased Construction Scenario, it will take longer for the full economic benefits due to improved accessibility to be fully realized.

The analysis of benefits due to improved accessibility is discussed under the Concurrent Construction Scenario above. Similarly, all three phases of the LPA for the Phased Construction Scenario will also provide a transit option that is more competitive with, and in some cases faster than, auto travel times, with benefits in worker and business productivity resulting from reduced travel times and more direct transit access. In addition, all three phases of the LPA for the Phased Construction Scenario will provide corridor employers with an increased ability to find qualified employees. With reductions in travel times, the available work force effectively increases as the travel radius for a given commute expands outward from the workplace.

Property Value Impacts

America Fast Forward (30/10) Scenario (Concurrent Construction)
Characteristics important in creating real estate value premiums near station sites include proximity to stations, relatively high-density zoning, a safe pedestrian-friendly environment, and a balanced origin/destination mix within the fixed guideway system. These characteristics are present for many of the stations.

Based on studies of property values in San Francisco, San Diego, and San Jose, California; New York, New York; and Portland, Oregon; an average home price may increase 6.4 percent within one-half mile of each transit station.

As detailed in Section 4.1, it is not possible to predict the level or timing of new development in station areas as development relies on many factors, including economic pressures. The same is true of property values, which in California declined substantially recently and may take additional years to recover. However, it is reasonable to expect that, in the future, property values and levels of development around station areas will be higher under the LPA than under the No Build Alternative.

Negative impacts on property values from transit (termed *nuisance* effects) also can occur. Measurable noise impacts from vehicles, increased foot traffic, adjacent structures, transit-associated parking, and increased bus traffic interfacing with transit stations can reduce the desirability of properties near a fixed guideway station. Such nuisance effects will most likely occur in areas where value is not attributed to the accessibility improvements that transit provides. This does not appear likely within the

Study Area as stations are planned for areas that are already densely developed and near major roads and bus routes.

Metro Long Range Transportation Plan Scenario (Phased Construction)
Under the Phased Construction Scenario, property value impacts are the same as described for the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of when potential impacts to property values will occur. Under the Phased Construction Scenario, potential impacts related to property values along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential impacts related to property values along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

The analysis of property value impacts is discussed under the Concurrent Construction Scenario above. It is reasonable to expect that property values and levels of development around station areas in each of the three phases of the LPA for the Phased Construction Scenario will be higher than under the No Build Alternative. However, under the Phased Construction Scenario, it may take longer for improvements to property values to occur since the full LPA, providing the greatest travel benefits, will open later.

4.2.4 Mitigation Measures

The LPA under either the Concurrent Construction Scenario or the Phased Construction Scenario will not result in adverse impacts in regards to demographic and economic impacts. Therefore, no mitigation is required.

The following measures will be implemented under both the Concurrent Construction Scenario and the Phased Construction Scenario to ensure impacts related to displacements and acquisitions are avoided or further minimized.

- **CN-1—Relocation Assistance and Compensation**

  Metro will provide relocation assistance and compensation for all displaced businesses and residences, as required by both the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b) and the California Relocation Assistance Act (CCR 2011). All real property acquired by Metro will be appraised to determine fair market value. Just compensation, which shall not be less than the approved appraisal, will be made to each displaced property owner. Each business and residence displaced as a result of the LPA will be given advance written notice and owners will be informed of their eligibility for relocation assistance and payments under the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b). It is anticipated that most businesses will relocate and, as such, most jobs will be relocated and will not be permanently displaced. However, there are permanent job losses anticipated. Metro shall coordinate with the appropriate jurisdictions regarding business relocations.

- **CN-2—Propose Joint-use Agreement**

  While employment loss as a result of property acquisitions will not result in an adverse effect, Metro will propose, where feasible, joint-use agreements for the land

it will take for station entrances and construction staging to induce job creation in areas to further reduce the affect of any job loss.

- **CN-3—Compensation for Easements**

  For easements, Metro will appraise each property to determine the fair market value of the portion that will be used either temporarily during construction or permanently above and below ground. Just compensation, which shall not be less than the approved appraisal, will be made to each displaced property owner.

For a more detailed discussion of impacts during construction and mitigation measures, refer to Section 4.15.

If the LPA is constructed under the Phased Construction Scenario, CN-1, CN-2, and CN-3 will be required for Phase 1, Phase 2, and Phase 3.

4.2.5 California Environmental Quality Act Determination

The CEQA determination compares the effects of the LPA, including all station, alignment, and station entrance options still under consideration under both the Concurrent Construction Scenario and the Phased Construction Scenario, with the existing conditions described in Section 4.2.1. The evaluation of socioeconomic impacts of the LPA, under both the Concurrent Construction Scenario and the Phased Construction Scenario, are discussed above.

According to CEQA guidelines, a project will have a significant impact if it results in any of the following:

- Displacement of a substantial number of existing housing units, particularly affordable housing units, necessitating the construction of replacement housing elsewhere
- Displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere

CEQA does not have specific thresholds for displacement impacts on employment. However, given the character of the Study Area, it is anticipated that the LPA will impact businesses. Therefore, a similar threshold for employment displacement is used in this analysis as for population and housing.

The LPA under both the Concurrent Construction Scenario and the Phased Construction Scenario will displace one two-unit multi-family residence at the Wilshire/Crenshaw construction staging and laydown site, one mixed-use building containing two residential units at the Wilshire/LaBrea Station site, two four-unit multi-family residences near the Wilshire/Fairfax Station, and one six-unit multi-family residence near the Wilshire/La Cienega Station. Although the residents will be displaced and relocated, due to the size and scope of the LPA, this impact is not considered substantial. In addition, the residents will be compensated under the Uniform Relocation Assistance and Real Property Acquisitions Act (USC 1995b). Furthermore, the acquisition will provide future opportunities for housing, should Metro decide to develop them. Under the LPA, including all station, alignment, and station entrance options still under consideration under both the Concurrent Construction Scenario and the Phased

Construction Scenario, no substantial displacement of housing or people is anticipated; therefore, less-than-significant impacts are expected.

It is anticipated that any displaced jobs will be relocated. Therefore, there will be no net loss of jobs overall. This will result in no adverse impacts related to job loss.

The opening of the LPA as a single phase under the Concurrent Construction Scenario or in three sequential phases under the Phased Construction Scenario will not result in different impacts resulting from acquisitions, as discussed in Sections 4.2.2 and 4.2.3. The only difference between the two scenarios is the timing of the potential for impacts. Under the Phased Construction Scenario, the potential impacts along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential impacts along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

For the LPA, including all station, alignment, and station entrance options still under consideration under both the Concurrent Construction Scenario and the Phased Construction Scenario, impacts will be less-than-significant. Mitigation measures CN-1, CN-2, and CN-3 incorporated into the LPA under both the Concurrent Construction Scenario and the Phased Construction Scenario will ensure impacts related to displacements and acquisitions are avoided or minimized and will help to offset social and economic effects.

4.2.6 Environmental Justice Considerations

This EJ analysis identifies EJ populations within the Study Area and presents the impact determinations regarding the likelihood that disproportionately high and adverse operational and construction impacts will be experienced by minority and low-income communities under either the Concurrent Construction Scenario or the Phased Construction Scenario. This section discusses measures to avoid, minimize, or mitigate those impacts to EJ populations and documents the Project's public outreach efforts to EJ populations. For more detailed information and references, see the *Westside Subway Extension Analysis of Environmental Justice Technical Report* (Metro 2010u), the *Westside Subway Extension Analysis of Environmental Justice Memorandum* (Metro 2011r), and the *Westside Subway Extension Community and Neighborhood Technical Report* (Metro 2010d).

Regulatory Setting

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (USEO 1994), was signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take appropriate and necessary steps to identify and address disproportionately high and adverse effects of their projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The order directs federal actions, including transportation projects, to use existing law to avoid discrimination on the basis of race, color, or national origin and to avoid disproportionately high and adverse impacts on minority and low-income populations. These are often referred to as environmental justice (EJ) populations.

There are three fundamental EJ principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority populations and low-income populations
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority populations and low-income populations

A "disproportionately high and adverse effect" is defined as follows:

- *Disproportionately high and adverse effect on minority and low-income populations means an adverse effect that:*
  - *is predominately borne by a minority population and/or low-income populations; or*
  - *will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.*

The principles of EJ are rooted in Title VI of the *Civil Rights Act of 1964* (PL 1964), which prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance. Additional laws, statutes, guidelines, and regulation that relate to EJ issues include the following:

- Title 49 of the United States Code (USC) Section 5332, *Nondiscrimination* (USC 2007)
- Title 49 of the Code of Federal Regulations (CFR) Part 21, *Nondiscrimination in Federally Assisted Programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964* (CFR 2009)
- Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (USEO 1994)
- *Environmental Justice: Guidance Under the National Environmental Policy Act* (CEQ 1997)
- *Department of Transportation Order to Address Environmental Justice in Minority Populations and Low-Income Populations* (FR 1997)
- *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (FHWA 1998)
- Executive Order 13166, *Improving Access to Services for Persons with Limited English Proficiency* (USEO 2000)
- *Americans with Disabilities Act of 1990* (ADA) (USC 1990, PL 1990a)

The California Governor's Office of Planning and Research (OPR) has been designated the "coordinating agency in state government for environmental justice programs." As part of its new EJ coordinator role, the OPR must now incorporate EJ considerations into local government planning decisions. California law requires the OPR to coordinate with federal agencies regarding EJ based on Executive Order 12898.

Metro includes guidelines and planning policies regarding EJ issues in its 2008 LRTP. Metro's 2008 LRTP evaluates how much additional transit service would be provided in areas with high-transit-dependent, minority, and low-income populations. The 2008

LRTP includes extensive transit investments and policies regarding placement of these investments in proximity to areas with minority and low-income populations and to job opportunities that support those areas (Metro 2008a). Metro files a Title VI compliance report every year with the FTA.

According to CEQA, economic and social changes resulting from a project shall not be treated as significant effects, but economic or social changes may be used to determine whether a physical change is significant (CEQA Guidelines, section 15064, subdivision (e)). The environmental issues and significance conclusions for other elements of the environment are considered in their respective sections of this Final EIS/EIR.

The regulatory settings for the LPA are the same whether the LPA is constructed under the Concurrent Construction Scenario or the Phased Construction Scenario.

Methodology

The analysis identifies operational and construction effects on minority and low-income populations that reside within the Study Area and determines whether these effects are disproportionate in comparison to the effects on the surrounding community. Other communities of concern include LEP households. The effects of the LPA, under either the Concurrent Construction Scenario or the Phased Construction Scenario, were analyzed as follows:

- How well the LPA will serve the transportation needs of the identified EJ populations and communities of concern in comparison to all other population groups within the Study Area
- Whether the effects of the LPA (e.g., construction, visual, noise) will have disproportionately high and adverse effects on the social, cultural, health, and well-being of the identified EJ populations and communities of concern as compared to other population groups within the Study Area

This EJ analysis follows a five-step process (Benefits and Burdens Analysis) to determine whether disproportionately high and adverse human health or environmental impacts exist. The steps are as follows:

1. Whether a high or substantial impact exists which adversely affects an EJ community
2. Whether effects on EJ populations exceed those borne by non-EJ community
3. Whether cumulative or indirect effects would adversely affect an EJ community
4. Whether mitigation and enhancement measures will be taken
5. Whether there are off-setting benefits to EJ community

Definition of Environmental Justice Populations

EJ populations are communities in which there is a higher proportion of minority or low-income populations in comparison to the surrounding community. For the purposes of this analysis, minority and low-income information from communities is compared to the demographics for the entire County of Los Angeles.

USDOT Order 5610.2 and subsequent agency guidance define the term “minority” to include any individual who is Black, Hispanic, Asian-American (Asian), American

Indian or Alaskan Native, and Native Hawaiian or Other Pacific Islander. According to FTA guidance, "minority populations should be identified when the minority population of the affected area exceeds 50 percent or when the minority population percentage of the affected area is less than 50 percent but is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis." The FTA guidance also requires a separate minority analysis of neighborhoods and communities in addition to the aggregate analysis.

Low-income population means any readily identifiable group of persons whose median household income is at or below the Department of Health and Human Services' (HHS) poverty guidelines who live in geographic proximity and, if circumstances warrant, geographically dispersed or transient persons who will be similarly affected by a proposed FTA program, policy, or activity. The HHS poverty guidelines are a simplified version of the federal poverty thresholds used for administrative purposes. The U.S. Census Bureau has developed poverty thresholds, which are used for calculating all official poverty population statistics. The Census Bureau applies these poverty thresholds to a family's income to determine poverty status.

Definition of Communities of Concern

In addition to minority and income status, other data were used as additional indicators of communities of concern, including LEP populations. Persons counted as LEP are those over the age of 5 who speak a non-English language at home and fall into the Census English speaking ability categories of "Speak English Not Well" or "Speak English Not at All." As with EJ populations, communities of concern were determined by comparing this indicator for community populations to the County of Los Angeles. Data on communities of concern also serve to direct public outreach efforts.

Identification of Environmental Justice Populations and Communities of Concern

In order to analyze demographic and socioeconomic characteristics, the Study Area was divided into 22 communities and neighborhoods, which are illustrated in Figure 4-16 and described above in the "Communities and Neighborhoods" section. Table 4-5 provides an overview of the demographic and socioeconomic characteristics of each of these communities within the Study Area and data for the entirety of Los Angeles County and the Cities of Los Angeles, Beverly Hills, Santa Monica, and West Hollywood.

Data was drawn from the 2000 U.S. Census, the American Community Survey (2006–2008), and the Bureau of Labor Statistics, which was the most recent data available when the Draft EIS/EIR was circulated. During the preparation of the Final EIS/EIR, 2010 Census data became available and this data was analyzed to validate the 2000 Census data. The 2010 Census data shows an overall decrease in EJ populations within the Study Area. Because the 2000 data represents a more conservative evaluation of EJ communities, this data is used in the analysis of EJ impacts in the Final EIS/EIR in order to provide a consistent evaluation. Please refer to the *Westside Subway Extension Analysis of Environmental Justice Memorandum* (Metro 2011r) for a detailed discussion of the differences between the 2000 Census data and the 2010 Census data.

Of the 22 communities and neighborhoods in the Study Area, twelve were identified as EJ populations based on one of the following criteria:

- A higher proportion of the population is below the poverty level in comparison to the County of Los Angeles, which is 15 percent below poverty
- The aggregate minority race/ethnicity exceeds 50 percent of the community population or is meaningfully greater when compared to the general population of the County of Los Angeles, which is 71 percent minority
- The Hispanic or Latino population exceeds 50 percent of the population or is meaningfully greater when compared to the Hispanic or Latino population of the County of Los Angeles, which is 47 percent Hispanic or Latino

The 12 EJ populations that were identified in the Study Area are the following:

- Unincorporated County of Los Angeles—VA West Los Angeles Campus (VA Hospital Campus) (54 percent minority and 54 percent below poverty)
- Hollywood (50 percent minority and 22 percent below poverty)
- Larchmont (57 percent minority)
- Miracle Mile (51 percent minority)
- Olympic Park (92 percent minority and 23 percent below poverty)
- Pico (76 percent minority)
- West Los Angeles (50 percent minority and 18 percent below poverty)
- Westwood (22 percent below poverty)
- Wilshire Center-Koreatown (92 percent minority and 30 percent below poverty)
- Wilshire Park (84 percent minority and 20 percent below poverty)
- Windsor Square (74 percent minority)
- Pico District, Santa Monica (63 percent minority and 18 percent below poverty)

In addition to being identified as having EJ populations, Wilshire Center-Koreatown is also considered to be a community of concern due to a substantial LEP population (37 percent in Wilshire Center-Koreatown compared to 27 percent in the County of Los Angeles).

Based on proximity to the alignment and proposed station areas, 6 of the 12 EJ populations and communities of concern would be directly affected by the LPA:

- Miracle Mile
- Westwood
- Wilshire Center-Koreatown
- Wilshire Park
- Windsor Square
- VA Hospital Campus

Based on demographic and socioeconomic information, Brentwood, Carthay, Century City, Hancock Park, Mid-City West/Fairfax, Rancho Park, South Robertson and the Cities of Beverly Hills, Santa Monica, and West Hollywood are not considered to have EJ populations or communities of concern.

For comparison, there would be five non-EJ communities that would be directly affected by the LPA:

- Beverly Hills
- Carthay
- Century City
- Hancock Park
- Mid-City West/Fairfax

Figure 4-17 illustrates the distribution of minorities in the Study Area and identifies the location of the 12 EJ populations. Table 4-5 summarizes the demographic and socioeconomic information for each of the 22 communities in the Study Area and highlights the EJ populations and Section 4.2.1 provides a detailed description of each community.

Community Participation

Executive Order 12898 requires the *meaningful* participation of the public in the project development process. Metro has provided opportunities for the public to provide input from the beginning of the project development process through scoping outreach during the initial Alternatives Analysis (AA) phase of the Project. Metro has continued with public outreach efforts throughout the Draft EIS/EIR and Final EIS/EIR phases of the Project. Additional information and details regarding community participation and outreach can be found in Chapter 8, Public and Agency Outreach.

As described in detail in the *Westside Transit Corridor Alternatives Analysis Study* (Metro 2009c), Metro held six formal early scoping meetings during the AA phase of the Project. Metro engaged in extensive efforts to notify stakeholders about the six public scoping meetings, including display advertisements in multi-lingual publications (English, Spanish, Russian, and Korean), and placed notices on Metro buses and trains serving the Study Area. A media release was distributed to 83 local, regional, ethnic, and multi-lingual publications as well as broadcast media, blogs, and other online news and information outlets. Noticing was conducted in English, Spanish, Russian, and Korean.

The scoping meetings began with an open house format to provide attendees with an opportunity to preview the Project information prior to the start of the presentation and subsequent comment period. Spanish, Russian, and Korean language translators were made available, as appropriate. In addition, close captioning was provided at two meetings for one hearing-impaired attendee. Following the open house period, a visual presentation was made to provide attendees with information regarding the purpose of scoping and other information involving the Project background, the Study Area, Project goals, alternatives, and alignment modes and issues. Emphasis was placed on the importance of the community to provide comments to Metro about what they would like to have studied in the Draft EIS/EIR. Following the presentations, attendees who completed speaker cards provided public comments, which were recorded by a court reporter/transcriber. After the public comment portion of the meetings, the Project team was available at the informational display boards to answer technical questions.

Of the 269 comments received by Metro during the six scoping meetings, five were directly related to the topic of EJ. Two of these five comments focused on the need to

provide transit-dependent populations access to employment within the corridor. One comment expressed concern regarding transit equity among communities within the corridor. This comment stated that Santa Monica could receive two rail lines and West Hollywood would receive none. Another comment cited concern for access to elderly populations. The final comment identified a concern that not enough time was given between the notification of meetings and the dates of the meetings.

Following the scoping meeting, Metro held community updates on the Project in August 2009 with nearly 250 stakeholders participating. The purpose of the updates was for community members to learn about Metro's continued progress with the Project.

In October and November 2009, communities within the Study Area were presented with five station information meetings. The outreach for this series of meetings was also varied, including hand drops to local libraries, parks, and malls, and "take ones" placed on buses and existing Metro Red/Purple Line trains servicing the corridor. Unlike previous community updates, which used a more formal meeting format, the Station Area information series of meetings encouraged stakeholders to "roll-up their sleeves" and actively engage with the program. The meeting began with a 45-minute open house, followed by a 45-minute presentation, and culminated with a 60-minute station breakout session.

A third and fourth round of five community update meetings were held in April and June 2010. These meetings provided an update on the status of the Draft EIS/EIR that was underway and provided a review of issues presented to the public in prior meetings and preparation for the formal public review and comment period on the Draft EIS/EIR.

A series of public hearings on the Draft EIS/EIR was held in September 2010. The purpose of these hearings was to give interested parties an opportunity to formally submit comments on the Project and the analysis contained in the Draft EIS/EIR. More than 500 stakeholders attended the series of five Public Hearings where 115 community members provided their verbal comments and 30 provided written comments. In addition, three rounds of community updates were held in January, March, and August 2011.

Metro made every effort to ensure minority, low-income, and disabled persons were included in all outreach efforts for this Project. This included sensitivity to multiple distribution channels and language needs, but also in the selection of transit-accessible venues in compliance the ADA (USC 1990, PL 1990). Simultaneous translations were provided at each community meeting. Spanish translation was available at every meeting with the addition of Russian for the meetings held in West Hollywood and Korean for meetings held in the Wilshire Center-Koreatown area. Closed captioning for the hearing-impaired was provided to the community on an as-requested basis provided that requests were made with 72 hours advance notice.

In addition to direct mail and emails, Metro provided notifications at least 10 days in advance of meetings on buses and trains serving the Project area to ensure that those who are transit-dependent had access to information about the Project and were made aware of opportunities to attend the meetings. Transit advocacy groups were included in e-blasts. Furthermore, bi-lingual (Spanish/English or Korean/English) meeting notices

were placed in parks, libraries, community centers, and non-profit organizations in the Project area. Multi-lingual information "Take One" brochures were placed on buses and trains throughout the Westside Corridor.

Environmental Impact/Environmental Consequences

No Build Alternative

The No Build Alternative consists of existing and planned highway and transit services, including the projects planned under the RTP and Metro's LRTP. The No Build Alternative would maintain the transportation system in the Study Area and, as a result, would not address the transportation deficiencies experienced by Study Area residents and persons traveling to the Study Area. The No Build Alternative would not result in direct disproportionate adverse impacts to EJ populations since transportation deficiencies would be experienced throughout the Study Area.

Locally Preferred Alternative

Under the LPA, the construction and operation of the LPA would not result in adverse impacts to minority or low-income communities in the following environmental impact areas:

- Geology and soils
- Hazardous materials
- Water quality
- Energy
- Historic, archaeological, and paleontological resources
- Parklands, community facilities, and other Section 4(f) properties
- Safety and security

After the LPA is constructed, it is anticipated that the LPA would provide beneficial direct impacts for minority and low-income communities that are typically transit-dependent and would provide increased mobility and regional connectivity throughout the region. The mobility and connectivity objectives of the Project are described in detail in Chapter 1, Purpose and Need. Under the Phased Construction Scenario, benefits to the communities in Phases 2 and 3 would be delayed until construction of those phases would be complete. This would delay benefits for two non-EJ communities (Beverly Hills and Century City) in Phase 2 and two EJ communities (Westwood and VA Hospital Campus) in Phase 3.

The specific construction and operations impacts to communities are discussed in the following sections:

- Traffic, Circulation, and Parking
- Displacement and Relocation
- Visual Resources and Aesthetics
- Air Quality and Climate Change
- Noise and Vibration
- Economic Vitality and Employment Opportunities

Because the LPA would be entirely grade separated and located below ground, impacts will occur primarily during construction and will be concentrated within 500 feet

(construction impact zone) of the proposed station locations and staging areas. Construction activity would also occur at the existing Division 20 Maintenance Yard as upgrades are made to the facility to support the LPA. However, this site is located in an industrial area and there are no sensitive receptors or community facilities within close proximity (0.25 miles). Therefore, no adverse effects to EJ communities would occur.

Table 4-13 shows the EJ and non-EJ communities by station and staging area. The first two stations (Phase 1) are located in a relatively equal mix of EJ and non-EJ communities. The middle three stations (Phase 2) are located in two non-EJ communities. The last two stations (Phase 3) are located in two EJ communities. The two staging areas (Phase 1) are located in three EJ communities. Overall the geographic distribution of station construction impact zones and staging areas affects almost an equal number of EJ (6) and non-EJ (5) communities.

Under the Phased Construction Scenario, potential impacts to EJ populations are the same as under the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of when potential impacts will occur. Under the Phased Construction Scenario, potential impacts along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential impacts along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

The impacts for each environmental resource prior to implementation of mitigation are summarized in Table 4-13, and the specific effects to the individual EJ communities and non-EJ communities are described in detail below. After a description of the specific impacts by topic area, mitigation is identified to reduce the impacts. If there are still impacts remaining, additional mitigation is identified to reduce the impact to an EJ community. For impacts to EJ communities that remain after implementation of all feasible mitigation, the determination of whether the impacts are borne disproportionately by an EJ community is assessed.

Traffic, Circulation, and Parking

Construction Traffic, Circulation, and Parking Impacts

Section 3.8 discusses transportation-related impacts during construction and provides more detail on the mitigation measures listed below. Construction traffic effects would be disruptive and adverse from the following changes to the physical environment:

- Increased Truck Volumes
- Reduced access to some commercial driveways
- Lane reductions
- Increased Bus Travel Times from rerouting
- Reduced access for pedestrians and bicyclists
- Off-peak intermittent street closures
- Parking reductions

Construction traffic effects would be the most severe at station boxes located within Wilshire Boulevard right-of-way, where temporary lane closures and detours would occur for a period of four to six months while the decking is installed and removed.

While construction traffic effects would be temporary, the adverse effects would be substantial in these areas.

Construction Traffic, Circulation, and Parking Impacts to EJ Communities

Truck traffic volume will increase during construction of the LPA along anticipated haul routes. Table 3-19 shows roadways proposed as haul routes and Table 3-21 shows the estimated daily haul truck trips. The truck volumes will range from 25 daily trips for the emergency exit shaft at the Westwood/VA Hospital Station and the Wilshire/Crenshaw construction staging area to between 100 and 140 trips for the tunnel boring machine (TBM) launch activity at the Westwood/VA Hospital Station. Increased truck traffic volume could cause visual, noise, and vibration impacts along haul routes. Most of the land uses along the haul routes is commercial, but there are a few stretches of residential. Section 3.8.2 identifies potential streets which may be used for haul routes where clusters of residential units are located. Metro will implement the following mitigation measure to reduce the impact of haul truck traffic on surrounding communities:

- **TCON-2—Designated Haul Routes**

In addition to haul truck traffic, other adverse traffic effects associated with LPA construction include reduced roadway traffic lanes and temporary street closures which could result in major traffic disruptions and bottlenecks. Additionally, commercial driveways may be subject to reduced access around construction sites. Emergency vehicle access (e.g. police, fire and rescue, and ambulance) in and around construction work sites may be affected by lane closures or temporary street closures. These adverse effects would occur to the six EJ and five non-EJ communities within the station areas described above. Metro will implement the following mitigation measures to reduce the impacts of street closures during construction:

- **TCON-1—Traffic Control Plans**
- **TCON-3—Emergency Vehicle Access**
- **TCON-4—Transportation Management Plan**
- **TCON-5—Coordination with Planned Roadway**

Bus service will be impacted by temporary street closures and will require the temporary rerouting of bus lines and bus stop locations. This will result in additional transit travel time for bus riders. Metro will implement the following mitigation measures to reduce the impacts to public transit during construction:

- **TCON-6—Temporary Bus Stops and Route Diversions**

Table 4-13. Impacts without Mitigation by Environmental Resource to EJ Communities during Construction and Operation

Station/Staging Area	Communities Present (EJ/non EJ)	Traffic, Circulation, Parking	Displacement and Relocation	Visual Resources	Air Quality	Noise and Vibration	Economic and Fiscal	Impact to EJ Community
Wilshire/Western Staging Area (Phase 1)								
Construction	Wilshire Center-Koreatown (EJ)	●	○	●	●	●	●	Yes
Operation		○	○	○	○	○	○	No
Wilshire/Crenshaw Staging Area (Phase 1)								
Construction	Wilshire Park and Windsor Square (EJ)	●	○	●	●	●	●	Yes
Operation		○	○	○	○	●	○	Yes
Wilshire/La Brea (Phase 1)								
Construction	Miracle Mile and Wilshire Park (EJ)	●	○	●	●	●	●	Yes
Operation	Mid-City West/Fairfax and Hancock Park (non-EJ)	●	○	○	○	●	○	Yes
Wilshire/Fairfax (Phase 1)								
Construction	Miracle Mile (EJ)	●	○	●	●	●	●	Yes
Operation	Mid-City West/Fairfax and Carthay (non-EJ)	●	○	○	○	○	○	Yes
Wilshire/La Cienega (Phase 1)								
Construction	Beverly Hills (non-EJ)	●	○	●	●	●	●	No
Operation		●	○	○	○	●	○	No
Wilshire/Rodeo (Phase 2)								
Construction	Beverly Hills (non-EJ)	●	○	●	●	●	●	No
Operation		●	○	○	○	○	○	No
Century City Santa Monica (Phase 2)								
Construction	Century City (non-EJ)	●	○	●	●	●	●	No
Operation		○	○	○	○	○	○	No
Century City Constellation (Phase 2)								
Construction	Century City (non-EJ)	●	○	●	●	●	●	No
Operation		○	○	○	○	○	○	No
Westwood/UCLA (Phase 3)								
Construction	Westwood (EJ)	●	○	●	●	●	●	Yes
Operation		●	○	○	○	○	○	Yes
Westwood/VA Hospital (Phase 3)								
Construction	VA Hospital Campus (EJ)	●	○	●	●	●	●	Yes
Operation		●	○	○	○	○	○	Yes

● Adverse Impact ○ No Adverse Impact

During construction, existing on-street parking and loading zones will be temporarily removed where traffic lanes are closed or eliminated temporarily. In addition, a number of off-street parking spaces will be removed during construction of the Wilshire/La Cienega, Wilshire/Rodeo, Century City Santa Monica option, Westwood/UCLA, and Westwood/VA Hospital Stations. Of these five stations, two are located in areas with EJ populations (Westwood/UCLA and Westwood/VA Hospital). Metro will implement the following mitigation measures to reduce the parking impacts during construction:

- **TCON-7—Parking Management**
- **TCON-8—Parking Monitoring and Community Outreach**
- **TCON-9—Construction Worker Parking**

Construction Traffic, Circulation, and Parking Impacts Remaining After Mitigation

Mitigation measures would apply uniformly to EJ and non-EJ communities. With implementation of mitigation measures, construction-related adverse effects on transportation and parking in the Study Area will be reduced for adjacent commercial areas and residential neighborhoods. However, at major intersections, traffic-related impacts, such as split phases of signals and loss of turn lanes, will remain adverse effects. These adverse effects would be substantial at the Wilshire/La Brea, Wilshire/Fairfax, Wilshire/La Cienega, Wilshire/Rodeo, Century City (both options), and the on-street Westwood/UCLA Stations due to the four to six months of lane closures and detours that would be required to install piles and decking in the street. These substantial adverse construction traffic effects would affect three EJ communities (Wilshire Park, Miracle Mile, and Westwood) and five non-EJ communities (Hancock Park, Mid-City West/Fairfax, Carthay, Beverly Hills, and Century City). The off-street Westwood/UCLA Station would not result in substantial construction traffic effects to the Westwood community.

Although the construction impacts identified on traffic circulation, parking, and transit will be temporary, impacts and residual impacts will remain adverse during construction. There are no additional feasible mitigation measures which would reduce the effects on the EJ communities.

Operational Traffic, Circulation, and Parking Impacts

Section 3.5 and Section 3.6 discuss impacts to traffic circulation and parking during operation of the LPA.

The LPA will have a beneficial effect on the regional transportation network by reducing vehicle miles traveled (VMT), vehicle hours traveled (VHT), and peak-hour trips in comparison to both future year and existing conditions. The Century City Constellation Station option will result in a greater reduction of VMT, VHT, and peak period trips than the Century City Santa Monica Station option. For example, there will be approximately 581,000 less regional VMTs in 2035 under the LPA (Century City Constellation) as compared to the No Build Alternative (see Table 3-9 in Chapter 3, Transportation). However, if the LPA is constructed under the Phased Construction Scenario, benefits will be delayed. Since Phase 1 will terminate at the Wilshire/La Cienega Station and Phase 2 will terminate at the Century City Station, reductions to VMT, VHT, and peak-hour trips will be less than the reductions resulting from the full LPA to Westwood/VA Hospital.

The LPA will result in improved level-of-service at several Study Area intersections. In the future (year 2035), the LPA is expected to improve level-of-service at 12 locations in the a.m. peak hour and at 8 locations in the p.m. peak hour. Under existing year with LPA conditions, the LPA is expected to improve level-of-service at 9 locations in the a.m. peak hour and 13 locations in the p.m. peak hour (see Table 3-11 in Chapter 3, Transportation). However, if the LPA is constructed under the Phased Construction Scenario, benefits will be delayed. Phase 1 will result in improved level-of-service at six locations in the a.m. peak hour and at 6 locations in the p.m. peak hour compared to future No Build Alternative conditions. Phase 2 will result in improved level-of-service at 10 locations in the a.m. peak hour and at 7 locations in the p.m. peak hour compared to future No Build Alternative conditions.

In general, the intersection level-of-service results indicate that the LPA will not impact any analyzed Study Area intersections compared to existing as well as future No Build Alternative conditions. The exception is the Bank of America entrance at the Wilshire/Rodeo Station (Phase 2), which will result in an adverse and unavoidable traffic impact at the intersection of Wilshire Boulevard and Beverly Drive under future conditions (for more information refer to the *Westside Subway Extension Wilshire/Rodeo Station Bank of America Portal Traffic Impact Analysis Report* (Metro 2011ak)). This is the only adverse traffic impact under the LPA and cannot be mitigated. However, this is not the recommended location for the Wilshire/Rodeo entrance, and there will be no traffic impact resulting from the Wilshire/Rodeo entrance at either the Ace Gallery or Union Bank.

The LPA will be constructed below grade and will not result in permanent parking loss at most stations. However, the following station locations will result in long-term impacts to parking:

- **Wilshire/Rodeo (Phase 2)**—Loss of off-street parking associated with the entrance options at the Bank of America and Union Bank Buildings. In addition, the entrance option at the Bank of America Building would result in the removal of three metered on-street parking spaces and one on-street loading space from the west side of Beverly Drive and up to 13 on-street spaces from the east side of Beverly Drive.
- **Century City Santa Monica Station (Phase 2)**—Some displaced parking in the nearby underground garage at the southwest corner of Santa Monica Boulevard and Century Park East.
- **Westwood/UCLA (On-Street or Off-Street) Station (Phase 3)**—Loss of existing off-street parking at UCLA Lot 36.

The LPA will result in neighborhood spillover parking impacts at the Wilshire/La Brea (Phase 1), Wilshire/Fairfax (Phase 1), Wilshire/La Cienega (Phase 1), Westwood/UCLA (On-Street or Off-Street) (Phase 3), and Westwood/VA Hospital (South or North) (Phase 3) Stations.

Operational Traffic, Circulation, and Parking Impacts to Specific Environmental Justice Communities

The one operational traffic impact at the Wilshire/Rodeo Station with the Bank of America entrance would occur in Beverly Hills, which is a non-EJ community. No operational traffic impacts are anticipated for EJ communities under the LPA, including all station, alignment, and station entrance options under consideration.

The five stations that would result in spillover parking impacts would result in impacts to four EJ communities (Miracle Mile, Wilshire Park, Westwood, and VA Hospital Campus) and four non-EJ communities (Mid-City West/Fairfax, Hancock Park, Carthay, and Beverly Hills). Therefore, spillover parking impacts would occur throughout the project corridor and would not be limited to EJ communities.

The LPA would result in a permanent parking loss the Wilshire/Rodeo, Century City Santa Monica, and the Westwood/UCLA (On-Street and Off-Street) Stations. The parking impacts at the Wilshire/Rodeo Station are located in Beverly Hills, which is a non-EJ community. The parking impacts at the Century City Santa Monica Station are located in Century City, which is a non-EJ community. The parking impacts at the Westwood/UCLA Station are located in Westwood, which is an EJ community.

The following mitigation measures will be implemented to minimize parking impacts due to either permanent parking loss or neighborhood spillover parking:

- **T-1—Coordination with Property Owners**
- **T-2—Parking Monitoring and Community Outreach**
- **T-3—Residential Permit Parking Districts**
- **T-4—Consideration of Shared Parking Program**

Operational Traffic, Circulation, and Parking Impacts Remaining After Mitigation

Mitigation measures would apply uniformly to EJ and non-EJ communities. With implementation of mitigation, no adverse operational parking impacts would remain in EJ or non-EJ communities. One adverse operational traffic impact would remain in a non-EJ community (Beverly Hills) at the Wilshire/Rodeo Station if the entrance is located at the Bank of America site. Following mitigation, no adverse operational traffic or traffic impacts would remain in EJ communities.

Displacement and Relocation

Construction Displacement and Relocation Impacts

Acquisitions and permanent and construction easements will occur at each LPA station area, as discussed in the preceding "Acquisitions and Displacement of Existing Uses" section and in the *Westside Subway Extension Displacement and Relocation Supplemental Technical Report* (Metro 2011c). No adverse impacts were found to occur.

Construction Displacement and Relocation Impacts to Specific Environmental Justice Communities

The LPA would result in the full permanent acquisition of up to 57 parcels. Of these acquisitions, at most 16 would be located in EJ communities. Between 1 and 3 would be located in Wilshire Center-Koreatown (at Wilshire/Western construction staging site), 12 would be located in Miracle Mile (6 at Wilshire/La Brea and 6 at Wilshire/Fairfax), and 1 would be located in Wilshire Park (at Wilshire/Crenshaw construction staging site). Given the size of the Project, the acquisition of 16 of over 100,000 parcels in the study area during construction in EJ communities would not be adverse. There would be up to 41 full parcel acquisitions in non-EJ communities. Similarly, these effects would not be adverse during construction in non-EJ communities.

Residential displacements will occur at the Wilshire/Crenshaw construction staging site and at the Wilshire/La Brea, Wilshire/Fairfax, and Wilshire/La Cienega Stations. The residential displacement at the Wilshire/Crenshaw Station is a two-unit multi-family

residence and is located in the Wilshire Park neighborhood, which is an EJ community. The residential displacement at Wilshire/La Brea is a mixed-used building containing two residential units and is located in the Miracle Mile neighborhood, which is an EJ community. The residential displacements at Wilshire/Fairfax Station are two four-unit apartment buildings in Miracle Mile, which is an EJ community. The residential displacement at the Wilshire/La Cienega Station is a six-unit apartment building in Beverly Hills, which is a non- EJ community. Although 12 residential units would be displaced in EJ communities, given the total of over 600,000 units in EJ communities, the impact during construction would not be adverse. Similarly, the effects during construction would not be adverse to non-EJ communities.

The following mitigation measures will be implemented to reduce the impacts associated with displacement and relocations:

- **CN-1—Relocation Assistance and Compensation**
- **CN-2—Propose Joint-use Agreements**
- **CN-3—Compensation for Easements**

The residents in both EJ and non-EJ communities will be compensated under the Uniform Relocation Assistance and Real Property Acquisition Act (USC 1995b) as further described in CN-1. Where businesses are displaced, it is anticipated that the vast majority will be relocated to nearby areas and no adverse effects would occur during construction to EJ and non-EJ communities.

If the LPA is constructed under the Phased Construction Scenario, the acquisitions will occur during the phases described below. The same mitigation measures will be implemented whether the LPA is constructed under the Phased Construction Scenario or the Concurrent Construction Scenario.

Phase 1 to Wilshire/La Cienega

Property acquisitions and construction easements are located around the station locations and construction staging sites for Phase 1. Two stations in Phase 1 (Wilshire/La Brea and Wilshire/Fairfax) are located in EJ communities. In addition, there will be property acquisition at the existing Wilshire/Western Station in Phase 1, which is located in Wilshire Center-Koreatown, and the site at Wilshire/Crenshaw, which is located in Wilshire Park, for construction staging.

The number of property acquisitions at the stations located in EJ population areas will be similar to the number of acquisitions at other stations along the alignment. Phase 1 will result in the full or partial acquisition of 30 to 32 properties, depending on station, entrance, and construction staging locations. Of these properties in Phase 1, at most 16 will be located in EJ communities. Between one and three will be located in Wilshire Center-Koreatown (at the Wilshire/Western construction stating site), twelve will be located in Miracle Mile (six at Wilshire/La Brea and six at Wilshire/Fairfax), and one will be located in Wilshire Park (at the Wilshire/Crenshaw construction staging site). Given the size of the Project, the acquisition of 16 of over 100,000 parcels in the study area during construction in EJ communities would not be adverse. There would be up to 16 full parcel acquisitions in non-EJ communities. Similarly, these effects would not be adverse during construction in non-EJ communities.

Twelve residential units in EJ communities will be displaced as part of Phase 1 at the Wilshire/Crenshaw construction staging site (Wilshire Park) and the Wilshire/La Brea (Miracle Mile), and Wilshire/Fairfax Stations (also Miracle Mile). Although 12 residential units will be displaced in EJ communities, given the total of over 600,000 units in EJ communities, the impacts would not be adverse.

There would be six residential units displaced in non-EJ communities, all six at the Wilshire/La Cienega Station. Similarly, the effects during construction would not be adverse to non-EJ communities.

The residents in both EJ and non-EJ communities will be compensated under the Uniform Relocation Assistance and Real Property Acquisition Act (USC 1995b) as further described in CN-1. Where businesses are displaced, it is anticipated that the vast majority will be relocated to nearby areas, and no adverse effects would occur during the construction of Phase 1 to EJ or non-EJ communities.

Phase 2 to Century City

None of the stations in Phase 2 are located in areas with EJ populations or communities of concern. Therefore, of the 5 to 25 full acquisitions that will occur as part of Phase 2, none will be located in an EJ population or community of concern areas. Property acquisition as part of Phase 2 will not result in adverse effects to EJ communities.

Phase 3 to Westwood/VA Hospital

Both station locations in Phase 3 (both station options for Westwood/UCLA [On-Street or Off-Street] and both station options for Westwood/VA Hospital [South or North]) are located in EJ population areas. No full acquisitions will occur as part of Phase 3; therefore, property acquisition as part of Phase 3 will not result in adverse effects to an EJ community.

Construction Displacement and Relocation Impacts Remaining After Mitigation

Mitigation measures would apply uniformly to EJ and non-EJ communities. With implementation of mitigation, no adverse displacement or relocation impacts would occur during construction or operation in EJ or non-EJ communities.

Operational Displacement and Relocation Impacts Remaining After Mitigation

No additional acquisitions or easements will be required during operation of the LPA. All acquisitions and easements were identified in the preceding construction discussion. Therefore, no additional mitigation measures are necessary, and there will not be any adverse effects to EJ or non-EJ communities.

Visual Resources and Aesthetics

Construction Visual and Aesthetics Impacts

The introduction of heavy construction equipment, stockpiled construction-related materials, erosion devices, excavated materials, and the removal of trees in these primarily commercial and residential areas will conflict with existing visual character and will change visual quality. This will result in adverse visual effects during construction.

Construction Visual and Aesthetics Impacts to Specific Environmental Justice Communities

The visual effects would occur at all seven of the proposed station locations and two staging areas. This would adversely affect the six EJ communities during construction (Wilshire Center-Koreatown (Phase 1), Wilshire Park (Phase 1), Miracle Mile (Phase 1), Windsor Square (Phase 1), Westwood (Phase 3), and VA Hospital Campus (Phase 3)) The visual effects would adversely affect five non-EJ communities during construction. Additionally, the raised decking at the Wilshire/Fairfax and Wilshire/La Brea Stations (Phase 1) (approximately 2 feet above grade) will temporarily increase the visual impacts to adjacent properties at these stations. Both of these stations would adversely affect two EJ communities (Wilshire Park and Miracle Mile) and three non-EJ communities (Hancock Park, Mid-City West/Fairfax, and Carthay) during construction. These effects would occur during construction as part of Phase 1. The lighting of the construction staging areas at night will result in the creation of a new light source in the same six EJ and five non-EJ communities listed above. If not mitigated, this would be an adverse effect during construction to EJ and non-EJ communities. The following mitigation measures will be implemented during construction of the LPA to reduce visual effects:

- **CON-2—Timely Removal of Erosion-control Devices**
- **CON-3—Location of Construction Materials**
- **CON-4—Construction Lighting**
- **CON-5—Screening of Construction Staging Areas**

Construction Visual and Aesthetics Impacts Remaining After Mitigation

Mitigation measures would apply uniformly to EJ and non-EJ communities. With implementation of these mitigation measures, no adverse effects to visual resources will remain during construction to EJ or non-EJ communities.

Operational Visual Resources and Aesthetics Impacts

As discussed in Section 4.3, based on the urban design analysis conducted for the LPA, station entrance designs and ancillary facilities may contribute to enhancement of the visual quality of the neighborhoods where they will be located. Effects are related to the visibility of station components and tunnel ventilation structures. Combining landscaping and design elements in the LPA and the mitigation measures will ensure that there are no adverse effects to EJ and non-EJ communities. While there are no adverse effects, the mitigation measures, as listed below, are incorporated into the LPA and will ensure that impacts related to conflicts between scale and visual character, building removal and right-of-way acquisition, removal of mature vegetation, location of ancillary facilities, and introduction of new sources of light and glare are avoided or minimized:

- **VIS-1—Minimize Visual Clutter**
- **VIS-2—Replacement for Tree Removal**
- **VIS-3—Source Shielding in Exterior Lighting**
- **VIS-4—Integrate Station Designs with Area Redevelopment Plans**

Operational Visual Resources and Aesthetics Impacts to Specific Environmental Justice Communities

No adverse effects to visual resources would occur to EJ or non-EJ communities during operation.

Operational Visual Resources and Aesthetics Impacts Remaining After Mitigation
Mitigation measures would apply uniformly to EJ and non-EJ communities. With implementation of these mitigation measures, no adverse effects to visual resources will remain during operation to EJ or non-EJ communities.

Air Quality and Climate Change

Construction Air Quality and Climate Change Impacts
As discussed in Section 4.15, South Coast Air Quality Management District (SCAQMD) thresholds will be exceeded for all pollutants when the total project emissions over the duration of the construction period are accounted for and would result in adverse effects. This is due to the accelerated schedule that has been developed to minimize the disturbances that construction can bring to residents and businesses within the Study Area. In addition, nitrous oxides (NO_x) thresholds will be exceeded for all construction elements. NO_x levels will be elevated partially due to the proposed use of diesel locomotives to extract soil during the tunnel boring process.

Construction Air Quality and Climate Change Impacts to Specific Environmental Justice Communities
The adverse air quality effects described above would occur near stations and staging areas throughout the corridor and would be expected to occur in six EJ communities (Wilshire Center-Koreatown (Phase 1), Wilshire Park (Phase 1), Miracle Mile (Phase 1), Windsor Square (Phase 1), Westwood (Phase 3), and VA Hospital Campus (Phase 3)) and five non-EJ communities (Hancock Park (Phase 1), Mid-City West/Fairfax (Phase 1), Carthay (Phase 1), Beverly Hills (Phase 2), and Century City (Phase 2)).

Adverse air quality effects during construction would be substantial at three station locations (Wilshire/La Brea (Phase 1), Century City (Phase 2), and Westwood/VA Hospital (Phase 3)) where mined dirt from the TBM is exported for a period of four to six years. The export of soil would result in an increase in NOx emissions that would substantially exceed the SCAQMD thresholds. These substantial adverse effects would occur to three EJ communities (Wilshire Park, Miracle Mile, and VA Hospital Campus) and three non-EJ communities (Hancock Park, Mid-City West/Fairfax, and Century City).

The following mitigation measures will be implemented to minimize air quality emission impacts during construction:

- **CON-6—Meet Mine Safety (MSHA) Standards**
- **CON-7—Meet SCAQMD Standards**
- **CON-8—Monitoring and Recording of Air Quality at Worksites**
- **CON-9—No Idling of Heavy Equipment**
- **CON-10—Maintenance of Construction Equipment**
- **CON-11—Prohibit Tampering of Equipment**
- **CON-12—Use of Best Available Emissions Control Technologies**
- **CON-13—Placement of Construction Equipment**

The SCAQMD thresholds for particulate matter smaller than or equal to 10 microns in size (PM_{10}) for the LPA will be exceeded if not mitigated at locations with TBM entry and exit sites due to dirt handling. Demolition, grading, stockpiling, and hauling soil will contribute to particulate matter emissions. These impacts would be concentrated at

stations and staging areas throughout the corridor. The following mitigation measures will be implemented to reduce air quality particulate matter impacts during construction:

- **CON-14—Measures to Reduce the Predicted PM10 Levels**
- **CON-15—Reduce Street Debris**
- **CON-16—Dust Control during Transport**
- **CON-17—Fugitive Dust Control**
- **CON-18—Street Watering**
- **CON-19—Spillage Prevention for Non-earth-moving Equipment**
- **CON-20—Spillage Prevention for Earth-moving Equipment**
- **CON-21—Additional Controls to Reduce Emissions**

Construction Air Quality and Climate Change Impacts Remaining After Mitigation

Mitigation measures would apply uniformly to EJ and non-EJ communities. With implementation of the above mitigation measures, emissions will remain adverse during construction for six EJ communities and five non-EJ communities. Adverse NO_x air quality impacts during construction would be substantial in three EJ and three non-EJ communities (described above). There are no additional feasible mitigation measures to reduce air quality impacts to EJ communities during construction.

Operational Air Quality and Climate Change Impacts

As discussed in Section 4.4 and Section 4.5, the LPA will reduce VMT and corresponding exhaust emissions. The LPA will decrease greenhouse gas emissions in comparison with the No Build Alternative. A beneficial effect with respect to reducing regional criteria pollutant emissions and greenhouse gas emissions is anticipated. However, if the LPA is constructed under the Phased Construction Scenario, the air quality and climate change benefits of the full LPA to Westwood/VA Hospital will occur later than under the Concurrent Construction Scenario.

Operational Air Quality and Climage Change Impacts to Specific Environmental Justice Communities

No adverse air quality effects would occur to EJ or non-EJ communities during operation.

Operational Air Quality and Climage Change Impacts Remaining after Mitigation

The LPA would result in beneficial operational air quality effects to EJ and non-EJ communities without the implementation of mitigation measures.

Noise and Vibration

Construction Noise and Vibration Impacts

As described in Section 4.15, the greatest noise impacts will occur near stations, tunnel access portals, and construction laydown areas where construction activities at the surface are concentrated. With the exception of these areas, all other construction will occur completely below-grade. Tunneling plants and materials, including a slurry separation system, if used, will be located at these tunnel access shaft sites. The slurry plant, if used, will be located at the Wilshire/La Brea, Century City, and Westwood/VA Hospital Stations.

Construction Noise and Vibration Impacts to Specific Environmental Justice Communities
Adverse construction noise effects would occur to sensitive uses within 500 feet of EJ communities near the Wilshire/Western and Wilshire/Crenshaw staging areas and the Wilshire/La Brea, Wilshire/Fairfax, Westwood/UCLA, and Westwood/VA Hospital station areas. Adverse construction noise effects would occur to sensitive uses within 500 feet of non-EJ communities near the Wilshire/La Brea, Wilshire/Fairfax, Wilshire/La Cienega, Wilshire/Rodeo, and Century City Station areas. These sensitive uses are identified in the *Westside Subway Extension Analysis of Environmental Justice Memorandum* (Metro 2011r).

To minimize noise impacts, the following mitigation measures will be implemented:

- **CON-22—Hire or Retain the Services of an Acoustical Engineer**
- **CON-23—Prepare a Noise Control Plan**
- **CON-24—Comply with the Provisions of the Nighttime Noise Variance**
- **CON-25—Noise Monitoring**
- **CON-26—Use of Specific Construction Equipment at Night**
- **CON-27—Noise Barrier Walls for Nighttime Construction**
- **CON-28—Comply with Local Noise Ordinances**
- **CON-29—Signage**
- **CON-30—Use of Noise Control Devices**
- **CON-31—Use of Fixed Noise-producing Equipment for Compliance**
- **CON-32—Use of Mobile or Fixed Noise-producing Equipment**
- **CON-33—Use of Electrically Powered Equipment**
- **CON-34—Use of Temporary Noise Barriers and Sound-control Curtains**
- **CON-35—Distance from Noise-sensitive Receivers**
- **CON-36—Limited Use of Horns, Whistles, Alarms, and Bells**
- **CON-37—Requirements on Project Equipment**
- **CON-38—Limited Audibility of Project-related Public Addresses or Music**
- **CON-39—Use of Haul Routes with the Least Overall Noise Impact**
- **CON-40—Designated Parking Areas for Construction-related Traffic**
- **CON-41—Enclosures for Fixed Equipment**
- **TCON-2—Designated Haul Routes**

During construction of the LPA, impact pile driving at the station boxes will result in adverse vibration impacts. Perceptible vibration levels could be experienced within 200 feet of pile driving operations. Additionally, equipment used for underground construction, such as the TBM and mine trains, could generate vibration levels that could result in audible ground-borne noise levels in buildings at the surface, depending on the depth of the tunnel and soil conditions. The operation of mine trains could contribute to underground construction vibration since they will operate continuously during the excavation, mining, and finishing of the tunnel.

Adverse construction vibration effects would occur to sensitive uses within 500 feet of EJ communities near the Wilshire/Western and Wilshire/Crenshaw staging areas and the Wilshire/La Brea, Wilshire/Fairfax, Westwood/UCLA, and Westwood/VA Hospital station areas. Adverse construction vibration effects would occur to sensitive uses within 500 feet of non-EJ communities near the Wilshire/La Brea, Wilshire/Fairfax, Wilshire/

La Cienega, Wilshire/Rodeo, and Century City Station areas. These sensitive uses are identified in the *Westside Subway Extension Analysis of Environmental Justice Memorandum* (Metro 2011r).

The following mitigation measures will be implemented during construction to minimize vibration impacts:

- **CON-42—Phasing of Ground-impacting Operations**
- **CON-43—Alternatives to Impact Pile Driving**
- **CON-44—Alternative Demolition Methods**
- **CON-45—Restriction on Use of Vibratory Rollers and Packers**
- **CON-46—Metro Ground-borne Noise and Ground-borne Vibration Limits**

Construction Noise and Vibration Impacts Remaining After Mitigation

Mitigation measures would apply uniformly to EJ and non-EJ communities. With implementation of mitigation measures, noise will remain an adverse impact for EJ and non-EJ communities during construction, but vibration impacts will be mitigated through the measures listed above. Although these residual noise effects would be adverse during construction, they would occur in an urban environment along a high density commercial corridor and would not be substantial. There are no feasible mitigation measures to reduce the noise impacts to EJ and non-EJ communities during construction.

Operational Noise and Vibration Impacts

As discussed in Section 4.6, components of the LPA with the potential to generate noise that will be audible at the surface are the station ventilation system fans and the emergency ventilation system fans. These components are subject to periodic testing and will adhere to Metro design levels and will not exceed FTA Noise Impact Criteria. Noise from rail operations, including the interaction of wheels on tracks, motive power, signaling and warning systems, and the traction power substations will occur well below ground. No adverse effects would occur from operational noise.

Ground-borne vibration during operations is not predicted to exceed the FTA criteria at any of the vibration-sensitive receivers. There are three locations along the LPA where exceedance of the FTA ground-borne noise criteria will occur during operation and an adverse effect would occur prior to mitigation.

Operational Noise and Vibration Impacts Remaining after Mitigation

There are no sensitive receptors located in EJ communities that would experience adverse effects from operational noise. The vibration analyses conducted for the project indicates that no adverse ground-borne vibration impacts would occur. As no noise or ground-borne vibration effects would occur, no adverse operational noise or ground-borne vibration impacts to EJ or non-EJ communities are anticipated.

The three locations along the LPA where exceedance of the FTA ground-borne noise criteria will occur due to train operations along tangent track or through crossovers, if mitigation measures are not implemented, are the Wilshire Ebell Theatre, apartments on Wilshire Boulevard and S. Orange Drive, and the Saban Theatre. All three locations are located along Phase 1 if constructed under the Phased Construction Schedule. The Ebell Theatre and the apartments are both located in Wilshire Park, an EJ community.

The Saban Theatre is located in Beverly Hills, which is a non-EJ community. The following measures will be implemented to mitigate ground-borne noise impacts:

- **VIB-1—Use of High Compliance Direct Fixation Resilient Rail Fasteners**
- **VIB-2—Use of a Low Impact Crossover**

Operational Noise and Vibration Impacts Remaining after Mitigation

Mitigation measures would apply uniformly to EJ and non-EJ communities. With implementation of these mitigation measures, the operation of the LPA will not result in adverse operational noise or vibration impacts to EJ and non-EJ communities.

Economic Vitality and Employment Opportunities

Construction Economic Vitality and Employment Opportunities Impacts

Construction of the LPA will have temporary impacts on businesses, particularly those near or adjacent to construction sites, which is discussed in Section 4.15. Construction impacts will include traffic disruption; increased noise, vibration, and dust; modified vehicular and pedestrian traffic patterns; and utility disruptions. Construction effects would be the most severe in two areas. The first area would be at the three station locations (Wilshire/La Brea, Century City, and Westwood/VA Hospital) where mined dirt is exported from the TBM. The export of soil would occur for approximately four to six years at these locations, including the station excavation as well as the tunneling activities. The other area would be at station boxes located within Wilshire Boulevard right-of-way, where temporary lane closures and detours would occur for a period of four to six months while the decking is installed and removed. Construction activity would also occur at the existing Division 20 maintenance yard as upgrades are made to the facility to support the LPA. This area is located in an industrial area and construction activity would not require significant excavation or traffic closures and lane reductions.

Sidewalks will be temporarily obstructed for station and tunnel construction, thereby reducing business access. However, at least one access point will be maintained at all times. The selection of some station entrances will result in a temporary loss of parking during construction. Business impacts will also include reduced visibility of commercial signs and business locations. These construction impacts will result in adverse economic impacts to businesses.

Construction Economic Vitality and Employment Opportunities Impacts to Specific Environmental Justice Communities

In general, Wilshire Boulevard is a high density commercial corridor with a larger number of highway-oriented and regional businesses than local-serving businesses. A survey of local-serving businesses near station areas was conducted and is summarized in Table 4-14. The table shows a summary of the station areas, whether they are located in EJ and non-EJ communities and the ratio of local-serving businesses that will be affected during construction.

In total, there are 116 local-serving businesses within the construction impact zones of station areas (500 feet) that would be directly affected by construction activity and 496 that are within the station service areas (one-quarter mile). Businesses within the station service areas could experience minor disruptions in circulation access but the effects would not be adverse. Of the local-serving businesses within the construction impact zones, 36 (31 percent) are located in EJ communities. During construction, adverse economic effects would occur to 36 local-serving businesses in EJ communities and 80 local-serving businesses in non-EJ communities from disruption in access.

Table 4-14. Distribution of Local-serving Businesses near Station Areas

Phase	Station Area	Distribution of EJ and non-EJ Communities	Local-serving Businesses within Station Area Construction Impact Zone		Local-serving Businesses within One-quarter Mile of Station Areas	
			EJ	Non-EJ	EJ	Non-EJ
Phase 1	Wilshire/La Brea	2 EJ (Wilshire Park, Miracle Mile), 2 non-EJ (Hancock Park, Mid-City West/Fairfax)	22	12	42	35
	Wilshire/Fairfax	1 EJ (Miracle Mile), 2 non-EJ (Mid-City West/Fairfax, Carthay)	2	5	7	19
	Wilshire/La Cienega	1 non-EJ (Beverly Hills)	0	12	0	49
Phase 2	Wilshire/Rodeo	1 non-EJ (Beverly Hills)	0	32	0	190
	Century City Santa Monica	1 non-EJ (Century City)	0	11	0	33
	Century City Constellation	1 non-EJ (Century City)	0	8	0	29
Phase 3	Westwood/UCLA	1 EJ (Westwood)	12	0	88	0
	Westwood/VA Hospital	1 EJ(VA Hospital Campus)	0	0	4	0
Total		4 EJ Communities/5 non-EJ Communities	36	80	141	355

Source: TAHA 2011

Local-serving businesses include grocery stores, restaurants, schools, libraries, post offices, barbershops, bakeries, bookstores, newsstands, florists, dry cleaners, specialty retail, and banks.

The following mitigation measures, which include measures to maintain access to residences and businesses, will be implemented during construction of the LPA.

- **CON-1—Signage**
- **TCON-1—Traffic-control Plans**
- **TCON-2—Designated Haul Routes**
- **TCON-3—Emergency Vehicle Access**
- **TCON-4—Transportation Management Plan**
- **TCON-7—Parking Management**
- **TCON-8—Parking Monitoring and Community Outreach**
- **TCON-10—Pedestrian Routes and Access**
- **TCON-11—Bicycle Paths and Access**

Construction Economic Vitality and Employment Opportunities Impacts Remaining after Mitigation
Mitigation measures would apply uniformly to EJ and non-EJ communities. With implementation of these mitigation measures, there will be no adverse effect to EJ and non-EJ communities or neighborhoods during construction.

Operational Economic Vitality and Employment Opportunities Impacts
Most businesses along the proposed alignment would be expected to benefit from operation of the LPA as mobility would be increased throughout the Westside and greater Los Angeles area resulting in an increase in pedestrian activity around the stations and a beneficial increase in potential customers. Operational effects would be beneficial to EJ and non-EJ communities.

The new stations and increased mobility would result in regional connection to the rest of the transit network and would result in a potential beneficial effect by increasing local access and mobility.

These direct user benefits (primarily travel time savings) filter through to businesses within the corridor, both by improving worker access to jobs within the corridor and also by improving access to retail, entertainment, restaurant, and other non-work related establishments. As a subset of the improved access to labor markets, there is an equity benefit as transit dependent persons, who usually have lower incomes and may belong to minority groups, are a surprisingly high percentage of direct beneficiaries. Finally, enhanced real estate values and redevelopment opportunities around stations are likely to accrue within up to one-quarter to one-half-mile ranges around stations, particularly at those stations with the highest volumes of boardings and alightings.

Operational Economic Vitality and Employment Opportunities Impacts to Environmental Justice Communities
No adverse effects to economic vitality and employment would occur to EJ or non-EJ communities during operation.

Operational Economic Vitality and Employment Opportunities Impacts Remaining after Mitigation
The LPA would result in beneficial operational economic effects to EJ and non-EJ communities without the implementation of mitigation measures.

Summary and Proportionality of Impacts after Mitigation

The intent of the Executive Order 12898, as well as subsequent FTA guidance pertaining to environmental justice, is both to identify whether EJ communities are affected by a federal action and whether the federal action results in a disproportionate impact to minority or low-income communities when compared to other non-minority and non-low-income communities within the overall project area. This EJ analysis follows a five-step process (Benefits and Burdens Analysis) to determine whether disproportionately high and adverse human health or environmental impacts exist.

Step One—Identify Adverse Effects to EJ Communities

Step one of the Benefits and Burdens analysis requires a determination of what specific adverse effects are occurring to EJ communities and whether those adverse effects are high and substantial. Impacts to EJ communities that are determined to be high and substantial are then carried through the subsequent steps of the Benefits and Burdens analysis.

Table 4-15 summarizes the impacts from the Project by station area/staging area. The following environmental topic areas would result in adverse impacts to EJ communities:

- Construction traffic and circulation
- Construction related air quality
- Construction related noise and vibration

As shown in Table 4-15, the following six EJ communities have significant impacts after implementation of mitigation:

- Miracle Mile
- Westwood
- Wilshire Center-Koreatown
- Wilshire Park
- Windsor Square
- VA Hospital Campus

As described above the adverse effects would be substantial for construction related traffic and air quality. Although the construction noise effects would be adverse, they would be temporary, occur in an urban environment, and would not be considered substantial. The substantial adverse traffic effects would occur at major intersections from temporary street closures, lane reductions, split phases of signals and loss of turn lanes. Due to the four to six months of lane closures and detours that would be required to install piles and decking in the street, these effects would occur at the Wilshire/La Brea, Wilshire/Fairfax, Wilshire/La Cienega, Wilshire/Rodeo, Century City (both options), and the on-street Westwood/UCLA Stations. The substantial adverse construction air quality effects would occur from NOx emissions that would exceed the SCAQMD thresholds by a magnitude of ten. These effects would occur at three station locations (Wilshire/La Brea (Phase 1), Century City (Phase 2), and Westwood/VA Hospital (Phase 3)) where mined dirt from the TBM is exported for a period of four to six years.

There will be three EJ communities (Wilshire Park, Miracle Mile, and Westwood (not substantial for off-street option)) and five non-EJ communities (Hancock Park, Mid-City West/Fairfax, Carthay, Beverly Hills, and Century City) affected by substantial construction traffic adverse effects. Three EJ communities (Wilshire Park, Miracle Mile, and VA Hospital Campus) and three non-EJ communities (Hancock Park, Mid-City West/Fairfax, and Century City) will be affected by substantial construction air quality adverse effects.

Table 4-15. Summary of Impacts to EJ Communities after Mitigation

Station/Staging Area	Communities Present (EJ/non-EJ)	Adverse Effects						Substantial Adverse Effects
		Traffic, Circulation, Parking	Displacement and Relocation	Visual Resources	Air Quality	Noise and Vibration	Economic and Fiscal	
Wilshire/Western Staging Area (Phase 1)								
Construction	Wilshire Center-Koreatown (EJ)	●	○	○	●	●	○	No
Operation		○	○	○	○	○	○	No
Wilshire/Crenshaw Staging Area (Phase 1)								
Construction	Wilshire Park (EJ) Windsor Square (EJ)	●	○	○	●	●	○	No
Operation		○	○	○	○	○	○	No
Wilshire/La Brea (Phase 1)								
Construction	Miracle Mile (EJ) Wilshire Park (EJ) Mid-City West/Fairfax (non-EJ)	●	○	○	●	●	○	Traffic; Air Quality
Operation		○	○	○	○	○	○	No
Wilshire/Fairfax (Phase 1)								
Construction	Miracle Mile(EJ) Mid-City West/Fairfax (non-EJ) Carthay (non-EJ)	●	○	○	●	●	○	Traffic
Operation		○	○	○	○	○	○	No
Wilshire/La Cienega (Phase 1)								
Construction	Beverly Hills (non-EJ)	●	○	○	●	●	○	Traffic
Operation		○	○	○	○	○	○	No
Wilshire/Rodeo (Phase 2)								
Construction	Beverly Hills (non-EJ)	●	○	○	●	●	○	Traffic
Operation		●	○	○	○	○	○	No
Century City Santa Monica (Phase 2)								
Construction	Century City (non-EJ)	●	○	○	●	●	○	Traffic; Air Quality
Operation		○	○	○	○	○	○	No
Century City Constellation (Phase 2)								
Construction	Century City (non-EJ)	●	○	○	●	●	○	Traffic; Air Quality
Operation		○	○	○	○	○	○	No
Westwood/UCLA (Phase 3)								
Construction	Westwood (EJ)	●	○	○	●	●	○	Traffic (on-street option)
Operation		○	○	○	○	○	○	No
Westwood/VA Hospital (Phase 3)								
Construction	VA Hospital Campus (EJ)	●	○	○	●	●	○	Air Quality
Operation		○	○	○	○	○	○	No

● Adverse Impact ○ No Adverse Impact

Step Two—Assess Whether Effects on EJ Communities Exceed Effects to non-EJ Communities

Step two of the Benefits and Burdens analysis requires an assessment of whether the effects on EJ communities exceed those borne by non-EJ communities.

Based on the geographical distribution of communities near the station areas and the effects to specific EJ communities described above, these substantial adverse construction effects would not be concentrated in any of the above communities. Based on the geographic distribution of EJ and non-EJ communities identified above, the substantial adverse effects during construction related to traffic and air quality would be borne by non-EJ communities.

As described above, the adverse effects that were determined not to be substantial (construction noise) for EJ communities would not exceed the effects borne by non-EJ communities.

These impacts would occur within all seven station areas along the project corridor. There were 12 sensitive receptors identified within EJ communities and 19 sensitive receptors identified in non-EJ communities.[1] There is no aspect of the project design or the presumed construction scenarios that suggest that there would be meaningful differences in the intensity and magnitude of these construction noise impacts between station areas. Thus, no disproportionate effects from construction noise are anticipated to EJ communities.

Step Three—Assess Whether Cumulative or Indirect Effects Adversely Affect an EJ Community

Step three of the Benefits and Burdens analysis requires an assessment of whether cumulative or indirect effects would adversely affect an EJ community.

This section discusses the comparative cumulative and indirect effects to EJ and non-EJ communities affected by the LPA. As discussed above, eleven communities are affected by the LPA. Six of these are EJ communities and five are non-EJ communities. During the construction process, station areas and staging areas where excavation would take place are expected to be the focal point for construction-related proximity impacts such as traffic and parking disruption, visual, air quality and noise/vibration effects. These effects would occur in a combined fashion in each of the seven LPA station areas and two staging areas. The two staging areas are located within three EJ communities. Because dirt would not be exported and cut-and-cover station excavation would not occur in these staging areas, the cumulative effects during the duration of construction would be substantially less than at the seven station areas. Two stations are located entirely within EJ communities and three stations are located entirely in non-EJ communities. The remaining two stations are located in areas that have both EJ and non-EJ communities.

[1]Residences were counted as one sensitive use per station area because of their relatively equal distribution. There were no residences within the Westwood/UCLA and Westwood/VA Hospital station area construction impact zone, which are both located in EJ communities.

As described above, construction effects would be greatest where dirt is exported from the TBM (Wilshire/La Brea, Century City, and Westwood/VA Hospital Stations) and where station cut-and-cover construction occurs in the street right of way (Wilshire/La Brea, Wilshire/Fairfax, Wilshire/La Cienega, Wilshire/Rodeo, Century City, and Westwood/UCLA On-Street Stations). Based on this information, the magnitude or intensity of the combined cumulative and indirect proximity effects would be greater at two stations, the Wilshire/La Brea and Century City stations. The Wilshire/La Brea Station is surrounded by four communities, two non-EJ communities to the north (Mid-City West/Fairfax and Hancock Park) which each occupy 25 percent of the construction impact zone, and two EJ communities to the south (Wilshire Park and Miracle Mile) which each occupy 25 percent of the construction impact zone. Because equal areas of EJ and non-EJ communities are located within the construction impact zone for the Wilshire/La Brea Station, a higher magnitude of impacts at this station location would not be borne by an EJ community. The Century City station is located within a non-EJ community (Century City) and would subject that non-EJ community to the higher magnitude of impacts that would occur at that station location. Based on the distribution of communities within the Century City and Wilshire/La Brea station areas, the combined cumulative and indirect intensity and magnitude of construction impacts would be borne more by the non-EJ communities than the EJ communities.

For the remaining five stations and alignment, the broad distribution of proximity effects throughout the LPA route strongly suggests that the combined cumulative and indirect intensity and magnitude of construction and operational effects in EJ communities compared to non-EJ communities would be negligible.

Step Four—Assess Whether Mitigation and Enhancement Measures will be Taken

Step four of the Benefits and Burdens analysis requires an assessment of whether mitigation and enhancement measures will be taken.

Mitigation measures to reduce adverse effects were identified above. These mitigation measures would apply uniformly to EJ and non-EJ communities. Although the proposed mitigation measures would reduce the effects of the LPA and the effects would be temporary, the LPA would result in substantial adverse effects to air quality and traffic during construction after implementation of mitigation. There are no further feasible mitigation measures to reduce the substantial adverse effects of the LPA. However, within the seven major station construction areas where substantial adverse effects would occur, two areas would result in impacts only in EJ communities, three areas would result in impacts only in non-EJ communities, and two areas would result in impacts to both EJ and non-EJ communities.

Step Five—Assess Whether There Are Off-setting Benefits to EJ Communities

Step five of the Benefits and Burdens analysis requires an assessment of whether there are off-setting benefits to EJ communities.

Effects of the LPA will result in benefits to the community as a whole and transit users. The LPA would result in a significant reduction in vehicle miles traveled thereby reducing pollutant emissions and benefiting air quality. The addition of a heavy rail transit system would also provide the infrastructure to accommodate transit oriented

development, which can improve quality of life by providing housing and a mix of uses within walking distance to public transportation and providing additional benefits to the environment, such as an increased sense of identity for communities. The benefits to transit users include increased transit options, improved mobility, proximity to transit links, and access to employment and activity centers. Traffic and transit performance will improve within the Study Area, and these benefits can be realized by all populations. There are seven stations proposed for the LPA, with four located in, or adjacent to EJ communities. Therefore, people living in EJ communities will have the same opportunity to access the transit and mobility improvements.

The LPA, including all station, alignment, and station entrance options still under consideration, will benefit users with improved travel times and more linked daily trips, as discussed in Section 3.4. The LPA will result in peak-hour transit travel time savings of approximately 32 minutes eastbound between Wilshire/Western and Westwood/ VA Hospital. The increased connectivity will also reduce the number of transfers, which will have a beneficial economic impact to elderly and low-income communities. The LPA will also allow easier access to major employment and activity centers.

However, if the LPA is constructed under the Phased Construction Scenario, the benefits of the full LPA to Westwood/VA Hospital will occur later than under the Concurrent Construction Scenario. Since Phase 1 will terminate at the Wilshire/ La Cienega Station, transit benefits to points west of this station will not be as significant as under the full LPA to Westwood/VA Hospital. Likewise, since Phase 2 will terminate at the Century City Station, transit benefits to points west of this station will not be as significant as under the full LPA to Westwood/VA Hospital. The delayed transit user benefits will be the same in areas with EJ populations and non-EJ populations along the LPA.

Although users within the corridor would benefit from the proposed project, it is also important to determine if impacts would occur to users outside of the project corridor who would typically access the area. The vast majority of transit users across Los Angeles County would experience improved travel times which would be a benefit. No adverse impacts are anticipated for minorities or low-income communities in the periphery of the Study Area.

Environmental Justice Determination

No minority or low-income communities were identified to have disproportionately high and adverse operational or construction effects in either the analysis of the LPA, including all station, alignment, and station entrance options, under both the Concurrent Construction Scenario and the Phased Construction Scenario, or as a finding of public outreach activities.

Based on the benefits and burdens analysis completed above, no disproportionately high and adverse effects would occur to EJ communities as a result of the LPA. Construction activities will occur at stations and staging areas throughout the Study Area and will affect both EJ and non-EJ communities alike. Transit service is meant to serve where the demand is greatest, and these areas are often within neighborhoods that have EJ populations and communities of concern. Although populations adjacent to the

alignment will be affected the most by operational and construction-related impacts, these groups include EJ and non-EJ populations, and they will also receive improved transit access.

The increased connectivity would also reduce the number of transfers which would have a beneficial economic impact to elderly and low-income communities. The project would also allow easier access to major employment centers.

As a result, no additional special measures are required by the USDOT Order on Environmental Justice (USDOT 1997).

CEQA Determination

Neither the CEQA statute nor its implementing guidelines refer specifically to the topic of environmental justice. CEQA is primarily focused on identifying and disclosing potential significant impacts to the physical environment, and socioeconomic effects are of secondary importance. CEQA does, however, place major emphasis on the disclosure of environmental changes to all potentially affected communities regardless of socio-economic status. As an element of the physical environment, CEQA does recognize in its guidelines that the displacement of a substantial number of affordable housing units, necessitating construction of replacements, would constitute a significant environmental impact.

No Build Alternative

The No Build Alternative includes all existing highway and transit services and facilities and the committed highway and transit projects in the 2009 Metro LRTP and the 2008 SCAG RTP.

The No Build Alternative would not displace affordable housing. No significant impacts are anticipated under CEQA.

Locally Preferred Alternative—Westwood/VA Hospital Extension

The LPA would not displace affordable housing. No significant impacts are anticipated under CEQA.

4.3 Visual Quality

This section has been updated from the Draft EIS/EIR to focus on the analysis of the effects of the LPA on visual quality. The analysis results have not changed from the Draft EIS/EIR. The LPA could either be constructed as a single phase under the America Fast Forward (30/10) Scenario (Concurrent Construction) or as three consecutive phases under the Metro Long Range Transportation Plan Scenario (Phased Construction). The opening of the LPA as a single phase or in three sequential phases does not substantially change the visual quality analysis that was presented in the Draft EIS/EIR. The analysis of all the Build and TSM Alternatives in the Draft EIS/EIR is incorporated into this document by reference. Information in this section is summarized from the *Westside Subway Extension Visual and Aesthetic Impacts Technical Report* (Metro 2010e) prepared in support of the Draft EIS/EIR and the *Addendum to the Westside Subway Extension Visual and Aesthetic Impacts Technical Report* (Metro 2011e) prepared in support of the LPA.

Physical changes to a man-made environment (e.g., buildings and streets) or natural environment (e.g., mountains and trees) can change the quality or character of views to these environments. This section summarizes federal, state, and local regulations that guide the consideration, preservation, and protection of scenic resources, views, and visual quality and character. This section also describes the existing visual environment (what can be seen within the Study Area), the physical changes that will occur to that environment as a result of implementing the LPA, and the resulting change to visual quality or aesthetic character (sense of beauty). Based on consideration of the regulatory setting and affected environment within the Study Area, an assessment of impacts, both beneficial and negative, and recommended strategies for avoiding, minimizing, or mitigating negative impacts was conducted. The overall findings of the visual assessment are that the station designs will complement the areas in which they are located and not alter their visual quality.

4.3.1 Regulatory Setting

The Project is required to consider impacts to the existing visual environment. This requirement is based on federal, state, and local rules and policies. These rules and policies focus on preserving visual quality, minimizing conflicts, improving aesthetic character, and mitigating adverse effects. The federal, state, and local regulations and policies that affect this Project are listed below, with a brief explanation. The regulatory settings for the LPA are the same whether the LPA is constructed under the Concurrent Construction Scenario or the Phased Construction Scenario.

Federal

- 42 USC 4321-4347, *National Environmental Policy Act of 1969* (NEPA) (USC 1969)—the federal government is to "use all practicable means" to ensure a pleasant visual environment
- 23 CFR 771, *Environmental Impacts and Related Procedures* (CFR 1987)—Urban mass transit projects must consider adverse impacts to aesthetic values
- FTA Circular 9400.1A, *Design and Art in Transit Projects* (FTA 1995)—Encourages using design and art in transit projects
- Public Law 109-59, *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), Sections 6002–6009 (PL 2005)—Emphasizes consideration of context-sensitive solutions and using visualization techniques to improve public understanding
- 23 CFR 774 et seq., *Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites,* Section 4(f) (CFR 2008)—Focuses on preserving aesthetic integrity for parks, recreational facilities, wildlife and waterfowl refuges, and historic sites
- 16 USC 470, *National Historic Preservation Act of 1966*, Section 106 (USC 1966)—Furthers preserving historic resources to include their setting (visual environment)

State

13 Public Resources Code (PRC) 21000-21177, *California Environmental Quality Act* (CEQA) (PRC 2009), and 14 CCR 15000-15387, with appendices, *CEQA Guidelines* (CCR 2010)—Requires consideration of project effects on the quality of the environment to include history, context, and area sensitivity.

Local

The following planning policies of the County of Los Angeles and the Cities of Los Angeles and Beverly Hills apply to the LPA:

- *City of Beverly Hills General Plan* (BH 2010b)
- *Century City North Specific Plan* (LA 1981)
- *Greening of Century City Plan* (LA 2007)
- *Park Mile Specific Plan* (LA 1987)
- *West Los Angeles Community Plan* (LA 1999b)
- *Wilshire Community Plan* (LA 2001a)
- *West Wilshire Boulevard Plan* (LA 2001c)
- *Miracle Mile Community Design Overlay* (LA 2005)
- *Westwood Community Plan* (LA 1999a)
- *Westwood Village Specific Plan* (LA 2004)

Policies contained in local jurisdictional planning documents that apply to the visual effects of the LPA are included in Table 3-1 of the *Westside Subway Extension Visual and Aesthetic Impacts Technical Report* (Metro 2010e). These planning documents focus primarily on the maintenance of visual diversity; definition of urban form and character; protection and management of scenic, historic, and cultural resources; enhancement of existing visual character and quality; and control over development.

4.3.2 Affected Environment/Existing Conditions

This section describes the Study Area's existing visual environment, its general character, key features, and overall visual quality. The affected environment and existing conditions for the LPA are similar whether the LPA is constructed under the Concurrent Construction Scenario or the Phased Construction Scenario. If the LPA is constructed under the Phased Construction Scenario, it is possible that some changes to the existing environment could occur prior to construction of Phase 2 and Phase 3 since the construction is extended over a longer period of time. However, the general visual character of each station is expected to be the same under either the Concurrent Construction Scenario or the Phased Construction Scenario.

Because the LPA is primarily a subway where trains will travel underground, the visual impact will be limited to station areas and the maintenance facility site. The visual Study Areas, or viewsheds, are the areas that have a view of the stations. The viewshed includes the area within one-half mile of a given viewpoint unless other elements, such as terrain, vegetation, or buildings, are blocking views.

Overall, the Study Area's visual setting varies and includes a combination of residential, commercial, transportation and utilities, industrial, and public/institutional buildings of varied heights and scale. Residences, both single-family and multi-story apartments and condominiums, are the primary land use. Commercial buildings are concentrated along major roadways, such as Wilshire and Santa Monica Boulevards and La Brea, Fairfax, and La Cienega Avenues.

The existing visual quality of each station area was categorized as low, moderate, or high as follows:

- **Low Visual Quality**—Areas that have low visual quality exhibit features that seem visually out of place, lack visual consistency, do not have well organized parts, and contain eyesores.
- **Moderate Visual Quality**—These areas are generally pleasant appearing but may lack any distinct or memorable features and harmony of organization, or may be common and ordinary landscapes that lack strong and consistent design features.
- **High Visual Quality**—These areas tend to be memorable, distinctive, unique (in a positive way), intact natural or park-like areas, or urban areas with strong and consistent design features.

Table 4-16 summarizes the visual character and category of each station. There is a photo for each station area included, and the location or feature where the photo was taken appears next to the photo. Table 4-16 also indicates the phase in which each station will be constructed under the Phased Construction Scenario.

4.3.3 Environmental Impacts/Environmental Consequences

This visual impact assessment focuses on areas where the LPA will affect the visual environment under both the Concurrent Construction Scenario and the Phased Construction Scenario. Analyzing visual impacts includes evaluating the following effects:

- Conflicts with or complements the existing visual character
- Changes the visual quality
- Has an effect on viewers (considers viewer sensitivity)
- Intrudes on or blocks sensitive views (emphasizes views protected by local jurisdictions)
- Creates shadows
- Creates new light or glare sources

The degree of visual impact was determined by assessing the visible changes that would be introduced by the Project's alternatives. The assessment focuses on areas where changes in the visual environment would be greatest, such as at station entrances and the maintenance facility, as well as areas with higher viewer sensitivity or where sensitive views would be affected. Consideration has been give for removal of existing buildings as well as effects to open plazas adjacent to buildings. During operation of the system where buildings are removed and an open plaza is created, such a plaza would be maintained by Metro, as shown in Figure 4-24 and Figure 4-25, until additional uses are developed. A high impact is defined as a reduction of the existing visual quality by one or more of the three categories (high, moderate, or low). For example, if the visual quality category of an area is reduced from high to moderate or changes from moderate to low, the impact would be considered a significant impact under CEQA.

Table 4-16. Stations and Maintenance Facility Visual Character, Category, and Impacts

Phase	Station/Facility (Alternatives)	General Visual Character	Category	Visual Impacts
Phase 1	Wilshire/La Brea	Located in the Miracle Mile District of Los Angeles, a designated scenic highway. Variety of retail and mixed-uses; varying building heights; large surface parking lots; prominent and notable visual resources include vegetation, landscaping, buildings, and distant vistas. Notable Art Deco buildings include the E. Clem Wilson (or "Samsung"), which has a large iconic vibrant neon sign atop; the Dominguez-Wilshire; the historical El Rey Theater; and the Wilshire Tower. The Prudential Insurance building is an example of Modern architecture.  *Looking north on S. La Brea Avenue to Santa Monica Mountains*	Moderate Generally pleasant with notable Art Deco buildings but lacking strong consistent architectural and urban design features.	There are two station entrance options: at the northwest corner of the Wilshire Boulevard and S. La Brea Avenue intersection on Metro-owned property (Figure 4-22) or at the southwest corner. Design of the entrance plaza area is expected to complement the Art Deco aesthetic of this commercial and residential neighborhood. The station will also include a one-story structure for the emergency generator along the east side of S. Detroit Street. The generator structure will fit within the visual context of the other station components and nearby three- to six-story buildings. No scenic vistas will be altered. Station entrance-defining lighting and signage impacts will be minimal. The station entrance may contribute to improving visual quality along the Miracle Mile Corridor. No adverse impacts to the scenic highway will occur. Several existing buildings will be removed to accommodate construction staging areas. However, removal of these buildings will not adversely affect the area's visual character or quality.

Table 4-16. Stations and Maintenance Facility Visual Character, Category, and Impacts (continued)

Phase	Station/Facility (Alternatives)	General Visual Character	Category	Visual Impacts
Phase 1	Wilshire/Fairfax	Home to several regional visual resources: the Los Angeles County Museum of Art (LACMA), the La Brea Tar Pits, Hancock Park, and the Petersen Automotive Museum. Buildings are multi-story (1 to 15 stories). Tall palm trees and other street trees are planted in center medians along Wilshire Boulevard. Hancock Park is landscaped and includes several mature trees. Several buildings with noteworthy architectural styles, including the Petersen Automotive Museum, the LACMA building, May Company/ LACMA West building, and Johnie's Coffee Shop. Johnie's is considered to be a landmark structure, a well known example of Googie style architecture. May Company/LACMA West building and Johnie's Coffee Shop are eligible for the National Register of Historic Places and California Register of Historic Resources.  *Johnie's Coffee Shop and May Company*	Moderate Generally pleasant appearance but lacking strong consistent architectural and urban design features.	There are three station entrance options: immediately west of Johnie's Coffee Shop (Figure 4-23), at the northeast corner of Wilshire Boulevard and S. Fairfax Avenue in the May Company/LACMA West building or at the southeast corner of Wilshire Boulevard and S. Orange Grove Avenue. The aboveground station components are expected to complement the regional visual resources along Wilshire Boulevard, such as the LACMA West building and Petersen Automotive museum buildings, within the Miracle Mile Corridor. With the exception of the May Company/LACMA West building, where the entrance would be integrated into the existing structure, the station entrance would be a new visual feature and the station entrances may contribute to improving visual quality along the Miracle Mile Corridor. Station entrance-defining lighting and signage impacts will be minimal. The station will not alter scenic vistas. No adverse impacts to scenic highways will occur. Several existing buildings will be removed to accommodate construction staging areas. However, removal of these buildings is not expected to adversely affect the area's visual character or quality.

Table 4-16. Stations and Maintenance Facility Visual Character, Category, and Impacts (continued)

Phase	Station/Facility (Alternatives)	General Visual Character	Category	Visual Impacts
Phase 1	Wilshire/ La Cienega	S. La Cienega Boulevard includes "Restaurant Row." The Flynt Building is a prominent visual resource with its unique oval shape and a plaza with the John Wayne statue and a view of the historic Art Deco Fox Wilshire Theater, now the Saban Theatre. The historical Clock Market, now the Beverly Hills Porsche-Audi Dealership, is a unique example of the Spanish Revival architectural style. The building is also an example of the car-oriented development that was built along Wilshire Boulevard in the 1920s. The Wilshire Theater is an Art Deco monument. Newer commercial architecture is more eclectic with a mix of Modern, International, Post-Modern, and non-descript building styles.  *Flynt Building Plaza, John Wayne statue, and Fox Wilshire Theater/Saban Theatre*	High Because of its distinctive and unique archi-tectural features.	The station entrance will change the setting and visual character at the Wilshire Boulevard and S. La Cienega Boulevard intersection (Figure 4-25). However, this change will not be significant and the station entrance may contribute to improving visual quality along this section of the Wilshire Boulevard corridor. Station entrance-defining lighting and signage impacts will be minimal. The station will not alter scenic vistas. Several existing buildings will be removed to accommodate construction staging areas. However, removal of these buildings is not expected to adversely affect the area's visual character or quality.

Table 4-16. Stations and Maintenance Facility Visual Character, Category, and Impacts (continued)

Phase	Station/Facility (Alternatives)	General Visual Character	Category	Visual Impacts
Phase 2	Wilshire/Rodeo	High-end retail, hotel, commercial, gallery, and mixed-uses; densely developed with limited open-space areas; unique and varied architecture; memorable views of the Santa Monica Mountains and slopes of Beverly Hills. The predominant architectural style is eclectic with Modern, Neo-Traditional, International, Art Deco, and less distinguishable commercial, retail, and mixed-use buildings. Prominent visual resources include the Beverly Wilshire Hotel; nearby neighborhood includes a variety of residential architectural styles, including bungalow, Spanish Eclectic, courtyard, Tudor, and Colonial styles, among others. Prominent buildings that contribute to the visual character include the California Bank Building, an Art Deco wedding-cake-style building; Security Pacific Plaza with its modern architecture; the Usonian Anderton Court Shops and its steeple, designed by Frank Lloyd Wright; the Saks Fifth Avenue building's Hollywood Regency Modern architecture; and the Home Federal Savings Building, which showcases Modern architecture with its white parabolic arches and window boxes.  *Looking west on Wilshire Boulevard*	High Strong and consistent architectural and urban design features.	There are three station entrance options: the southwest corner of S. Beverly Drive and Wilshire Boulevard at the current site of the Ace Gallery (Figure 4-26), the Bank of America building at the northwest corner of Wilshire Boulevard and N. Beverly Drive, and the Union Bank building on the south side of Wilshire Boulevard. The Ace Gallery site will also be the location of a construction laydown area. The design of the station entrance will complement the eclectic, Modern, Neo-Traditional, International, Art Deco, and less distinguishable buildings that contribute to the area's visual character. Station entrance-defining lighting and signage impacts will be minimal. Several existing buildings will be removed to accommodate construction staging areas, including the Ace Gallery. However, removal of these buildings is not expected to adversely affect the area's visual character or quality. The station will not alter scenic vistas.

Table 4-16. Stations and Maintenance Facility Visual Character, Category, and Impacts (continued)

Phase	Station/Facility (Alternatives)	General Visual Character	Category	Visual Impacts
Phase 2	Century City	Dense auto-oriented urban center with tall buildings and wide boulevards; multi-level plazas with pedestrian overpasses; the Century City high-rises are a visual landmark; prominent buildings contribute to the visual character; views are limited, but include distant mountains and the Hollywood sign; mature trees, corporate plazas, and banners are prominent visual elements. Prominent buildings that contribute to the visual character include the curved Century Plaza Hotel and the Century Plaza Towers.  *Looking south on Avenue of the Stars*	Moderate Generally pleasant appearance, but lacking strong consistent architectural and urban design features.	There are two station location options: on Santa Monica Boulevard and on Constellation Boulevard. The Century City Santa Monica Station entrance would be incorporated into the sidewalk along Santa Monica Boulevard. The Century City Constellation Station entrance would be at the northeast corner of Constellation Boulevard and Avenue of the Stars or incorporated into the landscaped area of the Hyatt Regency Hotel plaza. The design for the above-ground station components at either location will complement the prominent buildings that contribute to that area's visual character. Station entrance-defining lighting and signage impacts will be minimal. Several existing buildings will be removed to accommodate construction staging areas for either station location. However, removal of these buildings is not expected to adversely affect the area's visual character or quality. The station will not alter scenic vistas.

Table 4-16. Stations and Maintenance Facility Visual Character, Category, and Impacts (continued)

Phase	Station/Facility (Alternatives)	General Visual Character	Category	Visual Impacts
Phase 3	Westwood/UCLA	Dense development contrasts with the open expanse of Veterans Cemetery and pedestrian-scale Westwood Village; prominent and defining features are views of the Santa Monica Mountains, palm trees, overhead power lines, street lighting, wall-style and stand-alone billboards, and the I-405 Freeway. The predominant Westwood Village architectural style is Mediterranean, with tile roofs, decorative Spanish tile, courtyards, paseos, and patios. Notable buildings include the Janss Investment Company with its prominent dome and portico; the Fox Theater and Ralph's Grocery Store with its red-tiled Spanish Revival roof; and the Hammer Museum with its large gray and white stripes. The National Cemetery, Westwood Park, and Westwood Memorial Park Cemetery provide open expanses.  *Hammer Museum at Westwood Village entrance*	High Distinctive and unique architectural features.	There are two station entrance options: Westwood/UCLA Off-Street and Westwood/UCLA On-Street. Given the high ridership projections for the Westwood/UCLA Station, the station option selected will have two entrances. Design of the above-station entrance options will complement the surrounding mid- to high-rise residential towers, hotels, and office buildings. Station entrance-defining lighting and signage impacts will be minimal. The entrance at Wilshire Boulevard and Gayley Avenue for the Westwood/UCLA Off-Street Station would be visually prominent. The entrance at the Wilshire Boulevard and Westwood Boulevard intersection for the Westwood/UCLA On-Street Station would be retrofitted into the existing structure and, therefore, would not be as prominent as the other station entrance options being considered. One building will be removed to accommodate construction staging areas for either station location. However, removal of these buildings is not expected to adversely affect the area's visual character or quality. The station will not alter scenic vistas.

Table 4-16. Stations and Maintenance Facility Visual Character, Category, and Impacts (continued)

Phase	Station/Facility (Alternatives)	General Visual Character	Category	Visual Impacts
Phase 3	Westwood/ VA Hospital	Large, open landscaped areas surround the VA Hospital; prominent features include I-405, overhead utilities, large billboards, and wall-type signage; views include Santa Monica Mountains, Hollywood Hills, and tall buildings in Century City.  *Underpass on Wilshire Boulevard*	Moderate Generally pleasant appearance, but lacking strong consistent architectural and urban design features.	There are two station entrance options: Westwood/VA Hospital South Station and Westwood/VA Hospital North Station. The Westwood/VA Hospital South Station option entrance would be in the parking lot at the southeast corner of Wilshire Boulevard and Bonsall Avenue. The Westwood/ VA Hospital South Station would also include a one-story structure for the emergency generator east of the entrance and a three-story parking structure on the site of an existing parking lot east of the VA Hospital. The generator structure would fit within the visual context of the other station components and would not alter any scenic vistas. The parking structure would block some territorial views to the east from the first- through third-story windows of the VA Hospital. The entrance for the Westwood/VA Hospital North Station would be along the north side of Wilshire Boulevard just west of Bonsall Avenue. The North Station would also include a one-story structure for the emergency generator east of the entrance, near the I-405 ramps. The generator structure would fit within the visual context of the other station components and would not alter any scenic vistas. Designs of the above-ground station components for both station options will complement the surroundings. None of the components for either option will conflict with the area's character, which includes large parking lots and other buildings on the VA property. Station entrance-defining lighting and signage impacts will be minimal.

Table 4-16. Stations and Maintenance Facility Visual Character, Category, and Impacts (continued)

Phase	Station/Facility (Alternatives)	General Visual Character	Category	Visual Impacts
Phase 1	Division 20 Maintenance and Storage Facility, South Expansion Yard	Industrial area with maintenance buildings, several rows of rail tracks, paving, and no landscaped areas; prominent visual features include two bridges over the LA River built in 1929 and 1930, which are good examples of the City Beautiful style; no notable views from the site; however, the site is visible from an architectural school.  *Looking north toward the 4th Street Bridge from Santa Fe Avenue*	Low Lacks visual order and harmony, plus land uses include heavy industry; contains overhead power lines and flood lights on tall poles.	Visible changes would include additional tracks and modified buildings. Lighting levels in the yard may increase with these improvements. However, the changes would not noticeably change views or the visual character and quality from what currently exists on the site. Significant visual impacts to surrounding viewers would not occur because the sites are surrounded by relatively wide streets/highways and paved areas that act as visual buffers. In addition, surrounding land uses are industrial, and no important visual resources are in proximity to the existing facility or the expansion area. Although the 4th and 6th Street Bridges over the LA River are prominent visual features that frame each boundary of the site, their visual setting would not be adversely affected.

Figure 4-22. Wilshire/La Brea Station Entrance, Replacing the Metro Service Center and Blockbuster Video (Existing View and Visual Simulation)

Figure 4-23. Wilshire/Fairfax Station—Entrance West of Johnie's Coffee Shop (Existing View and Visual Simulation)

Figure 4-24. Wilshire/Fairfax Station—Entrance at LACMA (Existing View and Visual Simulation)

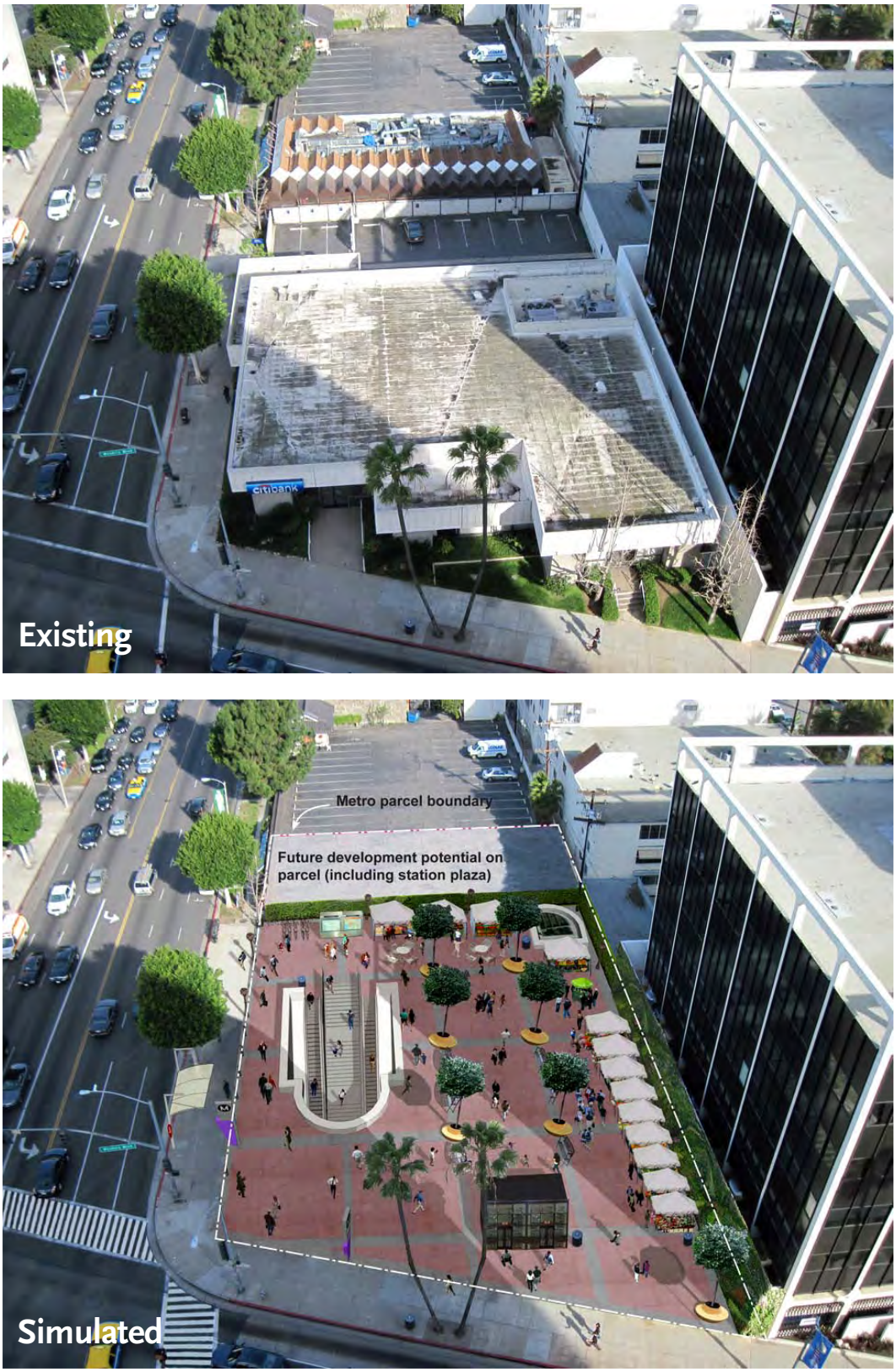


Figure 4-25. Wilshire/La Cienega Station (Existing View and Visual Simulation)

Figure 4-26. Wilshire/Rodeo Station—Station Entrance at the Southwest Corner of South Beverly Drive and Wilshire Boulevard (Existing View and Visual Simulation)

No Build Alternative

The No Build Alternative would not result in visual changes beyond those previously considered for approved projects; therefore, no visual impacts would occur.

Locally Preferred Alternative

The LPA could either be constructed as a single phase under the Concurrent Construction Scenario or as three consecutive phases under the Phased Construction Scenario. The opening of the LPA as a single phase or in three sequential phases will not result in substantially differing visual impacts during operation of the LPA.

America Fast Forward (30/10) Scenario (Concurrent Construction)

Under the Concurrent Construction Scenario, the LPA would be operational in its entirety to Westwood/VA Hospital in 2022. Table 4-16 summarizes the visual impacts associated with each station. In the visual environment, effects are related to the visibility of station components and tunnel ventilation structures. Typical station components include signage; lighting; streetscape amenities, such as benches, landscaping, special paving, and art; and bicycle facilities, such as racks or lockers. The below-ground station components visible to viewers will include escalators, elevators, stairs, and station waiting area platforms. Other support facilities, such as traction power substations (TPSS), will be located within the stations. The location of these support facilities will be noticeable when located at the surface but will not result in dramatic effects to the visual environment.

Emergency generators will be visible facilities on the surface near the Wilshire/La Brea and Westwood/VA Hospital Stations. These emergency generators will be completely enclosed in small metal buildings, about 20 feet by 60 feet in size, and sited on property of about 50 feet by 100 feet. Although they will be noticeable in views, the buildings will be screened from public view with a wall or fence. In addition, exterior landscaping will be installed around the site per the local plans and zoning ordinances of the cities of Los Angeles and Beverly Hills, respectively.

Buildings will be removed at several station areas to accommodate construction staging. Removal of existing buildings can improve or detract from visual settings depending on a building's condition, style, scale, and color. However, it is not expected that removal of buildings will substantially reduce the visual character or quality of any station area because vacant lots are a common feature of the existing visual setting in most station areas and along the LPA alignment.

Property used for construction staging will be left vacant and will be available for development after construction completion. Property acquisitions and the buildings that will be removed are discussed in the *Westside Subway Extension Real Estate and Acquisitions Technical Report* (Metro 2010c).

In addition to the typical station components, three entrance types will be used for stations: plazas with covered entries, entries integrated with existing buildings, and entries incorporated into future joint developments. Open plazas adjacent to the buildings will be affected by some station entrances. These plazas are discussed in Table 4-16. In most of the cases, the entrances will impact the landscaping and plaza design. The landscape designs in these plazas will be removed and replaced in kind. The plazas will be redesigned to accommodate the station entrance area and the associated canopy structure.

Operational impacts of varying degrees will occur at each of the station areas, as discussed in Table 4-16. The station components and other elements of the LPA will be visible to varying degrees. However, none of these elements is expected to significantly change the visual character of the area where they would be located.

Based on the urban design analysis conducted, it was determined that stations may contribute to improved visual quality within the neighborhoods where they will be located (Metro 2009d). This determination was based on the implementation of design guidelines that include, but are not limited to, the following:

- Preserve and enhance the unique cultural identity of each station area and its surrounding community by implementing art and landscaping
- Promote a sense of place, safety, and walkability by providing street trees, walkways or sidewalks, lighting, awnings, public areas, and street furniture

Design of the station entrances will complement the cultural, historic, geographic, and aesthetic character of the surrounding areas. Where practicable, entrances will be integrated into existing buildings or could be integrated into future development.

Table 4-16 also includes the visual impacts that may result for each station and station entrance.

To illustrate how station areas may appear after construction, simulations were prepared for the following four stations that are representative of the visual changes for all station options:

- Wilshire/La Brea (Figure 4-22)
- Wilshire/Fairfax (Figure 4-23 and Figure 4-24)
- Wilshire/La Cienega (Figure 4-25)
- Wilshire/Rodeo (Figure 4-26)

Metro Long Range Transportation Plan Scenario (Phased Construction)

Under the Phased Construction Scenario, the potential for impacts related to visual quality is the same as under the Concurrent Construction Scenario. The only difference between the two scenarios is the timing of potential visual impacts. Under the Phased Construction Scenario, the potential for impacts related to visual quality along Phase 2 and Phase 3 will occur later than under the Concurrent Construction Scenario due to an extended construction timeline. The timing for potential visual impacts along Phase 1 of the LPA will occur earlier than under the Concurrent Construction Scenario since Phase 1 will open for operation in 2020.

Phase 1 to Wilshire/La Cienega

Visual impacts associated with the three stations to be constructed along Phase 1 (Wilshire/La Brea, Wilshire/Fairfax, and Wilshire/La Cienega) as well as the Division 20 maintenance yard expansion are described in Table 4-16 and illustrated in Figure 4-22, Figure 4-23, Figure 4-24, and Figure 4-25. Visual impacts at these locations are also described above in the Concurrent Construction Scenario. Operational visual impacts of varying degrees will occur at each of the station areas. The station components and other elements of Phase 1 will be visible to varying degrees. Phase 1 will be designed consistent with Metro Design Criteria (Metro 1994). None of these elements associated with operation of Phase 1 is expected to significantly change the visual character of the area where they will be located.

An emergency generator will also be constructed along Phase 1 near the Wilshire/La Brea Station. The emergency generator will be a visible facility on the surface near the

station and will be completely enclosed in a small metal building, about 20 feet by 60 feet in size, and sited on property of about 50 feet by 100 feet. Although it will be noticeable in views, the building will be screened from public view with a wall or fence. In addition, exterior landscaping will be installed around the site per the local plans and zoning ordinances of Los Angeles, and the emergency generator will not significantly change the visual character of the surrounding area.

Phase 2 to Century City

Visual impacts for the two stations to be constructed along Phase 2 (Wilshire/Rodeo and Century City) are described in Table 4-16 and illustrated in Figure 4-26. Visual impacts at these locations are also described above in the Concurrent Construction Scenario. Operational impacts of varying degrees will occur at each of the station areas.

The station components and other elements of Phase 2 will be visible to varying degrees. Phase 2 will be designed consistent with Metro Design Criteria (Metro 1994). None of these elements is expected to significantly change the visual character of the area where they will be located.

Phase 3 to Westwood/VA Hospital

Visual impacts for the two stations to be constructed along Phase 3 (Westwood/UCLA and Westwood/VA Hospital) are described in Table 4-16. Visual impacts at these locations are described above in the Concurrent Construction Scenario. Operational impacts of varying degrees will occur at each of the station areas. The station components and other elements of Phase 3 will be visible to varying degrees. Phase 3 will be designed consistent with Metro Design Criteria (Metro 1994). None of these elements is expected to significantly change the visual character of the area where they will be located.

An emergency generator will also be constructed along Phase 3 near the Westwood/VA Hospital Station. Visual impacts related to the emergency generator will be the same as those described under Phase 1 and the Concurrent Construction Scenario. The emergency generator at Westwood/VA Hospital will not significantly change the visual character of the surrounding area.

4.3.4 Mitigation Measures

The LPA, including all station, alignment, and station entrance options under both the Concurrent Construction Scenario and the Phased Construction Scenario, will be designed consistent with Metro Design Criteria (Metro 1994). While there are no significant impacts, the mitigation measures, as listed below, are incorporated into the LPA under both the Concurrent Construction Scenario and the Phased Construction Scenario. These mitigation measures will ensure that impacts related to conflicts between scale and visual character, building removal and right-of-way acquisition, removal of mature vegetation, location of ancillary facilities, and introduction of new sources of light and glare are avoided or minimized. For a more detailed discussion of impacts during construction and mitigation measures refer to Section 4.15.

- **VIS-1—Minimize Visual Clutter**

  To minimize visual clutter, system components will be integrated and the potential for conflicts reduced between the transit system and adjacent communities; design of the system stations and components will follow the recommendations and guidance developed in the urban design analysis conducted for the LPA (Metro 2009d). These guidelines include the following: (1) preserve and enhance the unique cultural identity of each station area and its surrounding community by implementing art and landscaping; and (2) promote a sense of place, safety, and walkability by providing street trees, walkways or sidewalks, lighting, awnings, public art, and street furniture.

- **VIS-2—Replacement for Tree Removal**

  Where mature trees are removed, replacement with landscape amenities of equal value will be incorporated into final designs to enhance visual integrity of the station area.

- **VIS-3—Source Shielding in Exterior Lighting**

  Source shielding in exterior lighting at the maintenance and storage facility will be used to limit spillover light and glare.

- **VIS-4—Integrate Station Designs with Area Redevelopment Plans**

  Station designs will be integrated with area redevelopment plans. The objective is to create a unified visual setting where the station components, such as entrances, complement redevelopment plans.

If the LPA is constructed under the Phased Construction Scenario, VIS-1, VIS-2, VIS-3, and VIS-4 will be required for all three phases.

4.3.5 California Environmental Quality Act Determination

The CEQA determination compares the effects of the LPA under both the Concurrent Construction Scenario and the Phased Construction Scenario with the existing conditions described in Section 4.3.2. The evaluation of the potential for visual quality impacts of the LPA, under both the Concurrent Construction Scenario and the Phased Construction Scenario, are discussed above. Under CEQA Guidelines (Appendix G, Memorandum of Understanding for Paleo), a project will result in a significant impact if it will

- Have a substantial adverse effect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- Substantially degrade the existing visual character or quality of the site and its surroundings
- Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area

Combining landscaping and design elements already included in the LPA under either the Concurrent Construction Scenario or the Phased Construction Scenario and implementing mitigation measures described in Section 4.3.4 will reduce visual impacts to a less-than-significant level. The overall findings of the visual assessment are that the