

# WESTSIDE SUBWAY EXTENSION

## Growth Inducing Impacts Technical Report



August 2010







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## **Acronyms and Abbreviations**

CEQ	President's Council on Environmental Quality
CEQA	California Environmental Quality Act (PRC 21000-21177)
PEIR	Program Environmental Impact Report
RCPG	Regional Comprehensive Plan and Guide
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
WCCOG	Westside Cities Council of Governments





## **1.0 INTRODUCTION**

This report addresses the Westside Subway Extension’s potential to directly or indirectly induce population, housing, and/or employment growth within the study area and the region.





## **2.0 PROJECT DESCRIPTION**

This chapter describes the alternatives that have been considered to best satisfy the Purpose and Need and have been carried forward for further study in the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR). Details of the No Build, Transportation Systems Management (TSM), and the five Build Alternatives (including their station and alignment options and phasing options (or minimum operable segments [MOS]) are presented in this chapter.

### **2.1 No Build Alternative**

The No Build Alternative provides a comparison of what future conditions would be like if the Project were not built. The No Build Alternative includes all existing highway and transit services and facilities, and the committed highway and transit projects in the Metro Long Range Transportation Plan (LRTP) and the Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP). Under the No Build Alternative, no new 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 adopted Metro LRTP.

### **2.2 TSM Alternative**

The TSM Alternative emphasizes more frequent bus service than the No Build Alternative to reduce delay and enhance mobility. The TSM Alternative contains all elements of the highway, transit, Metro Rail, and bus service described under the No Build Alternative. In addition, the TSM Alternative increases the frequency of service for Metro Bus Line 720 (Santa Monica–Commerce via Wilshire Boulevard and Whittier Boulevard) to between three and four minutes during the peak period.

In the TSM Alternative, Metro Purple Line rail service to the Wilshire/Western Station would operate in each direction at 10-minute headways during peak and off-peak periods. The Metro Red Line service to Hollywood/Highland Station would operate in each direction at five-minute headways during peak periods and at 10-minute headways during midday and off-peak periods.

### **2.3 Build Alternatives**

The Build Alternatives are considered to be the “base” alternatives with “base” stations. Alignment (or segment) and station options were developed in response to public comment, design refinement, and to avoid and minimize impacts to the environment.

The Build Alternatives extend heavy rail transit (HRT) service in subway from the existing Metro Purple Line Wilshire/Western Station. HRT systems provide high speed (maximum of 70 mph), high capacity (high passenger-carrying capacity of up to 1,000 passengers per train and multiple unit trains with up to six cars per train), and reliable service since they operate in an exclusive grade-separated right-of-way. The subway will operate in a tunnel at least 30 to 70 feet below ground and will be electric powered.

Furthermore, the Build Alternatives include changes to the future bus services. Metro Bus Line 920 would be eliminated and a portion of Line 20 in the City of Santa Monica would be



eliminated since it would be duplicated by the Santa Monica Blue Bus Line 2. Metro Rapid Bus Line 720 would operate less frequently since its service route would be largely duplicated by the Westside Subway route. In the City of Los Angeles, headways (time between buses) for Line 720 are between 3 and 5 minutes under the existing network and will be between 5 and 11.5 minutes under the Build Alternatives, but no change in Line 720 would occur in the City of Santa Monica segment. Service frequencies on other Metro Rail lines and bus routes in the corridor would be the same as for the No Build Alternative.

### **2.3.1 Alternative 1—Westwood/UCLA Extension**

This alternative extends the existing Metro Purple Line from the Wilshire/Western Station to a Westwood/UCLA Station (Figure 2-1). From the Wilshire/Western Station, Alternative 1 travels westerly beneath Wilshire Boulevard to the Wilshire/Rodeo Station and then southwesterly toward a Century City Station. Alternative 1 then extends from Century City and terminates at a Westwood/UCLA Station. The alignment is approximately 8.60 miles in length.

Alternative 1 would operate in each direction at 3.3-minute headways during morning and evening peak periods and at 10-minute headways during midday. The estimated one-way running time is 12 minutes 39 seconds from the Wilshire/Western Station.

### **2.3.2 Alternative 2—Westwood/Veterans Administration (VA) Hospital Extension**

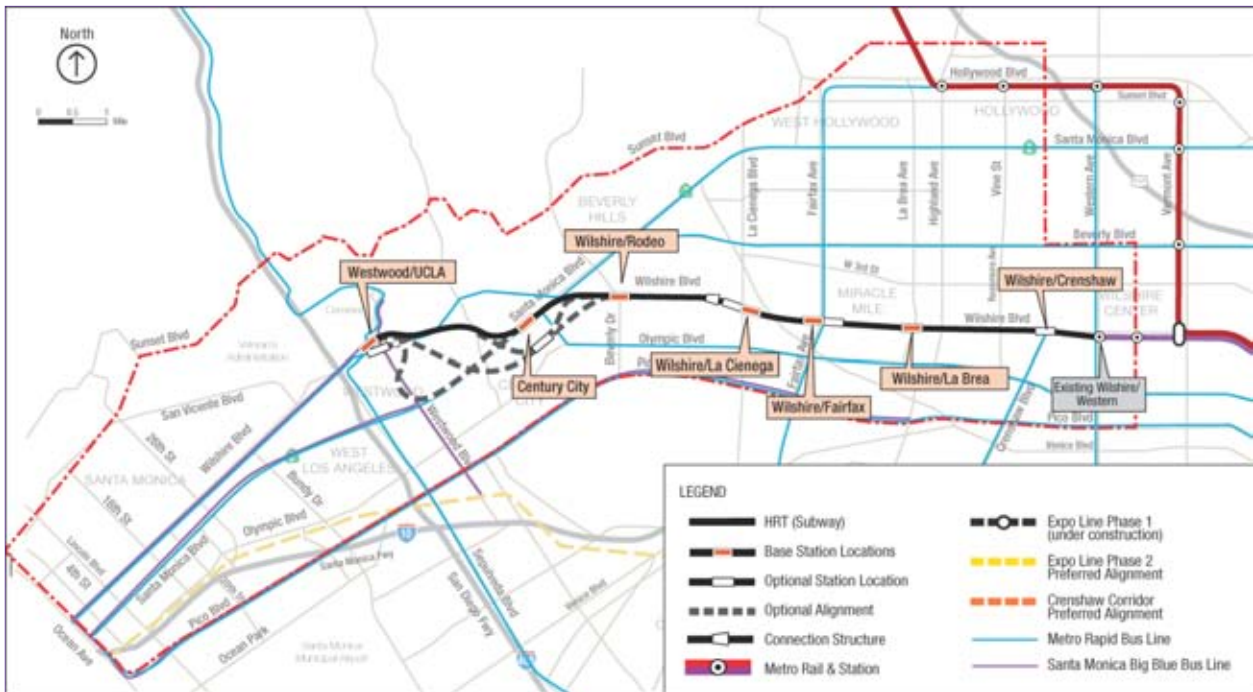
This alternative extends the existing Metro Purple Line from the Wilshire/Western Station to a Westwood/VA Hospital Station (Figure 2-2). Similar to Alternative 1, Alternative 2 extends the subway from the Wilshire/Western Station to a Westwood/UCLA Station. Alternative 2 then travels westerly under Veteran Avenue and continues west under the I-405 Freeway, terminating at a Westwood/VA Hospital Station. This alignment is 8.96 miles in length from the Wilshire/Western Station.

Alternative 2 would operate in each direction at 3.3-minute headways during the morning and evening peak periods and at 10-minute headways during the midday, off-peak period. The estimated one-way running time is 13 minutes 53 seconds from the Wilshire/Western Station.

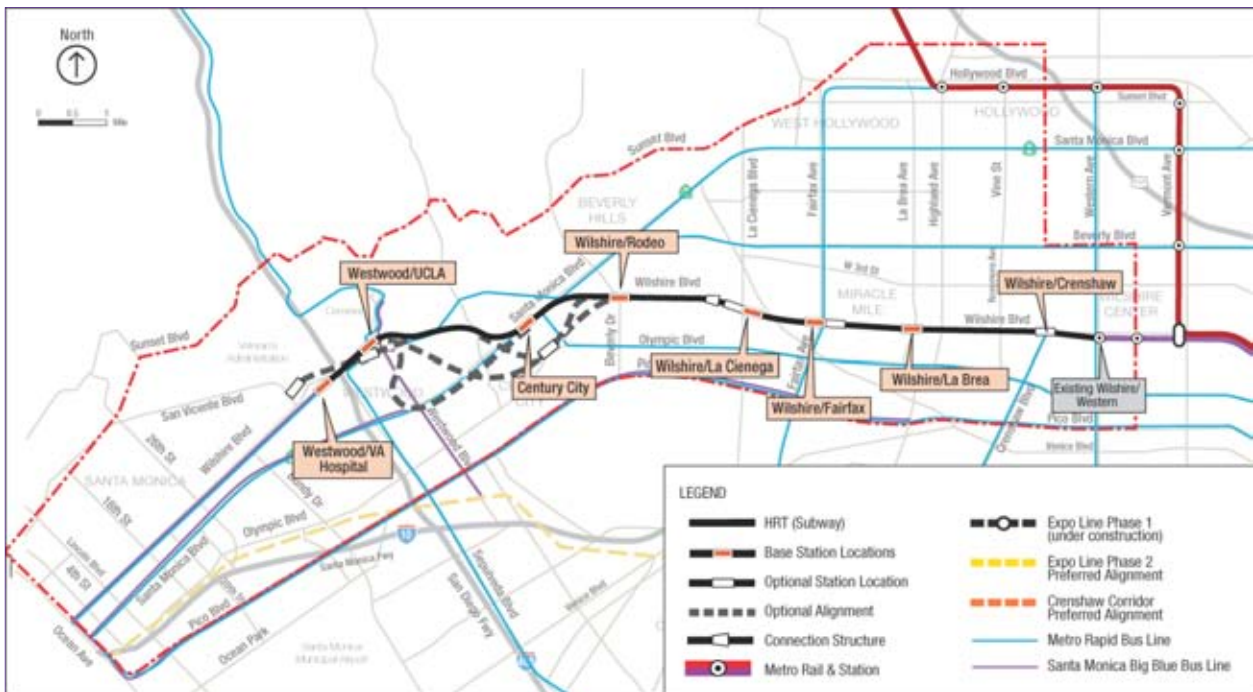
### **2.3.3 Alternative 3—Santa Monica Extension**

This alternative extends the existing Metro Purple Line from the Wilshire/Western Station to the Wilshire/4th Station in Santa Monica (Figure 2-3). Similar to Alternative 2, Alternative 3 extends the subway from the Wilshire/Western Station to a Westwood/VA Hospital Station. Alternative 3 then continues westerly under Wilshire Boulevard and terminates at the Wilshire/4th Street Station between 4th and 5th Streets in Santa Monica. The alignment is 12.38 miles.

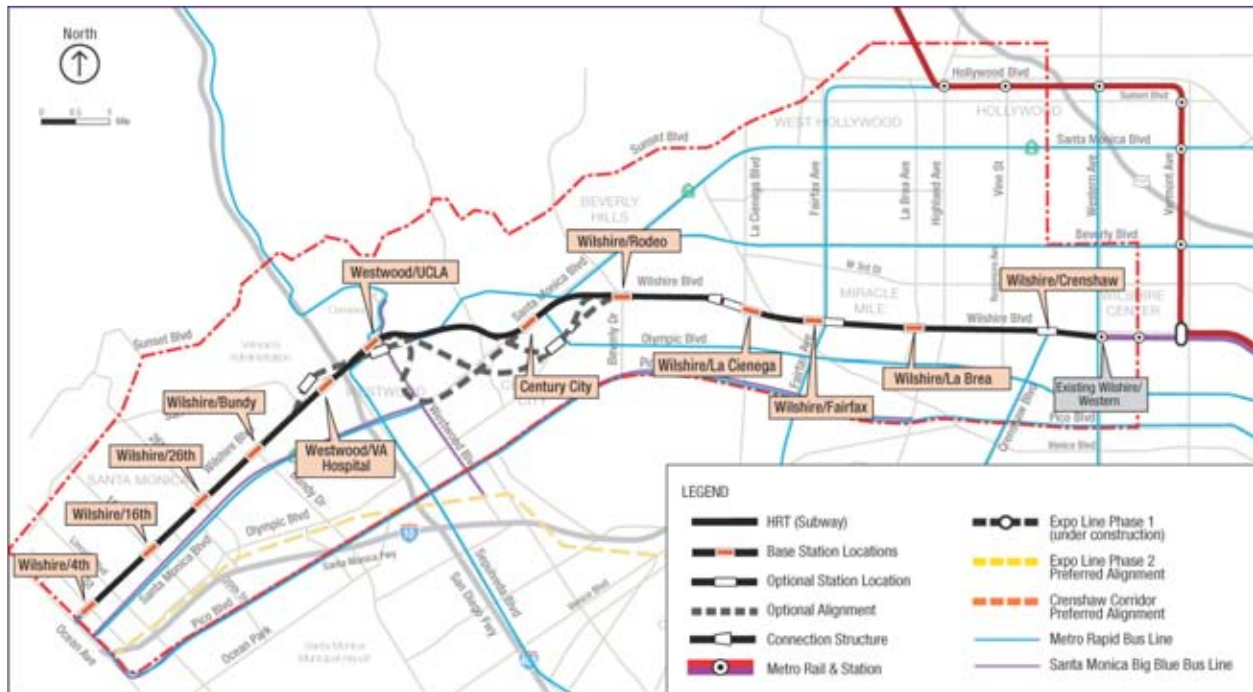
Alternative 3 would operate in each direction at 3.3-minute headways during the morning and evening peak periods and operate with 10-minute headways during the midday, off-peak period. The estimated one-way running time is 19 minutes 27 seconds from the Wilshire/Western Station.



**Figure 2-1. Alternative 1—Westwood/UCLA Extension**



**Figure 2-2. Alternative 2—Westwood/Veterans Administration (VA) Hospital Extension**



**Figure 2-3. Alternative 3—Santa Monica Extension**

### 2.3.4 Alternative 4—Westwood/VA Hospital Extension plus West Hollywood Extension

Similar to Alternative 2, Alternative 4 extends the existing Metro Purple Line from the Wilshire/Western Station to a Westwood/VA Hospital Station. Alternative 4 also includes a West Hollywood Extension that connects the existing Metro Red Line Hollywood/Highland Station to a track connection structure near Robertson and Wilshire Boulevards, west of the Wilshire/La Cienega Station (Figure 2-4). The alignment is 14.06 miles long.

Alternative 4 would operate from Wilshire/Western to a Westwood/VA Hospital Station in each direction at 3.3-minute headways during morning and evening peak periods and 10-minute headways during the midday off-peak period. The West Hollywood extension would operate at 5-minute headways during peak periods and 10-minute headways during the midday, off-peak period. The estimated one-way running time for the Metro Purple Line extension is 13 minutes 53 seconds, and the running time for the West Hollywood from Hollywood/Highland to Westwood/VA Hospital is 17 minutes and 2 seconds.

### 2.3.5 Alternative 5—Santa Monica Extension plus West Hollywood Extension

Similar to Alternative 3, Alternative 5 extends the existing Metro Purple Line from the Wilshire/Western Station to the Wilshire/4th Station and also adds a West Hollywood Extension similar to the extension described in Alternative 4 (Figure 2-5). The alignment is 17.49 miles in length. Alternative 5 would operate the Metro Purple Line extension in each direction at 3.3-minute headways during the morning and evening peak periods and 10-minute headways during the midday, off-peak period. The West Hollywood extension would operate in each direction at 5-minute headways during peak periods and 10-minute headways during the midday, off-peak period. The estimated one-way running time for the





Metro Purple Line extension is 19 minutes 27 seconds, and the running time from the Hollywood/Highland Station to the Wilshire/4th Station is 22 minutes 36 seconds.

### 2.3.6 Stations and Segment Options

HRT stations consist of a station “box,” or area in which the basic components are located. The station box can be accessed from street-level entrances by stairs, escalators, and elevators that would bring patrons to a mezzanine level where the ticketing functions are located. The 450-foot platforms are one level below the mezzanine level and allow level boarding (i.e., the train car floor is at the same level as the platform). Stations consist of a center or side platform. Each station is equipped with under-platform exhaust shafts, over-track exhaust shafts, blast relief shafts, and fresh air intakes. In most stations, it is anticipated that only one portal would be constructed as part of the Project, but additional portals could be developed as a part of station area development (by others). Stations and station entrances would comply with the *Americans with Disabilities Act of 1990*, Title 24 of the California Code of Regulations, the California Building Code, and the Department of Transportation Subpart C of Section 49 CFR Part 37.

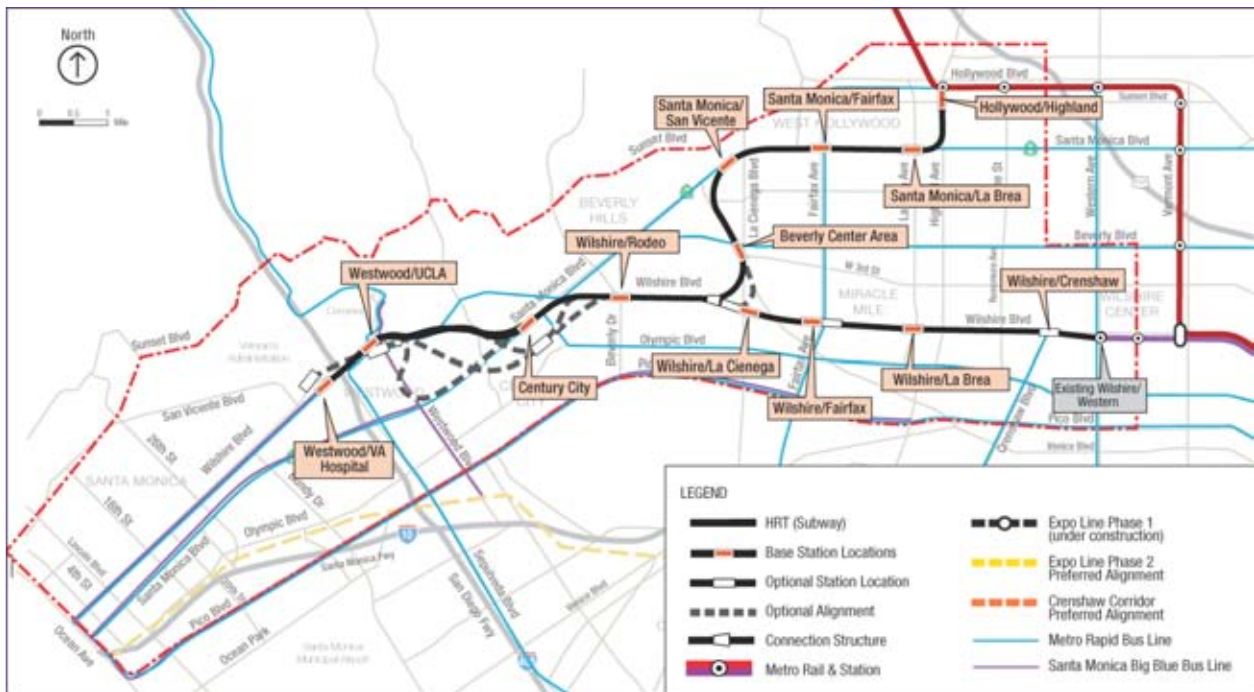
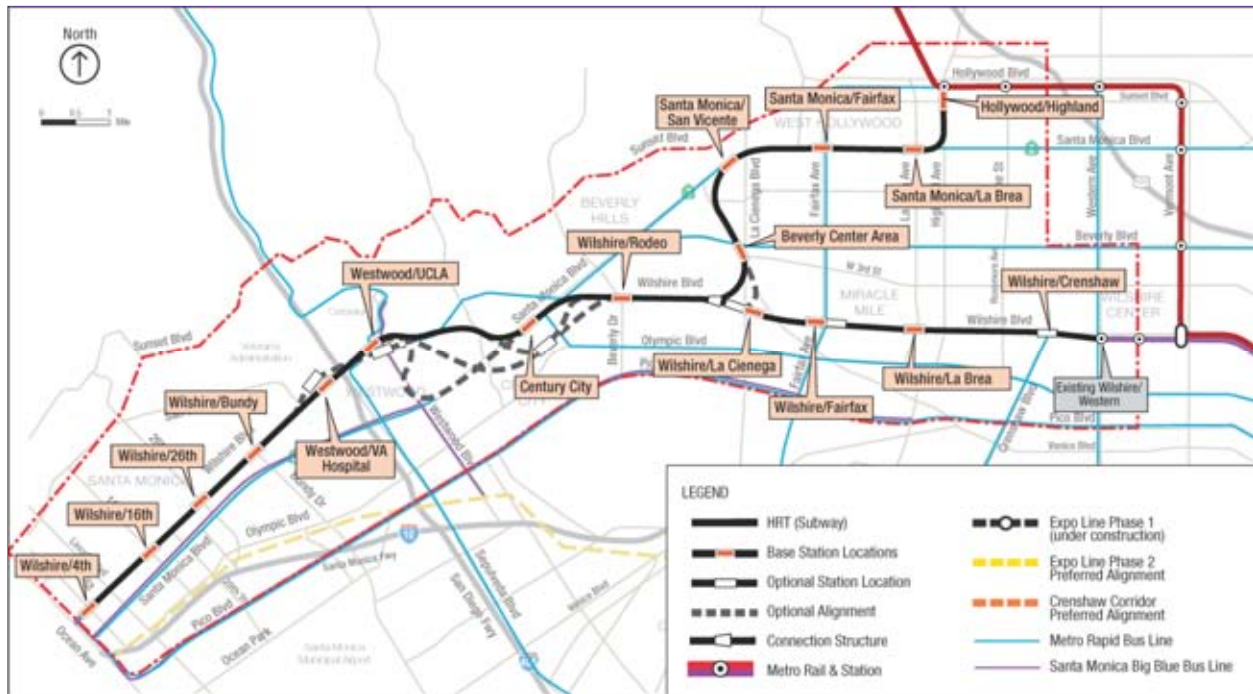


Figure 2-4. Alternative 4—Westwood/VA Hospital Extension plus West Hollywood Extension



**Figure 2-5. Alternative 5—Santa Monica Extension plus West Hollywood Extension**

Platforms would be well-lighted and include seating, trash receptacles, artwork, signage, safety and security equipment (closed-circuit television, public announcement system, passenger assistance telephones), and a transit passenger information system. The fare collection area includes ticket vending machines, fare gates, and map cases.

Table 2-1 lists the stations and station options evaluated and the alternatives to which they are applicable. Figure 2-6 shows the proposed station and alignment options. These include:

- Option 1—Wilshire/Crenshaw Station Option
- Option 2—Fairfax Station Option
- Option 3—La Cienega Station Option
- Option 4—Century City Station and Alignment Options
- Option 5—Westwood/UCLA Station Option
- Option 6—Westwood/VA Hospital Station Option

**Table 2-1. Alternatives and Stations Considered**

Stations	Alternatives				
	1	2	3	4	5
	Westwood/ UCLA Extension	Westwood/ VA Hospital Extension	Santa Monica Extension	Westwood/ VA Hospital Extension Plus West Hollywood Extension	Santa Monica Extension Plus West Hollywood Extension
<b>Base Stations</b>					
Wilshire/Crenshaw	•	•	•	•	•
Wilshire/La Brea	•	•	•	•	•
Wilshire/Fairfax	•	•	•	•	•
Wilshire/La Cienega	•	•	•	•	•
Wilshire/Rodeo	•	•	•	•	•
Century City (Santa Monica Blvd)	•	•	•	•	•
Westwood/UCLA (Off-street)	•	•	•	•	•
Westwood/VA Hospital		•	•	•	•
Wilshire/Bundy			•		•
Wilshire/26th			•		•
Wilshire/16th			•		•
Wilshire/4th			•		•
Hollywood/Highland				•	•
Santa Monica/La Brea				•	•
Santa Monica/Fairfax				•	•
Santa Monica/San Vicente				•	•
Beverly Center Area				•	•
<b>Station Options</b>					
1—No Wilshire/Crenshaw	•	•	•	•	•
2—Wilshire/Fairfax East	•	•	•	•	•
3—Wilshire/La Cienega (Transfer Station)	•	•	•	•	•
4—Century City (Constellation Blvd)	•	•	•	•	•
5—Westwood/UCLA (On-street)	•	•	•	•	•
6—Westwood/VA Hospital North		•	•	•	•

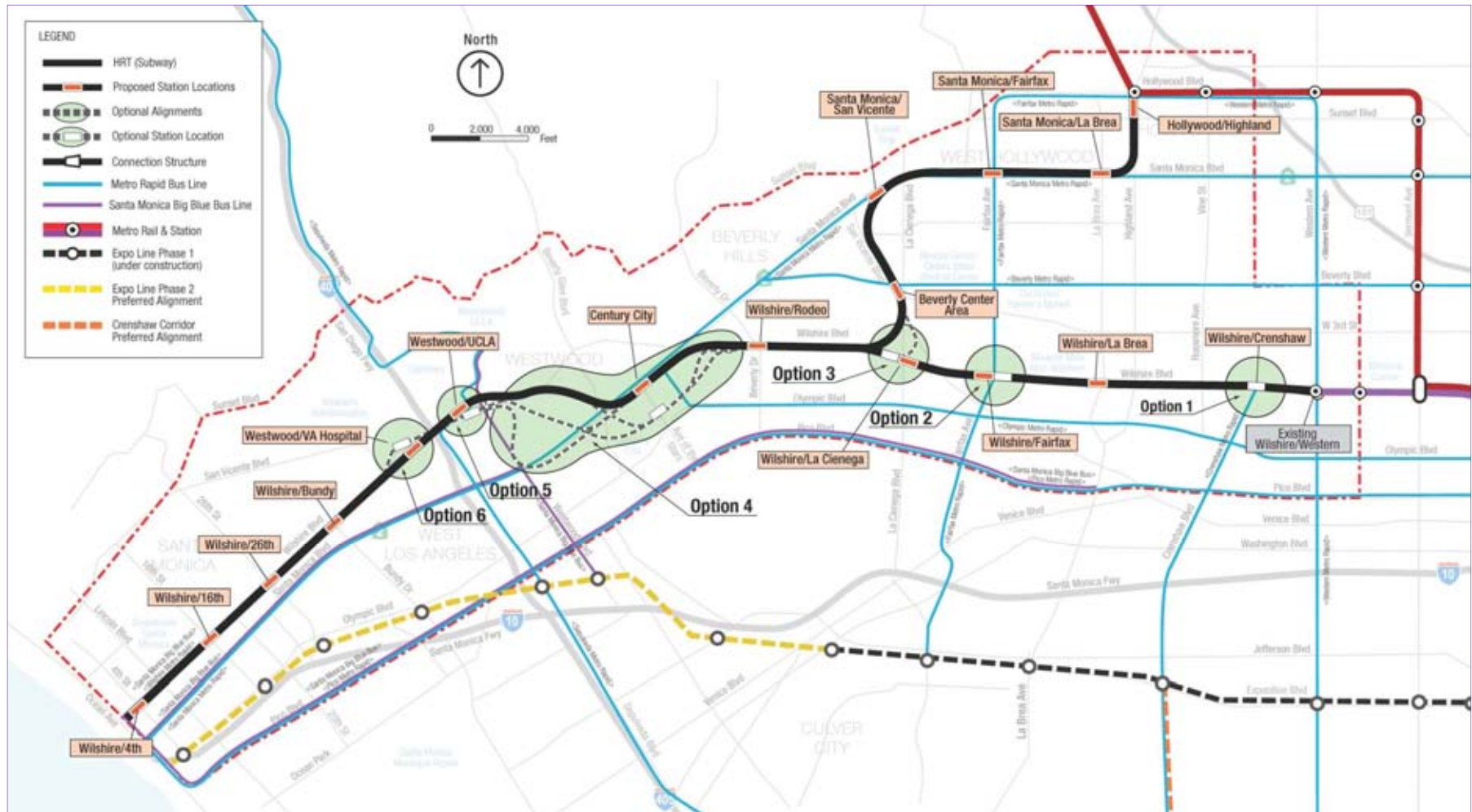


Figure 2-6. Station and Alignment Options



2.3.7 Option 1—Wilshire/Crenshaw Station Option

- **Base Station: Wilshire/Crenshaw Station**—The base station straddles Crenshaw Boulevard, between Bronson Avenue and Lorraine Boulevard.
- **Station Option: Remove Wilshire/Crenshaw Station**—This station option would delete the Wilshire/Crenshaw Station. Trains would run from the Wilshire/Western Station to the Wilshire/La Brea Station without stopping at Crenshaw. A vent shaft would be constructed at the intersection of Western Avenue and Wilshire Boulevard (Figure 2-7).

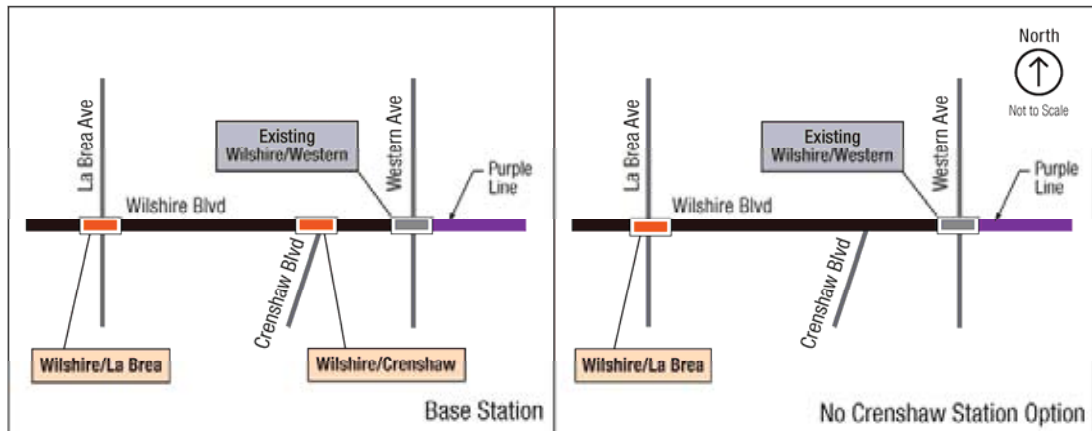


Figure 2-7. Option 1—No Wilshire/Crenshaw Station Option

2.3.8 Option 2—Wilshire/Fairfax Station East Option

- **Base Station: Wilshire/Fairfax Station**—The base station is under the center of Wilshire Boulevard, immediately west of Fairfax Avenue.
- **Station Option: Wilshire/Fairfax Station East Station Option**—This station option would locate the Wilshire/Fairfax Station farther east, with the station underneath the Wilshire/Fairfax intersection (Figure 2-8). The east end of the station box would be east of Orange Grove Avenue in front of LACMA, and the west end would be west of Fairfax Avenue.

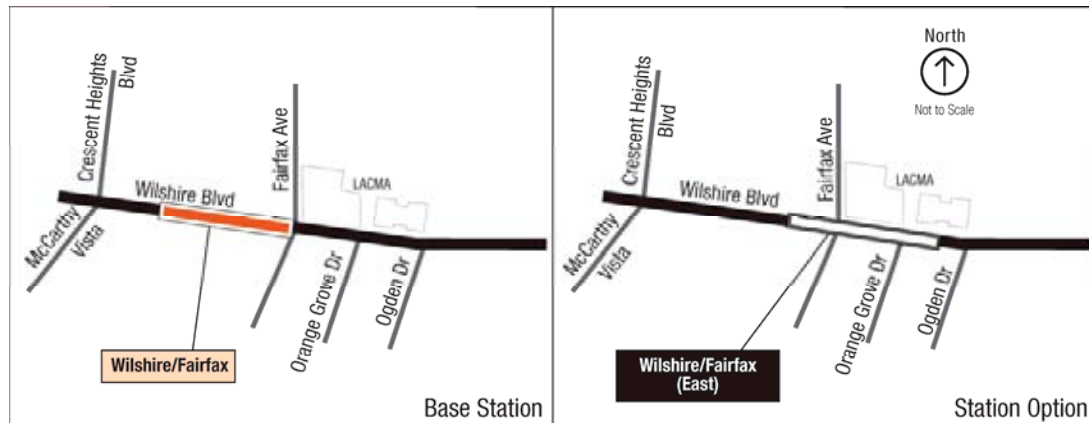


Figure 2-8. Option 2—Fairfax Station Option

2.3.9 Option 3—Wilshire/La Cienega Station Option

- **Base Station: Wilshire/La Cienega Station**—The base station would be under the center of Wilshire Boulevard, immediately east of La Cienega Boulevard. A direct transfer between the Metro Purple Line and the potential future West Hollywood Line is not provided with this station. Instead, a connection structure is proposed west of Robertson Boulevard as a means to provide a future HRT connection to the West Hollywood Line.
- **Station Option: Wilshire/La Cienega Station West with Connection Structure**—The station option would be located west of La Cienega Boulevard, with the station box extending from the Wilshire/Le Doux Road intersection to just west of the Wilshire/ Carson Road intersection (Figure 2-9). It also contains an alignment option that would provide an alternate HRT connection to the future West Hollywood Extension. This alignment portion of Option 3 is only applicable to Alternatives 4 and 5.

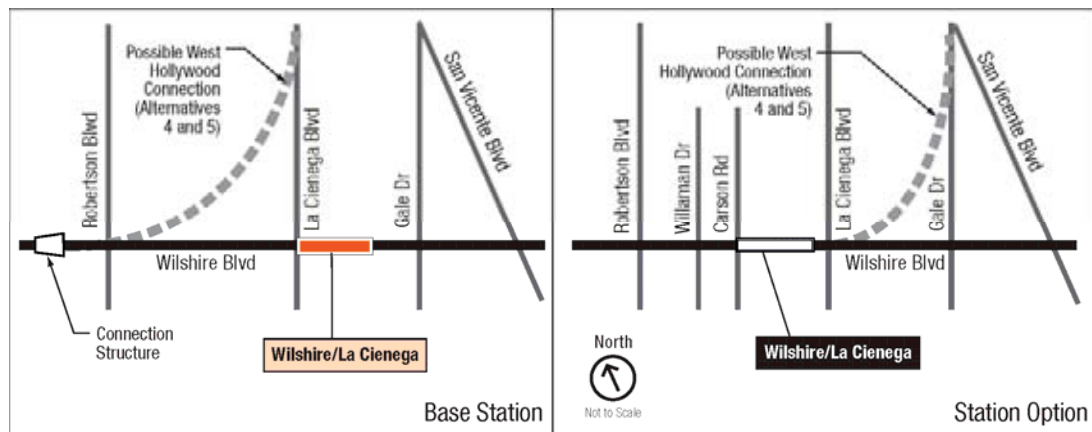


Figure 2-9. Option 3—La Cienega Station Option

2.3.10 Option 4—Century City Station and Segment Options

Century City Station and Beverly Hills to Century City Segment Options

- **Base Station: Century City (Santa Monica) Station**—The base station would be under Santa Monica Boulevard, centered on Avenue of the Stars.
- **Station Option: Century City (Constellation) Station**—With Option 4, the Century City Station has a location option on Constellation Boulevard (Figure 2-10), straddling Avenue of the Stars and extending westward to east of MGM Drive.
- **Segment Options:** Two route options are proposed to connect the Wilshire/Rodeo Station to Century City (Constellation) Station: Constellation North and Constellation South. As shown in Figure 2-10, the base segment to the base Century City (Santa Monica) Station is shown in the solid black line and the segment options to Century City (Constellation) Station are shown in the dashed grey lines.



2.3.10.1 Century City to Westwood Segment Options

Three route options considered for connecting the Century City and Westwood stations include: East, Central, and West. As shown in Figure 2-10, each of these three segments would be accessed from both Century City Stations and both Westwood/UCLA Stations. The base segment is shown in the solid black line and the options are shown in the dashed grey lines.

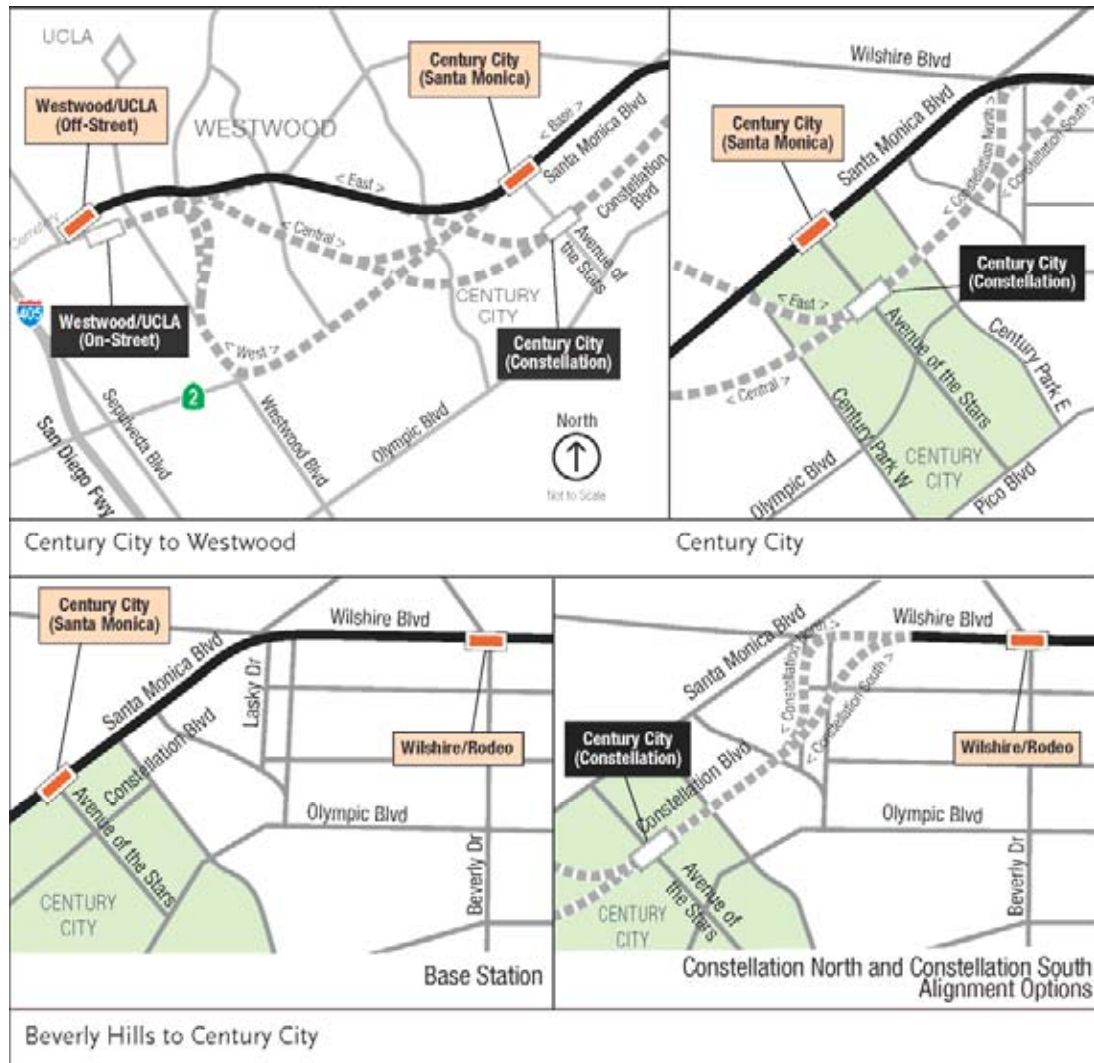


Figure 2-10. Century City Station Options

2.3.11 Option 5—Westwood/UCLA Station Options

- **Base Station: Westwood/UCLA Station Off-Street Station Option**—The base station is located under the UCLA Lot 36 on the north side of Wilshire Boulevard between Gayley and Veteran Avenues.
- **Station Option: Westwood/UCLA On-Street Station Option**—This station option would be located under the center of Wilshire Boulevard, immediately west of Westwood Boulevard (Figure 2-11).



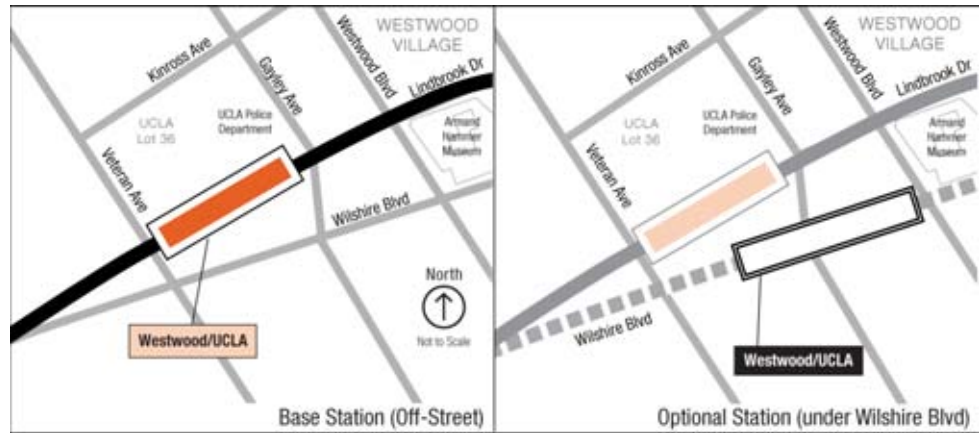


Figure 2-11. Option 5—Westwood/UCLA Station Options

### 2.3.12 Option 6—Westwood/VA Hospital Station Option

- **Base Station: Westwood/VA Hospital**—The base station would be below the VA Hospital parking lot on the south side of Wilshire Boulevard in between the I-405 exit ramp and Bonsall Avenue.
- **Station Option: Westwood/VA Hospital North Station**—This station option would locate the Westwood/VA Hospital Station on the north side of Wilshire Boulevard between Bonsall Avenue and Wadsworth Theater. (Shown in Figure 2-12)

To access the Westwood/VA Hospital Station North, the alignment would extend westerly from the Westwood/UCLA Station under Veteran Avenue, the Federal Building property, the I-405 Freeway, and under the Veterans Administration property just east of Bonsall Avenue.

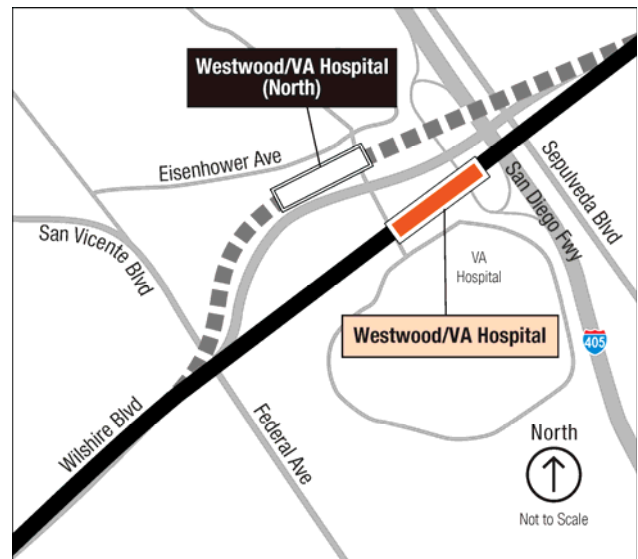


Figure 2-12. Option 6—Westwood/VA Hospital Station North

## 2.4 Base Stations

The remaining stations (those without options) are described below.

- **Wilshire/La Brea Station**—This station would be located between La Brea and Cloverdale Avenues.



- **Wilshire/Rodeo Station**—This station would be under the center of Wilshire Boulevard, beginning just west of South Canon Drive and extending to El Camino Drive.
- **Wilshire/Bundy Station**—This station would be under Wilshire Boulevard, east of Bundy Drive, extending just east of Saltair Avenue.
- **Wilshire/26th Station**—This station would be under Wilshire Boulevard, with the eastern end east of 26th Street and the western end west of 25th Street, midway between 25th Street and Chelsea Avenue.
- **Wilshire/16th Station**—This station would be under Wilshire Boulevard with the eastern end just west of 16th Street and the western end west of 15th Street.
- **Wilshire/4th Station**—This station would be under Wilshire Boulevard and 4th Street in Santa Monica.
- **Hollywood/Highland Station**—This station would be located under Highland Avenue and would provide a transfer option to the existing Metro Red Line Hollywood/Highland Station under Hollywood Boulevard.
- **Santa Monica/La Brea Station**—This station would be under Santa Monica Boulevard, just west of La Brea Avenue, and would extend westward to the center of the Santa Monica Boulevard/Formosa Avenue.
- **Santa Monica/Fairfax Station**—This station is under Santa Monica Boulevard and would extend from just east of Fairfax Avenue to just east of Ogden Drive.
- **Santa Monica/San Vicente Station**—This station would be under Santa Monica Boulevard and would extend from just west of Hancock Avenue on the west to just east of Westmount Drive on the east.
- **Beverly Center Area Station**—This station would be under San Vicente Boulevard, extending from just south of Gracie Allen Drive to south of 3rd Street.

## **2.5 Other Components of the Build Alternatives**

### **2.5.1 Traction Power Substations**

Traction power substations (TPSS) are required to provide traction power for the HRT system. Substations would be located in the station box or in a box located with the crossover tracks and would be located in a room that is about 50 feet by 100 feet in a below grade structure.

### **2.5.2 Emergency Generators**

Stations at which the emergency generators would be located are Wilshire/La Brea, Wilshire/La Cienega, Westwood/UCLA, Westwood/VA Hospital, Wilshire/26th, Highland/Hollywood, Santa Monica/La Brea, and Santa Monica/San Vicente. The emergency generators would require approximately 50 feet by 100 feet of property in an off-street location. All would require property acquisition, except for the one at the Wilshire/La Brea Station which uses Metro's property.

### **2.5.3 Mid-Tunnel Vent Shaft**

Each alternative would require mid-tunnel ventilation shafts. The vent shafts are emergency ventilation shafts with dampers, fans, and sound attenuators generally placed at both ends of a station box to exhaust smoke. In addition, emergency vent shafts could



be used for station cooling and gas mitigation. The vent shafts are also required in tunnel segments with more than 6,000 feet between stations to meet fire/life safety requirements. There would be a connecting corridor between the two tunnels (one for each direction of train movement) to provide emergency egress and fire-fighting ingress. A vent shaft is approximately 150 square feet; with the opening of the shaft located in a sidewalk and covered with a grate about 200 square feet.

**Table 2-2. Mid-Tunnel Vent Shaft Locations**

Alternative/Option	Location
Alternatives 1 through 5, MOS 2	Part of the connection structure on Wilshire Boulevard, west of Robertson Boulevard
Alternatives 2 through 5	West of the Westwood/VA Hospital Station on Army Reserve property at Federal Avenue and Wilshire Boulevard
Option 4 via East route	At Wilshire Boulevard/Manning Avenue intersection
Option 4 to Westwood/UCLA Off-Street Station via Central route	On Santa Monica Boulevard just west of Beverly Glen Boulevard
Option 4 to Westwood/UCLA On-Street Station via Central route	At Santa Monica Boulevard/Beverly Glen Boulevard intersection
Options 4 via West route	At Santa Monica Boulevard/Glendon Avenue intersection
Options 4 from Constellation Station via Central route	On Santa Monica Boulevard between Thayer and Pandora Avenues
Option from Constellation Station via West route	On Santa Monica Boulevard just east of Glendon Avenue

**2.5.4 Trackwork Options**

Each Build Alternative requires special trackwork for operational efficiency and safety (Table 2-3):

- Tail tracks—a track, or tracks, that extends beyond a terminal station (the last station on a line)
- Pocket tracks—an additional track, or tracks, adjacent to the mainline tracks generally at terminal stations
- Crossovers—a pair of turnouts that connect two parallel rail tracks, allowing a train on one track to cross over to the other
- Double crossovers—when two sets of crossovers are installed with a diamond allowing trains to cross over to another track

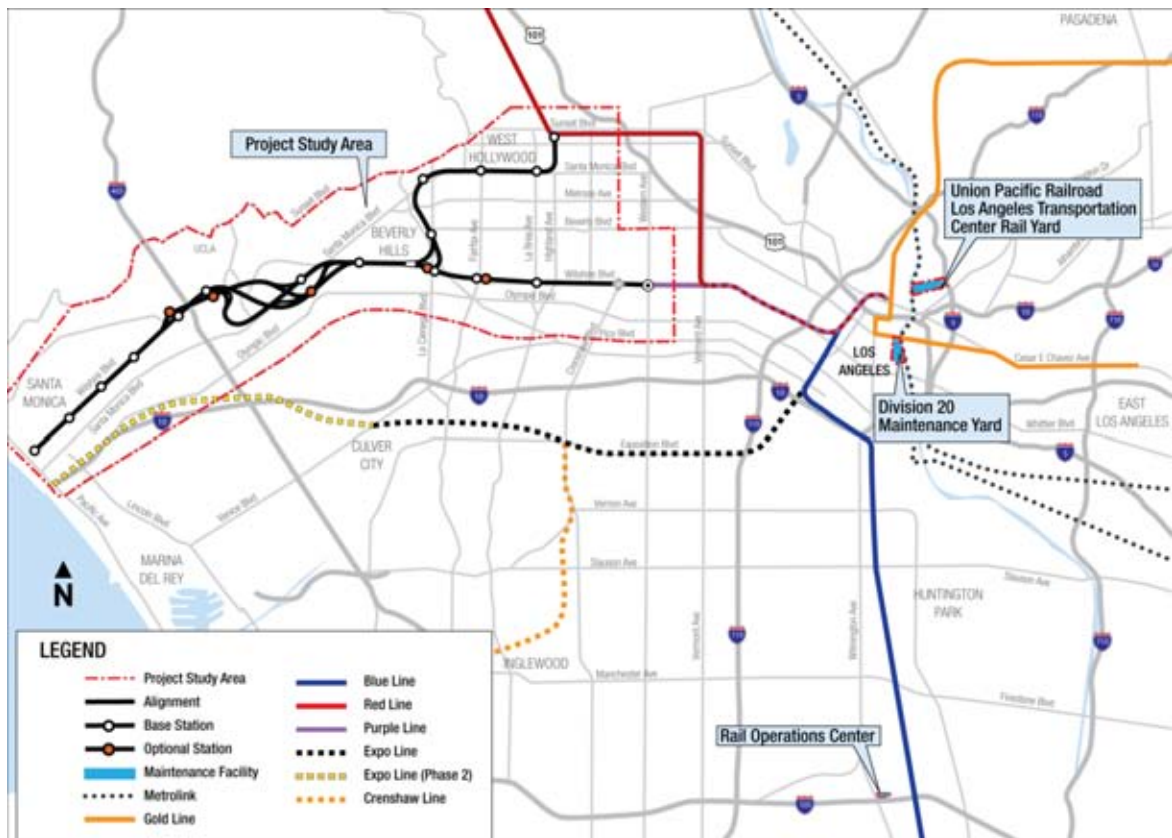
**Table 2-3. Special Trackwork Locations**

Station	1	2	3	4	5
	Westwood/ UCLA Extension	Westwood/ VA Hospital Extension	Santa Monica Extension	Westwood/ VA Hospital Extension Plus West Hollywood Extension	Santa Monica Extension Plus West Hollywood Extension
<b>Special Trackwork Locations—Base Trackwork Alternatives</b>					
Wilshire/Crenshaw	None	None	None	None	None
Wilshire/La Brea	Double Crossover	Double Crossover	Double Crossover	Double Crossover	Double Crossover
Wilshire/Fairfax	None  <i>MOS 1 Only: Terminus Station with Tail tracks</i>	None  <i>MOS 1 Only: Terminus Station with Tail tracks</i>	None  <i>MOS 1 Only: Terminus Station with Tail tracks</i>	None  <i>MOS 1 Only: Terminus Station with Tail tracks</i>	None  <i>MOS 1 Only: Terminus Station with Tail tracks</i>
Wilshire/La Cienega	None	None	None	None	None
<i>Station Option 3 - Wilshire/La Cienega West</i>	Turnouts	Turnouts	Turnouts		
<i>Wilshire/Robertson Connection Structure</i>	Equilateral Turnouts - for future West Hollywood connection	Equilateral Turnouts - for future West Hollywood connection	Equilateral Turnouts - for future West Hollywood connection	Equilateral Turnouts	Equilateral Turnouts
<i>Wilshire/Rodeo</i>	None	None	None	None	None
<i>Century City</i>	Double Crossover  MOS2 Only: Terminus Station with Double Crossover and tail tracks	Double Crossover  MOS2 Only: Terminus Station with Double Crossover and tail tracks	Double Crossover  MOS2 Only: Terminus Station with Double Crossover and tail tracks	Double Crossover  MOS2 Only: Terminus Station with Double Crossover and tail tracks	Double Crossover  MOS2 Only: Terminus Station with Double Crossover and tail tracks
<i>Westwood/UCLA</i>	End Terminal with Double Crossover and tail tracks	Double Crossover	Double Crossover	Double Crossover	Double Crossover
<i>Westwood/VA Hospital</i>	N/A	End Terminal with Turnouts and tail tracks	Turnouts	End Terminal with Turnouts and tail tracks	Turnouts
<i>Wilshire/Bundy</i>	N/A	N/A	None	N/A	None
<i>Wilshire/26th</i>	N/A	N/A	None	N/A	None
<i>Wilshire/16th</i>	N/A	N/A	None	N/A	None
<i>Wilshire/4th</i>	N/A	N/A	End Terminal with Double Crossover. Pocket Track with Double Crossover, Equilateral Turnouts and tail tracks	N/A	End Terminal with Double Crossover, Pocket Track with Double Crossover, Equilateral Turnouts and tail tracks
<i>Hollywood/ Highland</i>	N/A	N/A	N/A	Double Crossover and tail tracks	Double Crossover and tail tracks
<i>Santa Monica/La Brea</i>	N/A	N/A	N/A	None	None

<i>Santa Monica/Fairfax</i>	N/A	N/A	N/A	None	None
<i>Santa Monica/ San Vicente</i>	N/A	N/A	N/A	Double Crossover	Double Crossover
<i>Beverly Center</i>	N/A	N/A	N/A	None	None
<b>Additional Special Trackwork Location (Optional Trackwork)</b>					
Wilshire/Fairfax	Double Crossover	Double Crossover	Double Crossover	Double Crossover	Double Crossover
Wilshire/La Cienega	Double Crossover	Double Crossover	Double Crossover	Double Crossover	Double Crossover
Wilshire/ Rodeo	None	None	None	Pocket Track	Pocket Track
Wilshire/26th	N/A	N/A	Double Crossover	N/A	Double Crossover

### 2.5.5 Rail Operations Center

The existing Rail Operations Center (ROC), shown on the figure below, located in Los Angeles near the intersection of Imperial Highway and the Metro Blue Line does not have sufficient room to accommodate the new transit corridors and line extensions in Metro’s expansion program. The Build Alternatives assume an expanded ROC at this location.



**Figure -2-13: Location of the Rail Operations Center and Maintenance Yards**



### 2.5.6 Maintenance Yards

If any of the Build Alternatives are chosen, additional storage capacity would be needed. Two options for providing this expanded capacity are as follows (see Figure 2-14A and **Error! Reference source not found.**14B):

The first option requires purchasing 3.9 acres of vacant private property abutting the southern boundary of the Division 20 Maintenance and Storage Facility, which is located between the 4th and 6th Street Bridges. Additional maintenance and storage tracks would accommodate up to 102 vehicles, sufficient for Alternatives 1 and 2.

The second option is a satellite facility at the Union Pacific (UP) Los Angeles Transportation Center Rail Yard. This site would be sufficient to accommodate the vehicle fleet for all five Build Alternatives. An additional 1.3 miles of yard lead tracks from the Division 20 Maintenance and Storage Facility and a new bridge over the Los Angeles River would be constructed to reach this yard.



**Error! Reference source not found.**14A. Maintenance Yard Options



Figure 2-14B. UP Railroad Rail Bridge

### 2.6 Minimum Operable Segments

Due to funding constraints, it may be necessary to construct the Westside Subway Extension in shorter segments. A Minimum Operable Segment (MOS) is a phasing option that could be applied to any of the Build Alternatives.



**2.6.1 MOS 1—Fairfax Extension**

MOS 1 follows the same alignment as Alternative 1, but terminates at the Wilshire/Fairfax Station rather than extending to a Westwood/UCLA Station. A double crossover for MOS 1 is located on the west end of the Wilshire/La Brea Station box, west of Cloverdale Avenue. The alignment is 3.10 miles in length.

**2.6.2 MOS 2—Century City Extension**

MOS 2 follows the same alignment as Alternative 1, but terminates at a Century City Station rather than extending to a Westwood/UCLA Station. The alignment is 6.61 miles from the Wilshire/Western Station.







## **3.0 REGULATORY FRAMEWORK**

Guidance for the analysis of potential growth-inducing impacts has been established by both federal and state regulations, as described below.

### **3.1 NEPA Guidance**

The guidelines for implementation of the National Environmental Policy Act (NEPA) were established by the Council on Environmental Quality (CEQ). These guidelines require the evaluation of potential consequences of all proposed federal actions. Any proposed federal activity or program must examine not only direct consequences, but also indirect, or secondary impacts that may occur in areas beyond the immediate influence of a proposed action and at some time in the future (40 CFR 1508.8). Secondary impacts may include changes in land use, such as housing and economic vitality - which in turn includes components of growth such as employment and population density. The NEPA guidelines require the evaluation of reasonably anticipated growth in relation to projections of growth developed by a federally-designated Metropolitan Planning Organization.

### **3.2 CEQA Guidance**

The California Environmental Quality Act (CEQA) requires the consideration and discussion of the project’s potential to induce growth. CEQA Guidelines Section 15126.2(d) requires discussion of “the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment”. Growth-inducing impacts also include removing obstacles to population growth, and/or encouraging and facilitating other activities that could significantly affect the environment, either individually or cumulatively.

According to CEQA Guidelines, a project would result in a significant impact if it would induce substantial population growth in an area, either directly (for example, by proposing new homes or business) or indirectly (for example, through extension of roads or other infrastructure).

### **3.3 Regional Growth Management Plans**

The Southern California Association of Governments (SCAG) is the federally-designated Metropolitan Planning Organization for a 6-county southern California region (which includes the counties of Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial). SCAG develops regional growth management plans with the goals to provide for efficient movement of people, good, and information; enhance economic growth and international trade; and improve the quality of life for the Southern California region.

The 2008 SCAG Regional Comprehensive Plan and Guide (RCPG) describes the action plan for the implementation of short term-strategies and long-term initiatives and guiding principles for a sustainable and livable region. The RCPG focuses on specific planning and resource management areas, including land use and housing, open space and habitat, water, energy, air quality, solid waste, transportation, security and emergency



preparedness, and economy. The Growth Management chapter of the RCPG addresses issues related to growth and land use in the SCAG region and enumerates guiding principles for development that support the overall RCPG goals.

The 2008 SCAG Regional Transportation Plan (RTP) contains regional population, housing, and employment growth projections through the year 2035. These projections are used as guidelines for growth in each jurisdiction within the SCAG region.

SCAG conducted a comprehensive growth visioning process as part of the Southern California Compass Process. This visioning process is described in SCAG's 2004 Southern California Compass Growth Vision Report. The objective of the visioning process was to further develop ways to accommodate growth while maintaining mobility, prosperity, and sustainability goals for the region's residents. This resulted in a regional vision known as the Compass Blueprint Growth Vision.



## **4.0 ANALYSIS METHODOLOGY**

To evaluate potential growth-inducing impacts of the project, the 2008 SCAG RCPG, 2008 RTP, and the 2004 Southern California Compass Growth Vision Report are used in the environmental analysis. SCAG also states that the Program Environmental Impact Report (PEIR) prepared for the 2008 RTP can be used by lead agencies as the basis of regional impact analyses for their individual projects. In particular, this environmental analysis utilizes the RTP population, housing, and employment projections, together with relevant PEIR information, to address the magnitude of potential project impacts related to regional growth.





## 5.0 EXISTING CONDITIONS/AFFECTED ENVIRONMENT

### 5.1 Study Area

The study area traverses two of the 14 subregions comprising the SCAG region: the City of Los Angeles and the Westside Cities Council of Governments (WCCOG) subregion, where the Cities of Beverly Hills, West Hollywood and Santa Monica are located.

The primary regional growth management plans are developed by SCAG. SCAG completed the Southern California Compass Growth Vision Report (2004) which developed a regional vision titled the Compass Blueprint Growth Vision. This growth vision sought to accommodate growth while maintaining mobility, livability, prosperity, and sustainability goals for residents in the SCAG region. SCAG also developed the Regional Comprehensive Plan and Guide (RCPG), which is described in detail in Section 4.1 Land Use and Development.

### 5.2 Population and Housing Growth

As illustrated in Table 5-1, the SCAG region had a population of roughly 18.7 million in 2009. For the 2000 through 2009 period, Los Angeles County contributed the largest share of total population growth in the region, at nearly 40 percent, with the addition of 873,855 residents. However, in terms of the average growth rate, Los Angeles County was the slowest growing county in the SCAG region, with an annual average population growth rate of approximately 1 percent.

Table 5-1: Regional Population Growth, 2000-2009

County	Year 2000	Year 2009	2000-2009 Change	Annual Average % Change
Los Angeles	9,519,330	10,393,185	873,855	1.0%
Orange	2,846,289	3,139,017	292,728	1.1%
Riverside	1,545,387	2,107,653	562,266	4.0%
San Bernardino	1,710,139	2,060,950	350,811	2.3%
Ventura	753,197	836,080	82,883	1.2%
Imperial	142,361	179,254	36,893	2.9%
SCAG Region	16,516,703	18,716,139	2,199,436	1.5%

Source: State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark.

As illustrated in Table 5-2, the County of Riverside had the largest number of 195,438 households added to the region during the same period, with the highest average annual growth rate of 3.3 percent. The Los Angeles County households grew at the low 0.43 percent average annual growth rate during the same period, or at the lowest rate among the six counties comprising the region.



Table 5-2: Households in the Region, 2000-2009

County	Year 2000	Year 2009	2000-2009 Change	Annual Average % Change
Los Angeles	3,278,902	3,418,698	139,796	0.43
Orange	969,484	1,035,491	66,007	0.68
Riverside	584,674	780,112	195,438	3.34
San Bernardino	601,369	690,234	88,865	1.48
Ventura	251,711	277,895	26,184	1.04
Imperial	43,891	56,237	12,346	2.81
SCAG Region	5,730,031	6,256,667	528,636	0.92

Source: State of California, Department of Finance, E-5 Population Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark.

Table 5-3 shows the population growth for all of the cities in the study area. Between 2000 and 2009, the Cities of Los Angeles and Santa Monica had the annual average growth rates, at 1.1 percent. The Cities of Beverly Hills and West Hollywood, which have the smallest populations of the cities in the study area, grew at the annual average rate substantially below 1 percent during the same period.

Table 5-3: Population Growth in Cities within the Study Area, 2000-2009

City	Year 2000	Year 2009	2000-2009 Change	Annual Average % Change
Los Angeles	3,694,742	4,065,585	370,843	1.1
West Hollywood	35,794	37,580	1,786	0.6
Beverly Hills	33,784	36,090	2,306	0.8
Santa Monica	84,084	92,494	8,410	1.1

Source: State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark.

Correspondingly, Table 5-4 also shows that the City of Los Angeles experienced the largest amount of household growth from 2000 to 2009. By 2009, Los Angeles had the largest number of households at 1,407,967. The Cities of Los Angeles and Santa Monica both had annual average growth of about 0.5 percent in number of households, compared to the 0.17 and 0.16 percent growth rate in the Cities of West Hollywood and Beverly Hills.



Table 5-4: Households in Cities within the Study Area, 2000-2009

City	Year 2000	Year 2009	2000-2009 Change	Annual Average % Change
Los Angeles	1,340,036	1,407,967	67,931	0.50
West Hollywood	24,142	24,560	418	0.17
Beverly Hills	15,946	16,206	260	0.16
Santa Monica	48,133	50,371	2,238	0.47

Source: State of California, Department of Finance, E-5 Population Estimates for Cities, Counties and the State, 2001-2009, with 2000 Benchmark excluding "Group Quarters".

### 5.3 Employment Growth

As shown in Table 5-5, total employment in the SCAG region, including self-employment, decreased by 73,200 jobs overall by 2009, which reflects the current severe recession. Compared to other counties in the SCAG region, Los Angeles County exhibited both the largest number of lost jobs estimated at 220,000 and the highest 5.1 percent of lost jobs. The current unemployment rate for Los Angeles County was estimated at 12.3 percent, just slightly below the statewide unemployment rate of 12.5 percent (as of February 2010).

Table 5-5: Regional Employment Growth, 2000-2009

County	Year 2000	Year 2009	2000-2009 Change	% Change 2000-2009
Los Angeles	4,424,900	4,196,900	-228,000	-5.2
Orange	1,428,400	1,421,500	-6,900	-4.8
Riverside	643,900	770,500	126,600	19.7
San Bernardino	703,600	733,100	29,500	4.2
Ventura	374,700	378,100	3,400	0.9
Imperial	52,000	54,200	2,200	4.2
SCAG Region	7,627,500	7,554,300	-73,200	-1.0

Sources: State of California, Department of Finance, Labor Force Data for Sub-county areas, with 2000 Benchmark. Sacramento, California, 2009. State of California, Department of Finance, Labor Force Data for Sub-county areas, with 2009 Benchmark. Sacramento, California, 2010.



As shown in Table 5-6, the current economic recession has resulted in employment in all four study area cities to decrease between 5 and 5.2 percent. The City of Los Angeles lost the largest number (88,100) of jobs, and currently has the highest unemployment rate of 13.6 percent among the four cities in the study area. The City of West Hollywood has an estimated unemployment rate of 10.4 percent, the City of Santa Monica of 10.2 percent, and the City of Beverly Hills has the lowest unemployment rate at 8.6 percent (as of February 2010<sup>1</sup>).

**Table 5-6: Employment Growth in Cities within the Study Area, 2000-2009**

City	Year 2000	Year 2009	2000-2009 Change	% Change 2000-2009
Los Angeles	1,710,700	1,622,600	-88,100	-5.1
West Hollywood	24,800	23,500	-1,300	-5.2
Beverly Hills	17,900	17,000	-900	-5.0
Santa Monica	52,800	50,100	-2,700	-5.1

*Sources: State of California, Department of Finance, Labor Force Data for Sub-county areas, with 2000 Benchmark. Sacramento, California, 2009. State of California, Department of Finance, Labor Force Data for Sub-county areas, with 2009 Benchmark. Sacramento, California, 2010.*

Generally, growth-inducing projects are located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure (e.g., sewer and water facilities, roadways, etc.) or are those that could encourage “premature” or unplanned growth (i.e., “leap-frog” development). Growth-inducing impacts would be considered significant if the proposed project has the potential to induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

### 5.4 Future Growth Projections

The following projections are drawn from the 2008 RTP Growth Forecast, which does not reflect the change in conditions due to the current economic recession. As shown in Table 5-7, according to SCAG, the region is expected to continue to steadily grow, and have a population of about 24 million residents and 10.3 million jobs by 2035. Along with the population and job growth, the region is expected to have a total of 7.7 million households. The population of Los Angeles County and the employment in Los Angeles County are projected to increase by nearly 2 million people and 490,000 jobs between 2010 and 2035. This represents an estimated average annual increase of nearly 800,000 persons (less than 0.7 percent average annual population growth) and 19,600 jobs (less than 0.5 percent average annual employment growth).

<sup>1</sup> California Department of Finance, March 2010.





Table 5-7: Regional Population, Households, and Employment Growth, 2010-2035

County	2010 Population	2035 Population	2010 Households	2035 Households	2010 Employment	2035 Employment
Los Angeles	10,615,730	12,338,620	3,357,798	4,003,501	4,552,398	5,041,172
Orange	3,314,948	3,653,990	1,039,201	1,118,490	1,755,167	1,981,901
Riverside	2,242,745	3,596,680	720,531	1,183,097	784,998	1,413,522
San Bernardino	2,182,049	3,133,801	637,250	972,561	810,233	1,254,749
Ventura	860,607	1,013,753	275,117	330,189	373,444	463,227
Imperial	202,270	320,448	57,086	102,878	73,214	132,551
SCAG Region	19,418,349	24,057,292	6,086,983	7,710,716	8,349,454	10,287,122

Source: SCAG, 2010-2035 RTP Adopted Growth Forecast, 2008.

The SCAG’s 2008 RTP projections for study area cities are summarized in Table 5-8. As shown, population growth in all cities within the study area is projected to be relatively low during the 2010- 2035 period, reflecting their built out character. The City of Los Angeles is projected to grow at a highest average rate among the cities at 0.35 percent per year, while the City of Santa Monica population growth is projected at 0.04 percent per year, or the lowest rate among the cities. Household growth closely corresponds to the projected population growth, with the City of Los Angeles adding households at an average annual rate of 0.73 percent and the City of Santa Monica at 0.06 percent per year over the next 25 years. Similarly, the employment growth is projected to be the highest at an average of 0.38 percent per year for the City of Los Angeles, and the lowest at 0.28 percent per year for the Cities of Santa Monica and Beverly Hills.

Table 5-8: Population, Households, and Employment Growth in Cities within the Study Area, 2010-2035

City	2010 Population	2035 Population	2010 Households	2035 Households	2010 Employment	2035 Employment
Los Angeles	4,057,484	4,415,772	1,366,985	1,616,578	1,820,092	1,994,134
West Hollywood	38,223	39,821	23,718	24,940	32,185	34,719
Beverly Hills	36,433	38,508	15,289	16,094	58,068	62,104
Santa Monica	91,335	92,314	46,088	46,764	101,871	109,118

Source: SCAG, 2010-2035 RTP Adopted Growth Forecast, 2008.





## 6.0 ENVIRONMENTAL IMPACT/ENVIRONMENTAL CONSEQUENCES

### 6.1 Future Growth Projections

The No Build Alternative includes all existing highway and transit services and facilities, and the committed highway and transit projects in the 2009 Metro Long Range Transportation Plan (LRTP) and the 2008 Southern California Association of Governments' (SCAG) Regional Transportation Plan (RTP)<sup>2</sup>. Under the No Build Alternative, no new 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 Metro LRTP.

These projects include the Exposition Boulevard Light Rail Phase I (Expo I), Exposition Boulevard Light Rail Phase II (Expo II), Gold Line Foothill Extension, Eastside Phase 1 and 2, Crenshaw Transit Corridor Project, Green Line Extension to Los Angeles Airport (LAX), Green Line Extension to Redondo Beach, and the LAX automated people mover. Of these projects, the Expo I and II and the Crenshaw Transit Corridor project would be located within the closest proximity to the proposed Westside Subway Extension project.

These projects are anticipated to be completed and operational within the same planning horizon as the proposed Westside Subway Extension project. The Mid-City segment of Expo I is expected to open by summer 2011; Expo II in 2015; Metro Gold Line Foothill Extension in 2017; Crenshaw Transit Corridor in 2018; and Regional Connector in 2019. The Crenshaw/LAX Corridor to LAX opening year is expected to be 2028, depending on the availability of funding, while Metro's Gold Line Eastside Extension Phase 2 and South Bay Green Line Extension are anticipated to be operational by 2035.

In addition to the Metro lines, the No Build Alternative includes the proposed LAX automated people mover, which is part of the LAX Master Plan. The No Build Alternative also includes all the existing bus service provided by LA Metro and other transit agencies and incorporates the following two planned projects: the Metro Orange Line Extension which is expected to be in service in 2012 and Wilshire Bus Rapid Transit design and construction that is expected to begin in late 2010. The nearly completed Metro Rapid Bus Program is also included in the No Build Alternative.

All of these transportation improvement projects are located within a densely developed urban region. They will not extend into previously undeveloped areas that could induce growth in such areas or remove a barrier to growth.

These projects are intended to help accommodate the existing and future transportation needs of the area's population- which is projected to continue to grow steadily into the future - by providing new public transit options that would help increase subregional and local mobility for current and future residents. At the same time, while accommodating existing and future needs and transportation demand, these projects would indirectly

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<sup>2</sup>Metro is working with SCAG to update the RTP, which would add the projects identified in Metro's LRTP into the RTP. It is anticipated that the update will be completed in Summer 2010.



provide local development and growth opportunities—including opportunities for transit-oriented development around new stations. By enhancing mobility, particularly for transit-dependent populations, the No Build Alternative could create opportunities for more intensive and focused urban growth in proximity of the new transit stations and corridors, as well as for continuing growth in the areas made accessible by these new transit services. With these opportunities, future growth and development in certain areas may occur sooner, rather than later, pursuant to the No Build Alternative. However, such future local development would be consistent with land use and community plans and subject to all applicable requirements and regulations of each local jurisdiction. No growth beyond that already anticipated in local or regional plans would occur.

The projects under the No Build Alternative would also generate substantial new employment, both directly and indirectly. New construction-related employment and long-term permanent employment would be generated as these transportation projects become implemented and then operated and maintained. Since employment is directly proportional to the magnitude of capital expenditure associated with each of these projects, when combined, these projects would generate significant direct and indirect construction-related and long-term operation-related employment within the entire SCAG region, including the City of Los Angeles and Westside Cities COG subregions.

Overall, the transportation projects comprising the No Build Alternative would significantly contribute to the general economic growth, including employment growth, within their corridors, their regions' cities and counties, and within the entire SCAG region. This is considered a significant beneficial effect since this new employment is anticipated to help alleviate the effects of lost jobs due to the current recession, help alleviate current unemployment, and help generate future employment that has been projected for the region and the study area. No adverse growth-inducing effects are anticipated pursuant to the No Build Alternative.

## **6.2 TSM Alternative**

The TSM Alternative enhances the No Build Alternative by expanding the Metro Rapid bus services operating in the Westside Transit Corridor. This alternative emphasizes more frequent service to reduce delay and enhance mobility. In addition to the local bus routes described as part of the No Build Alternative, a Metro Rapid Bus route would also be enhanced as part of the TSM Alternative. This route includes Santa Monica–Commerce via Wilshire Boulevard and Whittier Boulevard (Line 720). A provision of enhanced bus services would not result in a substantial permanent change to the physical environment of the study area or the region. The TSM enhancement would be located within a densely developed urban setting and would not extend into previously undeveloped areas. The TSM Alternative would not remove a barrier to growth or otherwise induce growth directly or indirectly. Therefore, no adverse impacts are anticipated related to growth inducement.

## **6.3 Alternative 1—Westwood/UCLA Extension**

This alternative involves an alignment that extends via subway from the existing Metro Purple Line Wilshire/Western Station to Westwood/UCLA. This alternative has seven stations, and also station options. The total alignment length is 8.60 miles.



As with the No Build and TSM Alternatives, the Westwood/UCLA Extension Alternative would be located within a densely developed urban area and would not extend into previously undeveloped areas.

Potential indirect growth inducing effects may result from the opportunities provided by this Alternative for micro-scale growth or development near the seven stations. Such growth may occur from implementation of local and state land use policies or local planning objectives, which may encourage transit-oriented development, station area planning, or housing density bonuses adjacent to transit corridors at (a detailed discussion of this potential for local development is provided in Section 4.1, Land Use and Development, of this EIR/EIS). With opportunities for such development, future growth in these station areas may occur sooner, rather than later, pursuant to this Alternative. All such future development (including mixed-use, residential, and commercial) within the City of Los Angeles, Westside Cities COG, and the entire SCAG region would be consistent with applicable land use and community plans and subject to all applicable requirements and regulations of local jurisdictions where the stations would be located, including those of the Cities of Los Angeles and Beverly Hills. Therefore, Alternative 1 is not anticipated to induce growth beyond that already anticipated in the regional plans and projections for the SCAG region, or in local land use and community plans of the Cities of Los Angeles and Beverly Hills.

Alternative 1 would also significantly contribute to the general economic growth, including employment growth within the study area and the entire SCAG region. It would generate approximately 60,000 new construction-related jobs, (including about 34,000 direct jobs and 26,000 indirect/induced jobs) and more than 15,000 long-term jobs during operation (including about 5,600 direct and more than 9,500 indirect jobs)<sup>3</sup>. This is considered a significant beneficial effect since this new employment is anticipated to help alleviate the effects of the more than a quarter-million (228,000) jobs lost within Los Angeles County due to the current recession (including 88,100 jobs in the City of Los Angeles and 900 jobs in Beverly Hills). This new employment would also help alleviate current unemployment (estimated at 13.6 percent in the cities of Los Angeles and 8.6% in Beverly Hills), and help generate future employment that has been projected for the region (including the 174,000 new jobs for the City of Los Angeles and 4,000 jobs for the City of Beverly Hills). Therefore, this is considered a significant beneficial effect; no adverse impacts are anticipated related to growth inducement pursuant to Alternative 1.

#### **6.4 Alternative 2—Westwood/VA Hospital Extension**

For the most part, Alternative 2 follows the same alignment as Alternative 1, but extends beyond the Westwood/UCLA station and instead terminates at the Westwood/VA Hospital Station. This Alternative includes all seven stations from Alternative 1 plus one additional station at Westwood/VA Hospital, and has six station options. The total alignment length is 8.96 miles.

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<sup>3</sup> Number of jobs is in person years, which is equivalent to the full-time employment of one person for one year.



As with Alternative 1, the Westwood/VA Hospital Extension Alternative would be located within a densely developed urban area and would not extend into previously undeveloped areas.

Potential indirect growth inducing effects may result from the opportunities provided by this Alternative for micro-scale growth or development near the eight stations. Such growth may occur due to the implementation of local and state land use policies or local planning objectives, which may encourage transit-oriented development, station area planning, or housing density bonuses adjacent to transit corridors and stations (a detailed discussion of this potential for local development is provided in Section 4.1, Land Use and Development, of this EIR/EIS). With opportunities for such development, future growth within these station areas may occur sooner, rather than later, pursuant to this Alternative. All such future development (including mixed-use, residential, and commercial) within the County and City of Los Angeles, Westside Cities COG, and the entire SCAG region would be consistent with applicable land use and community plans and subject to all applicable requirements and regulations of local jurisdictions where the stations would be located, including those of the Cities of Los Angeles and Beverly Hills. Therefore, Alternative 2 is not anticipated to induce growth beyond that already anticipated in the regional plans and projections for the SCAG region, or in local land and community plans of the Cities of Los Angeles and Beverly Hills.

As with Alternative 1, the Westwood/VA Hospital Extension Alternative would also significantly contribute to the general economic growth, including employment growth within the study area and the entire SCAG region. It would generate approximately 64,000 new construction-related jobs, (including about 36,000 direct jobs and 28,000 indirect/induced jobs) and nearly 16,000 long-term jobs during the operation (including about 6,000 direct and 10,000 indirect jobs)<sup>4</sup>. This is considered a significant beneficial effect since this new employment is anticipated to help alleviate the effects of the more than a quarter-million (228,000) jobs lost within Los Angeles County due to the current recession (including 88,100 jobs lost in the City of Los Angeles and 900 jobs in Beverly Hills). This new employment would also help alleviate current unemployment (estimated at 13.6 percent in the cities of Los Angeles and 8.6% in Beverly Hills), and help generate future employment that has been projected for the region, including the nearly half-million (488,774) jobs in Los Angeles County, 174,000 new jobs for the City of Los Angeles, and 4,000 jobs for the City of Beverly Hills. Therefore, this is considered a significant beneficial effect; no adverse impacts are anticipated related to growth inducement pursuant to Alternative 2.

## **6.5 Alternative 3—Santa Monica Extension**

The Santa Monica Extension Alternative follows the same alignment as Alternative 2, but extends beyond the Westwood/VA Hospital station to the Wilshire/4<sup>th</sup> Street station. This Alternative has the same eight stations and options as Alternative 2—Westwood/VA Hospital Extension Alternative—plus four additional stations: Wilshire/Bundy, Wilshire/26<sup>th</sup> Street; Wilshire 16<sup>th</sup> Street, and Wilshire/ 4<sup>th</sup> Street. The total alignment length is 12.38 miles.

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<sup>4</sup> Number of jobs is in person years, which is equivalent to the full-time employment of one person for one year.



As with Alternative 2, the Santa Monica Extension Alternative would be located within a densely developed urban area and would not extend into previously undeveloped areas.

Potential indirect growth inducing effects may result from the micro-scale growth or development near the 12 stations. This growth may occur due to the opportunities provided by this Alternative for implementation of local and state land use policies or local planning objectives, which may encourage transit-oriented development, station area planning, or housing density bonuses adjacent to transit corridors and stations (a detailed discussion of this potential for local development is provided in Section 4.1, Land Use and Development, of this EIR/EIS). With opportunities for such development, future growth within these station areas may occur sooner, rather than later, pursuant to this Alternative. All such future development (including mixed-use, residential, and commercial) within the County and City of Los Angeles, Westside Cities COG, and the entire SCAG region would be consistent with applicable land use and community plans and subject to all applicable requirements and regulations of local jurisdictions where the stations would be located, including those of the Cities of Los Angeles, Beverly Hills, and Santa Monica. Therefore, Alternative 3 is not anticipated to induce growth beyond that already anticipated in the regional plans and projections for the SCAG region, or in local land use and community plans of the Cities of Los Angeles, Beverly Hills, and Santa Monica.

As with Alternatives 1 and 2, the Santa Monica Extension Alternative would also significantly contribute to the general economic growth, including employment growth within the study area and the entire SCAG region. This Alternative would generate more than 90,000 new construction-related jobs, (including about 51,000 direct jobs and 39,000 indirect/induced jobs), or about 50 percent more construction jobs than Alternative 1 and 40 percent more jobs than Alternative 2. Similar to Alternative 2, this alternative would generate nearly 16,000 long-term jobs during operation (including about 6,000 direct and 10,000 indirect jobs)<sup>5</sup>. This is considered a significant beneficial effect since this new employment is anticipated to help alleviate the effects of the more than a quarter-million (228,000) jobs lost within Los Angeles County due to the current recession (including 88,100 jobs lost in the City of Los Angeles, 900 in Beverly Hills, and 2,700 in Santa Monica). This new employment would also help alleviate current unemployment estimated at 13.6 percent in the city of Los Angeles, 8.6 percent in Beverly Hills, and 10.2 percent in Santa Monica. It would also help generate future employment that has been projected for the region, including the nearly half-million (488,774) jobs in Los Angeles County, 174,000 new jobs for the City of Los Angeles, 4,000 jobs for the City of Beverly Hills, and more than 7, jobs for the City of Santa Monica. Therefore, this is considered a significant beneficial effect; no adverse impacts are anticipated related to growth inducement pursuant to Alternative 3.

## **6.6 Alternative 4—Westwood/VA Hospital Extension Plus West Hollywood Extension**

This alternative is the combination of Alternative 2 (Westwood/VA Hospital Extension) plus the West Hollywood Extension, with an alignment length of 14.06 miles. It has the

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<sup>5</sup> Number of jobs is in person years, which is equivalent to the full-time employment of one person for one year.



same eight stations and options as Alternative 2—Westwood/VA Hospital Extension Alternative—plus five additional stations: Hollywood/Highland; Santa Monica/La Brea; Santa Monica/Fairfax; Santa Monica/San Vicente; and Beverly Center area.

As with Alternatives 1, 2, and 3, the Westwood/VA Hospital Extension Plus West Hollywood Extension Alternative would be located within a densely developed urban area and would not extend into previously undeveloped areas.

Potential indirect growth inducing effects may result from the micro-scale growth or development near the 13 stations. This growth may occur due to the opportunities provided by this Alternative for implementation of local and state land use policies or local planning objectives, which may encourage transit-oriented development, station area planning, or housing density bonuses adjacent to transit corridors and stations (a detailed discussion of this potential for local development is provided in Section 4.1, Land Use and Development, of this EIR/EIS). With opportunities for such development, future growth within these station areas may occur sooner, rather than later, pursuant to this Alternative. All such future development (including mixed-use, residential, and commercial) within the County and City of Los Angeles, Westside Cities COG, and the entire SCAG region would be consistent with applicable land use and community plans and subject to all applicable requirements and regulations of local jurisdictions where the stations would be located, including those of the Cities of Los Angeles, Beverly Hills, and West Hollywood. Therefore, Alternative 4 is not anticipated to induce growth beyond that already anticipated in the regional plans and projections for the SCAG region, or in local land and community plans of the Cities of Los Angeles, Beverly Hills, and West Hollywood.

As with Alternatives 1, 2, and 3, the Westwood/VA Hospital Extension Plus West Hollywood Extension Alternative would also significantly contribute to general economic growth, including employment growth within the study area and the entire SCAG region.

With more stations than the previous alternatives discussed above, this alternative would generate the second largest number of construction jobs among all build alternatives. Alternative 4 would generate more than 106,000 new construction-related jobs, (including about 60,000 direct jobs and 46,000 indirect/induced jobs), or about 80 percent more construction jobs than Alternative 1, 65 percent more than Alternative 2, and 18 percent more than Alternative 3. This alternative would generate more than 16,000 long-term jobs during operation (including more than 6,000 direct and more than 10,000 indirect jobs)<sup>6</sup>, or slightly more than Alternatives 1, 2, and 3. This is considered a significant beneficial effect since this new employment is anticipated to help alleviate the effects of the more than a quarter-million (228,000) jobs lost within the Los Angeles county region due to the current recession (including 88,100 jobs lost in the City of Los Angeles, 900 in Beverly Hills, and 1,300 in West Hollywood). This new employment would also help alleviate current unemployment estimated at 13.6 percent in the cities of Los Angeles, 8.6 percent in Beverly Hills, and 10.4 percent in West Hollywood. It would also help generate future employment that has been projected for the region, including the nearly half-million (488,774) jobs in Los Angeles County, 174,000 new jobs for the City of Los

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<sup>6</sup> Number of jobs is in person years, which is equivalent to the full-time employment of one person for one year.





Angeles, 4,000 jobs for the City of Beverly Hills, and 2,500 for the City of West Hollywood. Therefore, this is considered a significant beneficial effect; no adverse impacts are anticipated related to growth inducement pursuant to Alternative 4.

## **6.7 Alternative 5—Santa Monica Extension Plus West Hollywood Extension**

Alternative 5—Santa Monica Extension Plus West Hollywood Extension follows the same alignment and has the same stations as Alternatives 3 and 4, totaling 17 stations and six station options. The alignment length of this alternative is nearly 17.5 miles.

As with Alternatives 1 through 4, the Santa Monica Extension Plus West Hollywood Extension Alternative would be located within a densely developed urban area and would not extend into previously undeveloped areas.

Potential indirect growth inducing effects may result from the micro-scale growth or development near the 17 stations. This growth may occur due to the opportunities provided by this Alternative for implementation of local and state land use policies or local planning objectives, which may encourage transit-oriented development, station area planning, or housing density bonuses adjacent to transit corridors and stations (a detailed discussion of this potential for local development is provided in Section 4.1, Land Use and Development, of this EIR/EIS). With opportunities for such development, future growth within these station areas may occur sooner, rather than later, pursuant to this Alternative. All such future development (including mixed-use, residential, and commercial) within the County and City of Los Angeles, Westside Cities COG, and the entire SCAG region would be consistent with applicable land use and community plans and subject to all applicable requirements and regulations of local jurisdictions where the stations would be located, including those of the Cities of Los Angeles, Beverly Hills, West Hollywood, and Santa Monica. Therefore, Alternative 5 is not anticipated to induce growth beyond that already anticipated in the regional plans and projections for the SCAG region, or in local land use and community plans of the Cities of Los Angeles, Beverly Hills, Santa Monica and West Hollywood.

As with other Build Alternatives, the Santa Monica Extension Plus West Hollywood Extension Alternative would also significantly contribute to the general economic growth, including employment growth within the study area and the entire SCAG region.

With the longest alignment and most stations among all build alternatives, this alternative would generate the most construction jobs. Alternative 5 would generate about 134,000 new construction-related jobs (including nearly 76,000 direct jobs and more than 58,000 indirect/induced jobs), or about twice the number of jobs generated by Alternatives 1 and 2, nearly 50 percent more than Alternative 3, and 25 percent more than Alternative 4. This alternative would generate nearly 16,500 long-term jobs during operation (including more than 6,000 direct and about 10,500 indirect jobs)<sup>7</sup>, slightly more than other build alternatives. This is considered a significant beneficial effect since this new employment is anticipated to help alleviate the effects of the more than a

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<sup>7</sup> Number of jobs is in person years, which is equivalent to the full-time employment of one person for one year.



quarter-million (228,000) jobs lost within Los Angeles County due to the current recession (including 88,100 jobs lost in the City of Los Angeles, 900 in Beverly Hills, 1,300 in West Hollywood, and 2,700 in Santa Monica). This new employment would also help alleviate current unemployment, estimated at 13.6 percent in the cities of Los Angeles, 8.6 percent in Beverly Hills, 10.4 percent in West Hollywood, and 10.2 percent in Santa Monica. It would also help generate future employment that has been projected for the region, including the nearly half-million (488,774) jobs in Los Angeles County, 174,000 new jobs for the City of Los Angeles, 4,000 jobs for the City of Beverly Hills, 2,500 for the City of West Hollywood, and 7,200 jobs in Santa Monica. Therefore, this is considered a significant beneficial effect; no adverse impacts are anticipated related to growth inducement pursuant to Alternative 5.

## **6.8 MOS 1—Fairfax Extension**

The Minimum Operable Segment (MOS) 1—Fairfax Extension Alternative follows the same alignment as Alternative 1 but terminates at the Wilshire/Fairfax station. The alignment length of this segment is 3 miles.

This Alternative is a short segment (about one-third) of the Alternative 1 alignment, with three stations and two station options only. Therefore, the growth-inducing potential of this alternative would be proportionally reduced, including a significant reduction in the beneficial effect associated with the provision of employment opportunities within the City of Los Angeles. Thus, as discussed under Alternative 1, this segment would not induce growth beyond that already anticipated in the regional plans and projections for the SCAG region, or in local land use and community plans of the City of Los Angeles.

## **6.9 MOS 2—Century City Extension**

The MOS 2—Century City Extension follows the same alignment as Alternative 1 but terminates at the Century City Station instead of the Westwood/UCLA station. This segment has 6 stations and four station options and an alignment length of 6.61 miles.

This segment represents about two-thirds of the Alternative 1 alignment, with six stations and four station options. Therefore, the growth-inducing potential of this alternative would be proportionally reduced, including a reduction in the beneficial effect associated with the provision of employment opportunities within the City of Los Angeles. Thus, as discussed under Alternative 1, this segment would not induce growth beyond that already anticipated in the regional plans and projections for the SCAG region, or in local land use and community plans of the City of Los Angeles and City of Beverly Hills.

## **6.10 Station Options**

The impacts related to growth-inducement for any of the station options (Options A through F) are the same as those discussed under Alternative 1 through Alternative 5; no adverse impacts are anticipated for any of the options.



## 6.11 Alignment Options

The impacts related to growth-inducement for any of the alignment options (Options G through U) are the same as those discussed under Alternative 1 through Alternative 5; no adverse impacts are anticipated for any of the options.





## **7.0 MITIGATION MEASURES**

None are required.

### **7.1 CEQA Determination**

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

### **7.2 No Build Alternative**

As discussed in Section 5.1 above, the No Build Alternative would result in a beneficial effect and would not induce growth either directly or indirectly beyond that already anticipated by regional and local land use and community plans, and regional projections for the City of Los Angeles, Westside Cities COG and the entire SCAG region. No significant impacts are anticipated pursuant to CEQA.

### **7.3 TSM Alternative**

As discussed in Section 5.2 above, the TSM Alternative's provision of enhanced bus services would not result in a substantial permanent change to the physical environment, or induce growth directly or indirectly beyond that already anticipated for the study area and the region. No significant impacts are anticipated pursuant to CEQA.

### **7.4 Build Alternatives**

As discussed in Section 5.3 through 5.11, the proposed Build Alternatives, and station and alignment options, would not induce growth, either directly or indirectly, beyond that already would not induce growth beyond that already anticipated in the regional plans and projections for the SCAG region, or in local land use and community plans of the City of Los Angeles or Westside Cities COG subregions. The proposed project alternatives would result in beneficial effects; no significant adverse significant impacts are anticipated pursuant to CEQA.

### **7.5 Mitigation Measures**

The proposed project alternatives would result in beneficial effects; no significant adverse significant impacts related to growth inducement are anticipated and no mitigation measures are required.

### **7.6 Impact Remaining After Mitigation**

The proposed project alternatives would result in beneficial effects; no significant adverse significant impacts related to growth inducement are anticipated and no mitigation measures are required.





## 8.0 REFERENCES

- SCAG 2004 Southern California Association of Governments. June, 2004. *Southern California Compass Growth Vision Report*.
- SCAG 2008a Southern California Association of Governments, Regional Council. 2008. *2008 Regional Transportation Plan (RTP)*.
- SCAG 2008b Southern California Association of Governments, Regional Council. 2008. *Final 2008 regional transportation plan program environmental impact report (PEIR)*.