WESTSIDE SUBWAY EXTENSION

Economic and Fiscal Impacts Analysis and Mitigation Report

Metro

August 2010

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1.0 INTRODUCTION

This report describes the potential for economic and fiscal impacts that could arise from the construction and long-term operation of the proposed Westside Subway Extension. The baseline fiscal and economic conditions (i.e., local and regional employment levels and property tax revenues) by which the project alternatives are assessed are also described. This report evaluates the direct and indirect tax revenue impacts, construction-related impacts, construction-related employment impacts, construction spending impacts on the regional economy, and potential mitigation measures for the project. Topics discussed include the regulatory framework for this analysis, the regional economy, employment and unemployment trends, government revenues, and local business districts.

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 LRTP and the SCAG 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.

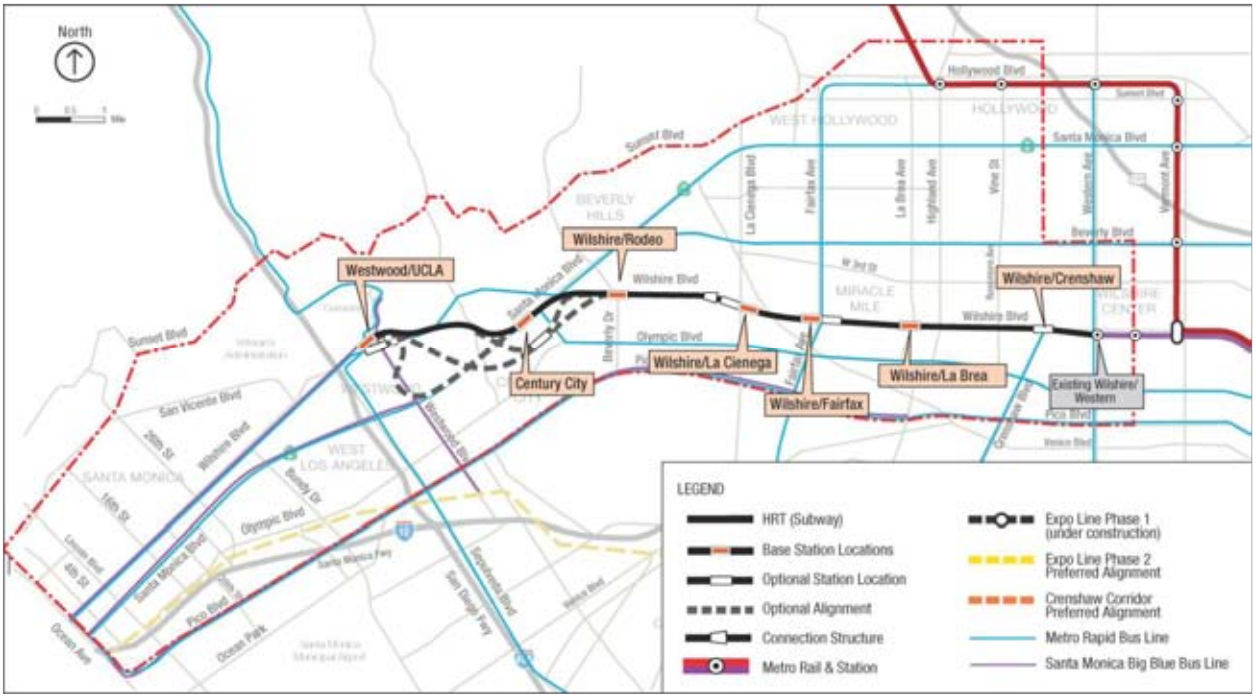

Figure 2-1. Alternative 1—Westwood/UCLA Extension

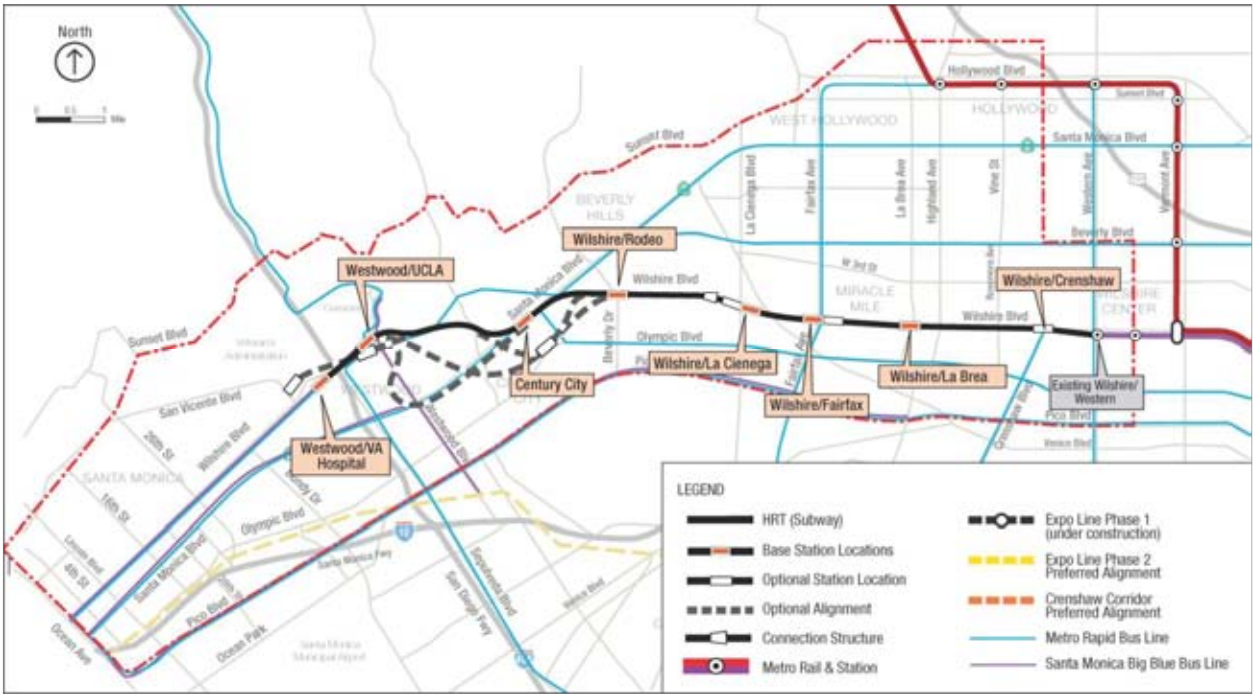

Figure 2-2. Alternative 2—Westwood/Veterans Administration (VA) Hospital Extension

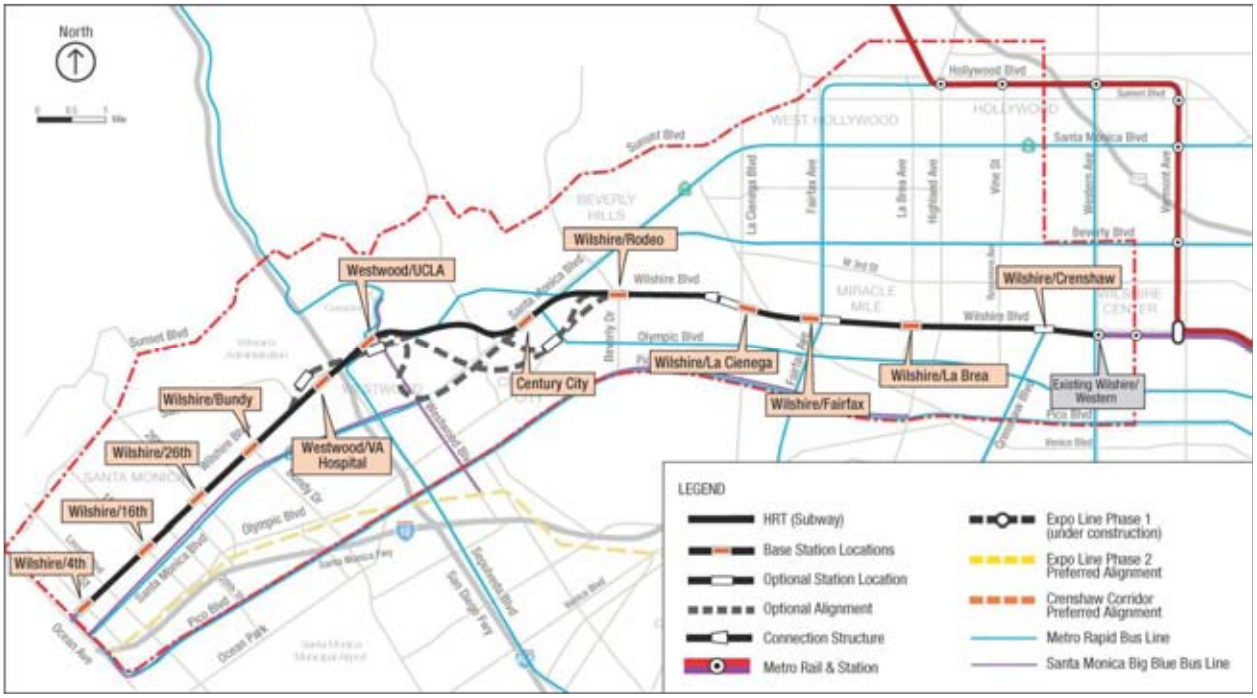

Figure 2-3. Alternative 3—Santa Monica Extension

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.

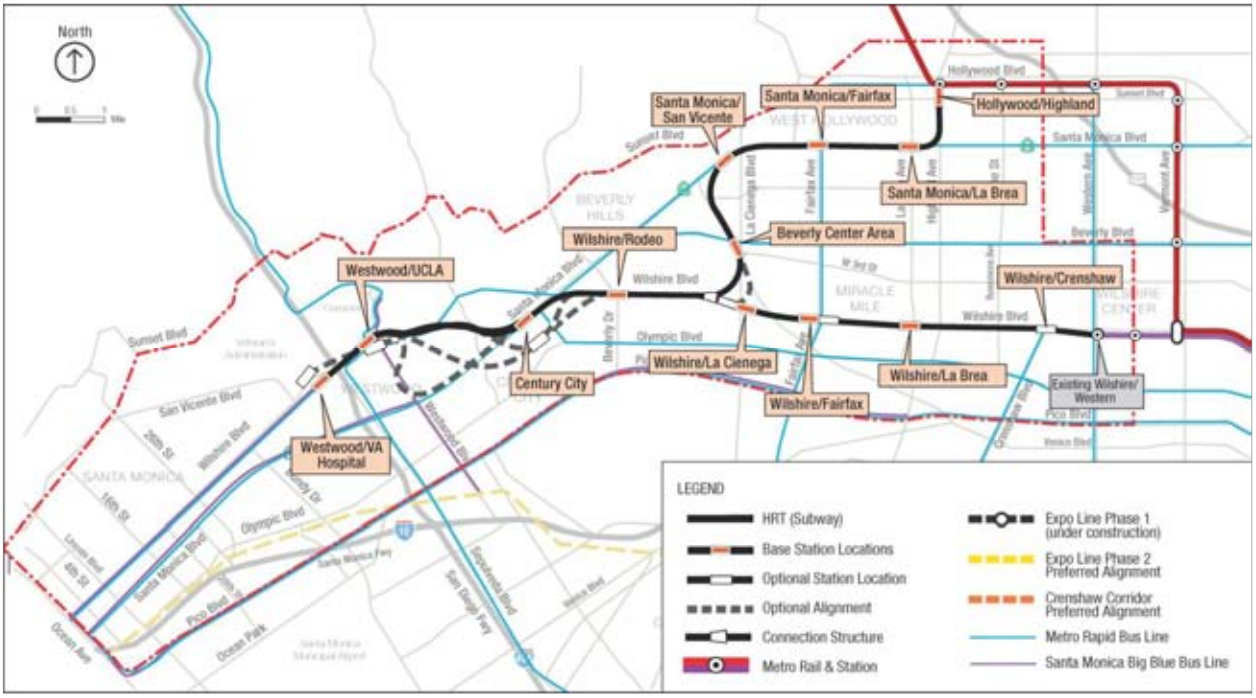

Figure 2-4. Alternative 4—Westwood/VA Hospital Extension plus West Hollywood Extension

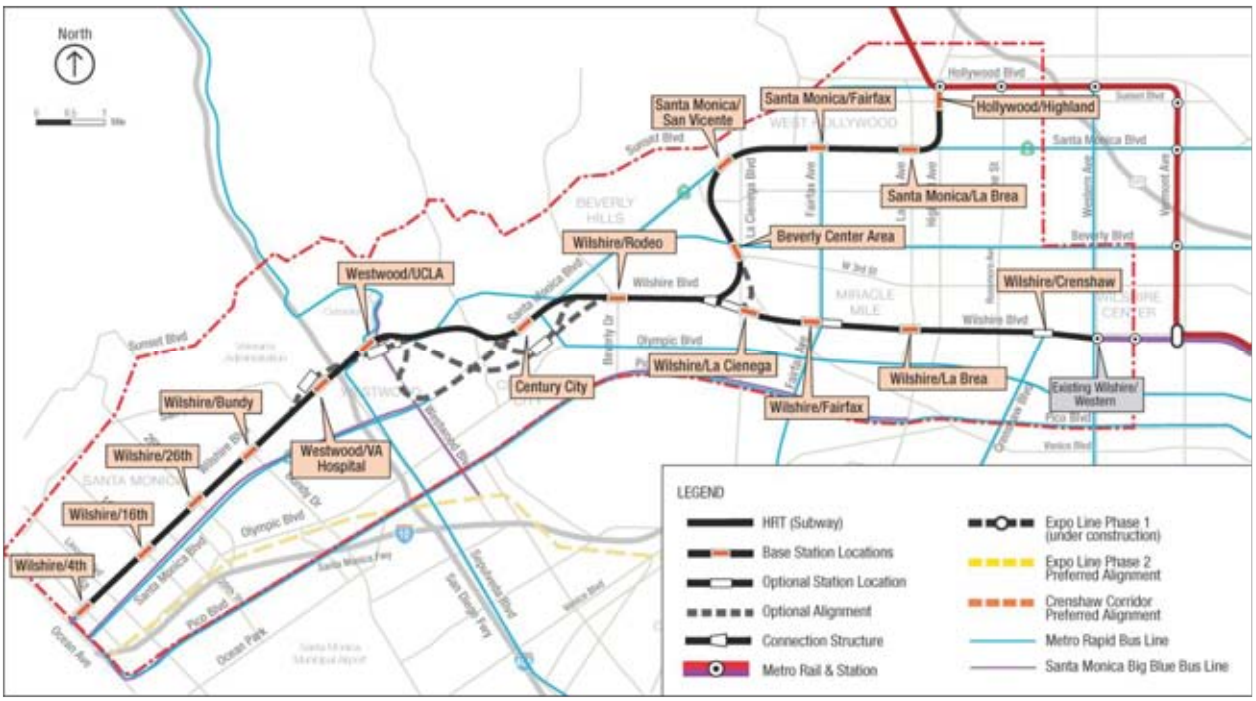

Figure 2-5. Alternative 5—Santa Monica Extension plus West Hollywood Extension

2.4 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.

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
Base Stations					
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				●	●
Station Options					
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		●	●	●	●

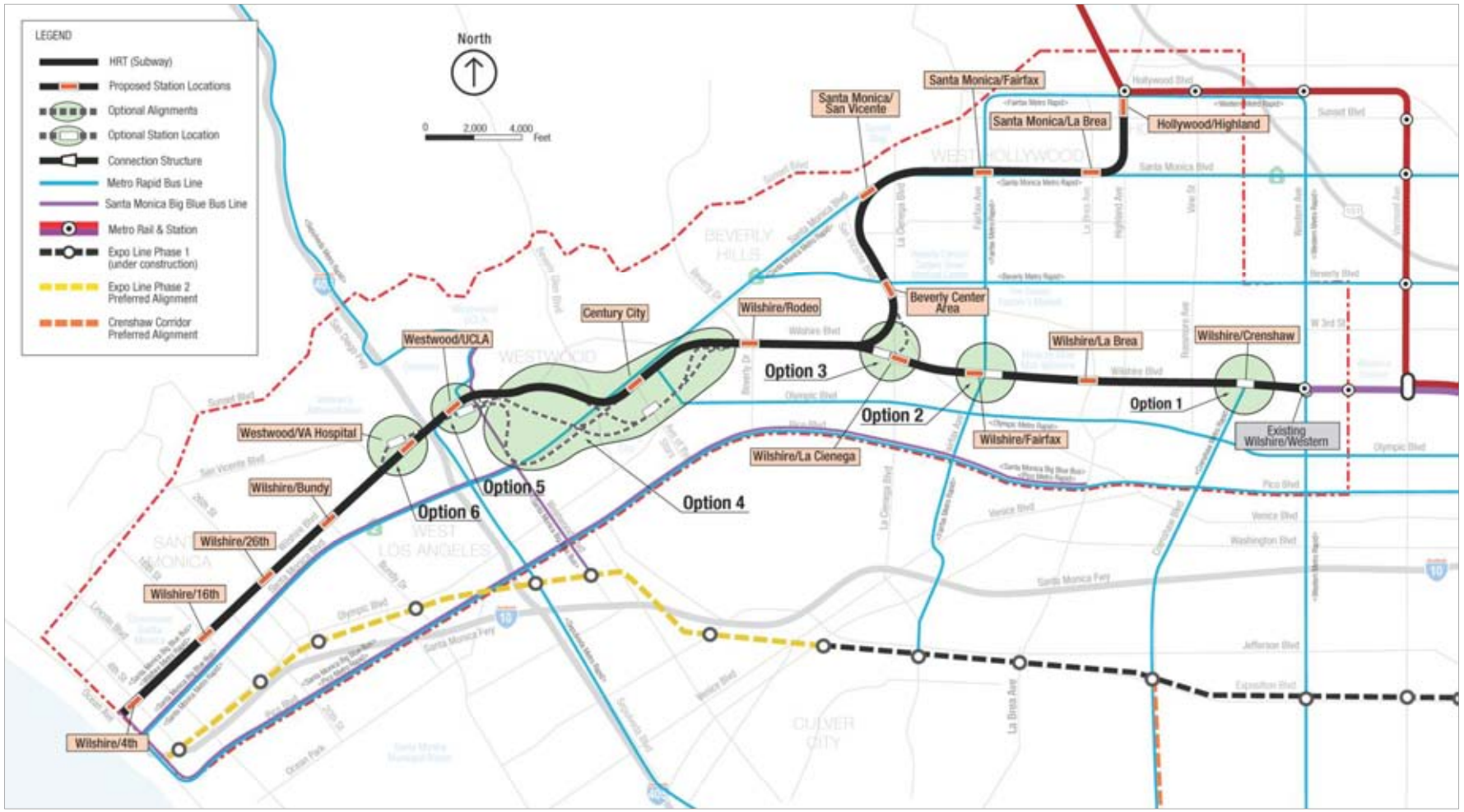

Figure 2-6. Station and Alignment Options

2.4.1 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).

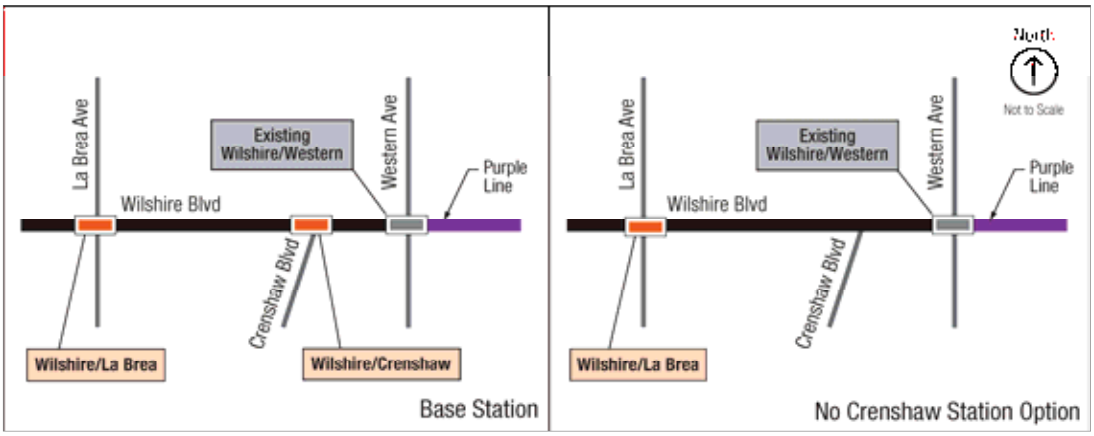

Figure 2-7. Option 1—No Wilshire/Crenshaw Station Option

2.4.2 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.

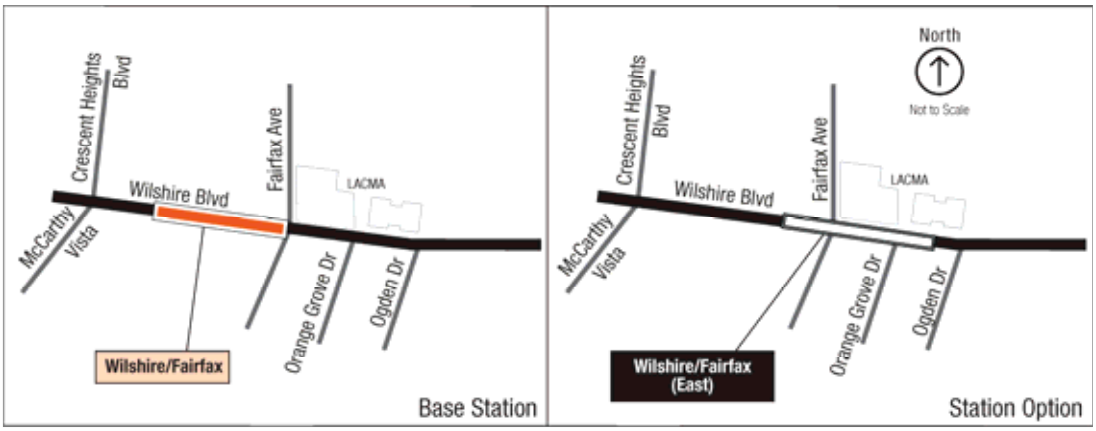

Figure 2-8. Option 2—Fairfax Station Option

2.4.3 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.

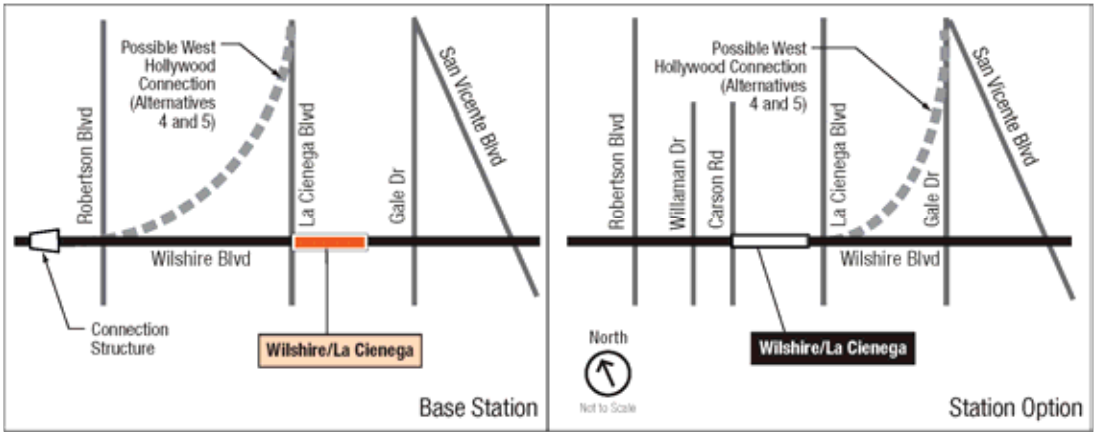

Figure 2-9. Option 3—La Cienega Station Option

2.4.4 Option 4—Century City Station and Segment Options

2.4.4.1 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—Three 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.

2.4.4.2 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.

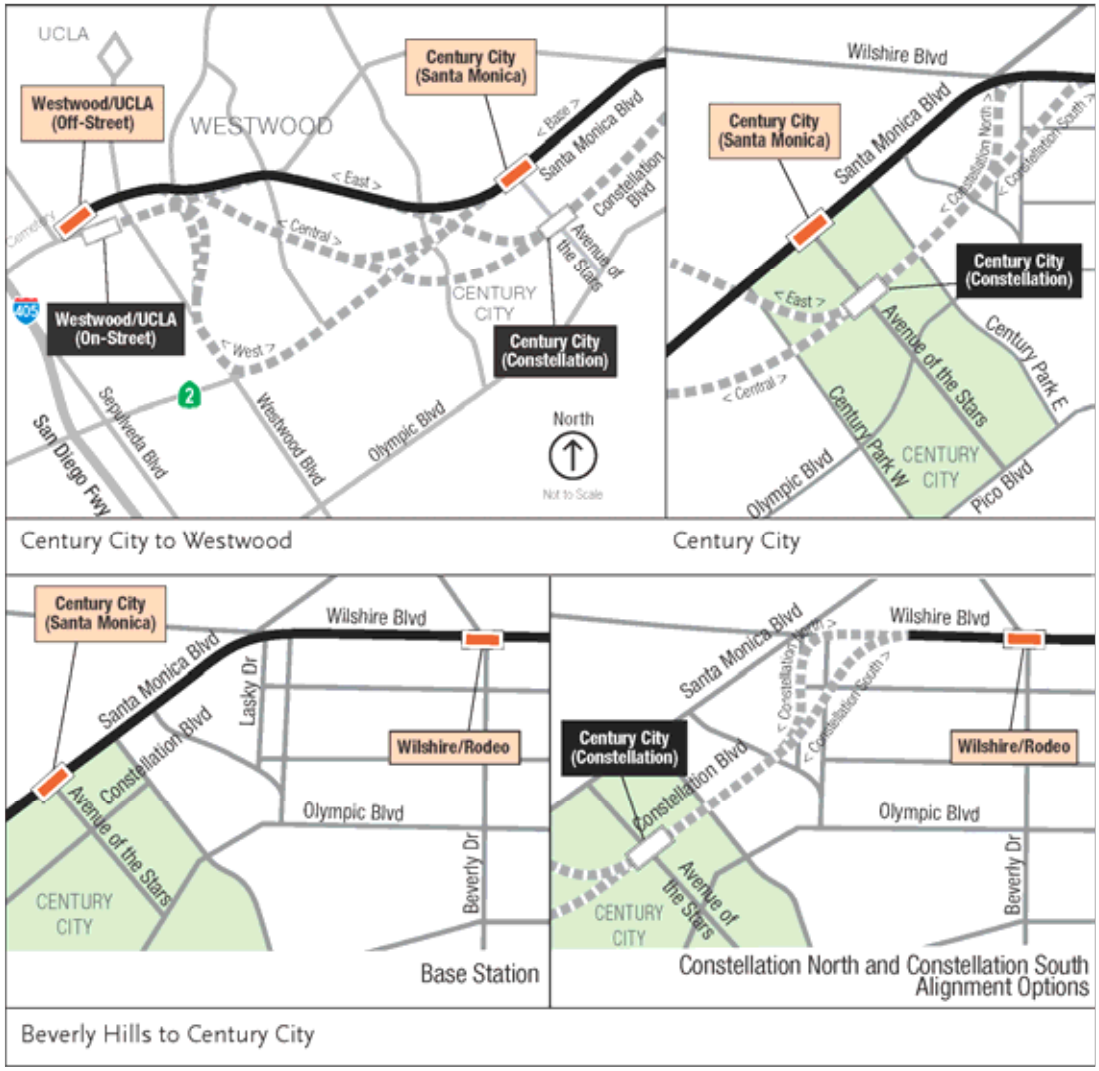

Figure 2-10. Century City Station Options

2.4.5 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

2.4.6 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.

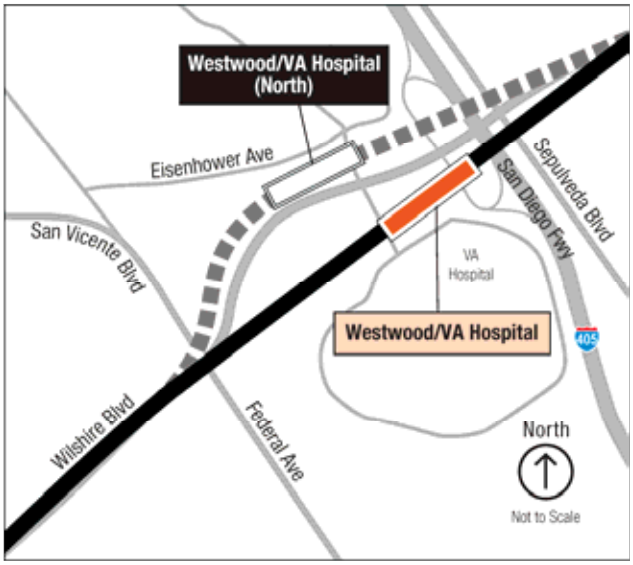

Figure 2-12. Option 6—Westwood/VA Hospital Station North

2.5 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.

2.6 Other Components of the Build Alternatives

2.6.1 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.

2.6.2 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.

2.6.3 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

2.6.4 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	Alternative 1 Westwood/ UCLA Extension	Alternative 2 Westwood/ VA Hospital Extension	Alternative 3 Santa Monica Extension	Alternative 4 Westwood/VA Hospital Extension Plus West Hollywood Extension	Alternative 5 Santa Monica Extension Plus West Hollywood Extension
Special Trackwork Locations—Base Trackwork Alternatives					
Wilshire/Crenshaw	None	None	None	None	None
Wilshire/La Brea	Double Crossover	Double Crossover	Double Crossover	Double Crossover	Double Crossover
Wilshire/Fairfax	None *MOS 1 Only: Terminus Station with Tail tracks*	None *MOS 1 Only: Terminus Station with Tail tracks*	None *MOS 1 Only: Terminus Station with Tail tracks*	None *MOS 1 Only: Terminus Station with Tail tracks*	None *MOS 1 Only: Terminus Station with Tail tracks*
Wilshire/La Cienega	None	None	None	None	None
Station Option 3 - Wilshire/La Cienega West	Turnouts	Turnouts	Turnouts		
Wilshire/Robertson Connection Structure	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
Wilshire/Rodeo	None	None	None	None	None
Century City	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*
Westwood/UCLA	End Terminal with Double Crossover and tail tracks	Double Crossover	Double Crossover	Double Crossover	Double Crossover
Westwood/VA Hospital	N/A	End Terminal with Turnouts and tail tracks	Turnouts	End Terminal with Turnouts and tail tracks	Turnouts
Wilshire/Bundy	N/A	N/A	None	N/A	None
Wilshire/26th	N/A	N/A	None	N/A	None
Wilshire/16th	N/A	N/A	None	N/A	None
Wilshire/4th	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
Hollywood/ Highland	N/A	N/A	N/A	Double Crossover and tail tracks	Double Crossover and tail tracks
Santa Monica/La Brea	N/A	N/A	N/A	None	None
Santa Monica/Fairfax	N/A	N/A	N/A	None	None
Santa Monica/ San Vicente	N/A	N/A	N/A	Double Crossover	Double Crossover
Beverly Center	N/A	N/A	N/A	None	None
Additional Special Trackwork Location (Optional Trackwork)					
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	Pocket Track	Pocket Track	Pocket Track	Pocket Track	Pocket Track
Wilshire/26th	N/A	N/A	Double Crossover	N/A	Double Crossover

2.6.5 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.

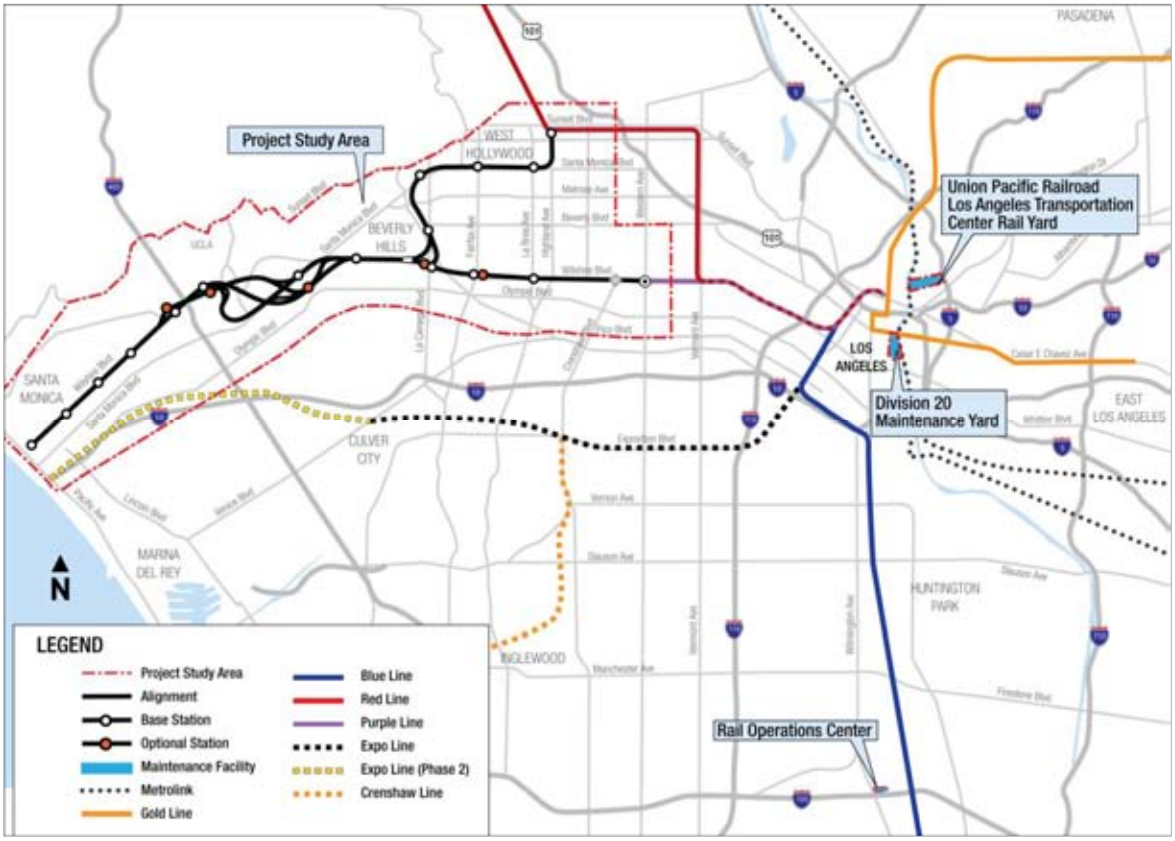

Figure -2-13: Location of the Rail Operations Center and Maintenance Yards

2.6.6 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:

- 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 (Figure 2-14).

Figure 2-14. UP Railroad Rail Bridge

Figure 2-15. Maintenance Yard Options

2.7 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.

2.7.1 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.

2.7.2 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 fiscal and economic impacts has been established by both federal and state guidelines, 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. The primary federal guidance is provided by the FHWA Technical Advisory T 6640.8A, "Guidance for Preparing and Processing Environmental and Section 4(f) Documents" dated October 30, 1987. Section V of this document addresses economic impacts. The guidance directs preparers of EIS documents to discuss foreseeable economic impacts.

Potential impacts to be considered include the following topics: (1) The economic impacts on the regional and/or local economy such as the effects of the proposed alternatives on development, tax revenues and public expenditures, employment opportunities, accessibility, and retail sales; (2) The impacts on the economic vitality of existing highway-related businesses and resultant impacts on the local economy; and (3) Impacts of the proposed action on established business districts.

3.2 CEQA Guidance

Pursuant to the CEQA guidelines, economic or social effects of a project that are not related to physical changes in the environment shall not be treated as significant effects on the environment, but may be used to determine the significance of physical changes caused by the project (Section 15131(b)).

4.0 ANALYSIS METHODOLOGY

Information used to conduct this analysis comes from a wide variety of sources. Statistics include those published by the U.S. Census Bureau, U.S. Department of Labor – Bureau of Labor Statistics, California Employment Development Department, and the Southern California Association of Governments (SCAG). Local government web pages for the Cities of Los Angeles, West Hollywood, Beverly Hills, Santa Monica, as well as portions of unincorporated Los Angeles County were consulted to obtain general economic information and copies of current 2008-2009 adopted budgets. The number of direct, indirect, and induced jobs generated by the proposed alternatives as a result of both capital and operation and maintenance (O&M) expenditures was estimated using employment multipliers provided by the Bureau of Economic Analysis RIMS II Economic multipliers for Los Angeles County and for the State of California. These multipliers are derived by the U.S. Bureau of Economic Analysis (BEA) from detailed input output models of the economy, adjusted for a specific geographic area, and are used to estimate economic output, value added, employment, and household income impacts.

Property tax losses to each jurisdiction are based on the current assessed values of the parcels identified at this stage of the study for acquisition, combined with current property tax rates for the respective jurisdictions. The taxable values for these parcels have been obtained from the Los Angeles County Assessors records for the fiscal year as provided in Damar, a ROM-encoded real estate database for the County produced by TRW-REDI Property Data. The relevant data taken from the TRW-REDI files will include property taxes paid in the fiscal year, city location, property ownership, and land use and building square footage.

5.0 EXISTING CONDITIONS/AFFECTED ENVIRONMENT

5.1 Study Area

The Westside Subway Extension Study Area is located in one of the country's largest metropolitan areas, Los Angeles. The proposed Westside Subway Extension Project is in western Los Angeles County and includes portions of five jurisdictions: the Cities of Los Angeles, West Hollywood, Beverly Hills, Santa Monica, as well as portions of unincorporated Los Angeles County.

This section will describe fiscal conditions and trends in areas of the County, Cities of Los Angeles, Beverly Hills, West Hollywood, and Santa Monica, based on employment and revenue data from SCAG. It will also report local revenues from property taxes.

5.2 Employment and Economic Activity

5.2.1 Regional Economy

Over the past decade, total employment growth in the SGAC region has remained relatively flat. While construction, trade and manufacturing jobs have decreased over this time period, computer-related investment in the region has bolstered job growth in the technology and information sector, which has increased at a compound annual growth rate (CAGR) of 1.0% from 2000 to 2009. Regional capital investments in biotechnological research have also increased employment in the health care services sector at a CAGR of 1.2%.

Table 5-1: SCAG Regional Jobs by Major Industry Group, 2000-2009

Industry Group	Year 2000	Year 2009	2000-2009 Change	Compound Annual Growth Rate %
Total, All Industries	6,831,100	6,711,700	-119,400	-0.2%
Total Nonfarm	6,762,500	6,653,100	-109,400	-0.2%
Mining and Logging	8,000	8,500	500	0.7%
Construction	305,200	273,100	-32,100	-1.2%
Manufacturing	198,700	181,800	-16,900	-1.0%
Trade, Transportation & Utilities	125,100	109,800	-15,300	-1.4%
Information	174,700	190,900	16,200	1.0%
Financial Activities	59,700	53,000	-6,700	-1.3%
Professional & Business Services	77,000	71,900	-5,100	-0.8%
Educational & Health Services	54,600	60,600	6,000	1.2%
Leisure & Hospitality	85,500	81,600	-3,900	-0.5%
Other Services	39,400	34,500	-4,900	-1.5%
Government	82,500	80,000	-2,500	-0.3%

Source: State of California, Department of Finance, Labor Force data .....Benchmark....

Note: if 2009 data not available, year 2008 data will be used for all existing conditions

Employment in the Los Angeles County has been declining over the past decade, at an annual rate of 0.7%. The County was relatively hard-hit by the recent economic downturn,

losing over 19,000 jobs in the finance and construction sectors in the first half of 2009. However, job growth in the county is expected to rebound in 2010, driven by the service industries, particularly the high-tech information and professional services sector.

Table 5-2: Employment Growth, 2000-2009

County	Year 2000	Year 2009	2000-2009 Change	Compound Annual Growth Rate, %
Los Angeles	4,079,800	3,835,600	-244,200	-0.7%
Orange	1,396,500	1,375,400	-21,100	0.2%
San Bernardino & Riverside	1,010,100	1,147,100	137,000	1.4%
Ventura	294,300	299,000	4,700	0.2%
Imperial	50,400	54,600	4,200	0.9%
SCAG Region	6,831,100	6,711,100	-119,400	-0.2%

Source: State of California, Department of Finance, Labor Force data ……Benchmark….

5.2.2 Local Economy

At the present, employment densities in the project area are among the highest in the metropolitan region, averaging approximately 12,500 jobs per square mile. These high population and employment concentrations make the project area one of the densest places to live and work in the region.

Presented below are the employment growth rates in the cities within the project area.

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

City	Year 2000	Year 2009	2000-2009 Change	Compound Annual Growth Rate, %
Los Angeles	1,673,500	1,710,700	37,200	0.2%
West Hollywood	24,800	24,300	-500	-0.2%
Beverly Hills	17,500	17,900	400	0.3%
Santa Monica	52,800	51,600	1,200	-0.3%

Source: State of California, Department of Finance, Labor Force data ……Benchmark….

5.3 Tax Sources & Revenues

In 2009, total Los Angeles County tax revenues increased by $174 million—a nominal increase of 4.6% from the previous year.

5.3.1 Property Taxes

Property taxes fell slightly in 2009 to $12.3 billion but remain the largest local tax revenue source for the county.

The decrease in property taxes is due to falling assessed values of property in the county. In 2009, total assessed value was $1.108 trillion, a decrease of $1 billion (-0.5%) from the previous year. This decrease in value is largely the result of changes in ownership and, in turn, base year values.

6.0 ENVIRONMENTAL IMPACT/ENVIRONMENTAL CONSEQUENCES

This section addresses direct, short term, and long term economic and fiscal impacts of the project alternatives. Direct impacts, which are primarily felt in the short to medium time frames, include losses from property acquisitions for right of way, and employment losses from associated business displacements. The potential losses of tax revenues to local jurisdictions are estimated from current and expected future assessed values of acquisition properties. Other short term economic impacts are those associated with construction of the alternatives, including employment and personal income.

Long term impacts include direct employment from increased operations and maintenance of the alternatives, as well as longer term economic development impacts due to improved accessibility and reduced congestion, and station area development impacts.

For purposes of this environmental document, a direct loss of jobs associated with ROW takings in excess of one percent of project Study Area employment would be considered an adverse effect under NEPA (significant effect under CEQA). The project Study Area is as defined in Section 2 of this report. Property tax losses in excess of one percent of the project Study Area tax base would be considered an adverse effect under NEPA (significant effect under CEQA). It should be noted that any losses estimated below from direct property acquisitions will overstate the long term adverse impacts, as general economic growth and development in the corridor and the region – due to improved accessibility and station area development clustering – will result in positive employment and fiscal gains, but these have been addressed qualitatively in this chapter.

6.1 Direct Impacts from Property Acquisition and Business Displacements

Property acquisitions for right-of-way and construction staging areas will result in two major long-term impacts on the project Study Area. First, the acquisition will lead to property tax revenue losses to the County and local jurisdictions in which the land parcels are located. Second, job losses may be incurred within the project Study Area as businesses on the acquired parcels are required to close-down permanently or relocate to beyond the local jurisdictions.

This section describes the potential impact of the property acquisitions on the fiscal conditions and employment of the County, cities (Los Angeles, Beverly Hills, West Hollywood and Santa Monica) and other jurisdictions (including special district, school district and redevelopment agencies) within the project Study Area.

6.1.1 Tax Revenue Impacts

Results of the fiscal impact analysis show that none of the five full alternatives or the two MOS alternatives will lead to property tax losses in excess of one percent of the project Study Area tax base, and thus are not expected to have an adverse effect under NEPA (significant effect under CEQA).

6.1.1.1 Methodology and Major Assumptions

The fiscal impact was evaluated based on the land acquisitions required by the project. For each alternative, the parcels that are slated for "fee simple" acquisition were identified and their assessed values were obtained from the LA County Assessor database. The taxable value was then multiplied by the corresponding FY 2009-2010 tax rate (see Table 6-1) to obtain the tax revenue of the parcel. Partial acquisitions were treated as full acquisitions for the purpose of computing tax revenue of each parcel. Tax revenue for all the "fee simple" parcels were then summed for each alternative.

6.1.1.2 Proposition 13

All real property (land, improvement and fixtures) in California is subject to Article XIII (A), placed in the Constitution by Proposition 13 of the election of June 6, 1978. Proposition 13 controls the growth of property taxes by restricting the tax rate to no more than one percent (with limited exceptions) of fair market value, and by not allowing reappraisal of property except upon change of ownership or completion of new construction. Proposition 13 allows the one percent tax rate to be exceeded as necessary to retire voter-approved bonded indebtedness incurred prior to its enactment and also to certain later-approved indebtedness. In most of Los Angeles County, the total tax rate is capped at 1.25%. The tax rates that were applied in this analysis are as follows:

Table 6-1: LA County Property Tax Rates, FY 2009-2010

City	General Tax Levy	City Debt Service Tax	Unified Schools Debt Service Tax	Community College Debt Service Tax	Metro Water District Debt Service Tax	Total Tax Rate
Beverly Hills	1%	0.0147%	0.0453%	0.0231%	0.0043%	1.0874%
Los Angeles	1%	0.0412%	0.1518%	0.0231%	0.0043%	1.2204%
LA Wilshire	1%	0.0412%	0.1518%	0.0231%	0.0043%	1.2204%
Santa Monica	1%	0.0119%	0.0474%	0.0503%	0.0043%	1.1139%
W. Hollywood	1%	0.0000%	0.1518%	0.0231%	0.0043%	1.1792%

Source: LA County Auditor-Controller

Presented in Sections 6.1.1.1 to 6.1.1.7 are the property tax revenues from the parcels that are to be acquired for each of the alternatives. A summary of all alternatives is provided in Table 6-12 at the end of the section.

6.1.1.3 Alternative 1—Westwood/UCLA Extension

This alternative, which involves an alignment that is 8.78 miles in length, requires the full or partial acquisition of 42 parcels from private owners. Nearly 75% of these parcels are of commercial use.

In FY 2009-2010, the property taxes levied on these parcels amount to $1.9 million. Should this alternative be selected, the County of Los Angeles would expect to lose tax revenue from these parcels, which represents approximately 0.15% of total property taxes ($1.3 billion) levied in the project Study Area.

Since the fiscal impact of this alternative is less than 1%, this alternative is NOT considered to have an adverse effect under NEPA (significant effect under CEQA).

See Table 6-2 for the property taxes levied associated with each parcel to be acquired for Alternative 1.

Table 6-2: Property Tax Assessments for Alternative 1 – Westwood/UCLA Extension

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
3818 Wilshire Boulevard	Los Angeles	$3,094
3820 Wilshire Boulevard	Los Angeles	$3,453
3828 Wilshire Boulevard	Los Angeles	$2,942
3832 Wilshire Boulevard	Los Angeles	$23,943
3846 Wilshire Boulevard	Los Angeles	$11,288
3835 Ingraham Street	Los Angeles	$6,802
3841 Ingraham Street	Los Angeles	$6,802
3847 Ingraham Street	Los Angeles	$5,603
675 Crenshaw Boulevard	Los Angeles	$11,226
5220 Wilshire Boulevard	Los Angeles	$84,197
5200 Wilshire Boulevard	Los Angeles	$126,479
711 S La Brea Ave	Los Angeles	$33,414
5318 Wilshire Boulevard	Los Angeles	$11,966
729 S La Brea Ave	Los Angeles	$11,690
718 S Detroit Street	Los Angeles	$2,377
722 S Detroit Street	Los Angeles	$1,857
726 S Detroit Street	Los Angeles	$1,857
6000 Wilshire Boulevard	Los Angeles	$56,765
6010 Wilshire Boulevard	Los Angeles	$9,062
6018 Wilshire Boulevard	Los Angeles	$14,960
6030 Wilshire Boulevard	Los Angeles	$74,915
6111 Wilshire Boulevard	Los Angeles	$13,110
6121 Wilshire Boulevard	Los Angeles	*
6133 Wilshire Boulevard	Los Angeles	$11,690
6139 Wilshire Boulevard	Los Angeles	$11,690
6155 Wilshire Boulevard	Los Angeles	$43,286
6120 Wilshire Blvd	Los Angeles	$18,499
6122 Wilshire Blvd	Los Angeles	$41,074
6130 Wilshire Blvd	Los Angeles	$4,019
6146 Wilshire Blvd	Los Angeles	$4,856
AIN 5088002036[1]	Los Angeles	$3,810
8400 Wilshire Boulevard	Beverly Hills	$17,649
8412 Wilshire Boulevard	Beverly Hills	$3,596
8420 Wilshire Boulevard	Beverly Hills	$7,681
AIN: 4333029014[1]	Beverly Hills	$1,867
8471 Wilshire Boulevard	Beverly Hills	$21,956
8755 Wilshire Blvd	Beverly Hills	$4,954
8767 Wilshire Boulevard	Beverly Hills	$10,089

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
9430 Wilshire Boulevard	Beverly Hills	$135,762
9460 Wilshire Boulevard[2]	Beverly Hills	$222,344
1100 Veteran Ave[2]	Los Angeles	**
10990 Wilshire Blvd[2]	Los Angeles	$814,261
AIN 43650089041 (VA Medical Center)[1,2]	Los Angeles	**
Alternative 1 GRAND TOTAL		$1,896,885

Source: Los Angeles County Assessor

[1]Denotes parcels that do not have a recorded address in the county database.
[2]Denotes parcels that would be acquired partially. The property at 1100 Veteran Ave and the VA Medical Center will require a temporary construction easement during station construction and a permanent easement for station entrances.
*Assessed value not available
**Assessed value not available (government-owned property)
AIN = Assessor Identification Number

6.1.1.4 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. The development of this extension only requires one additional parcel compared to Alternative 1. Since this additional parcel is the property of the US government, the fiscal impact of Alternative 2 is the same as that of Alternative 1.

Therefore, Alternative 2 would also result in the loss of approximately 0.15% of property tax revenue in the project Study Area and will NOT have an adverse effect under NEPA (significant effect under CEQA).

6.1.1.5 Alternative 3-Santa Monica Extension

Alternative 3, the Santa Monica Extension, follows the same alignment as Alternative 2, but extends beyond the Westwood/VA Hospital station to terminate instead at Santa Monica/4th station. This extension beyond Alternative 2's alignment requires the acquisition of 19 additional parcels from private owners. These parcels are also primarily commercial uses.

The tax revenue from these additional parcels is approximately $502,890 in FY 2009-2010. Adding the parcels from Alternative 2, the total tax revenue from all parcels required for the Santa Monica Alternative is $2.4 million, approximately 0.18% of total property tax levied in the project Study Area. Therefore, this alternative is deemed to NOT have an adverse effect under NEPA (significant effect under CEQA).

See Table 6-3 for the property taxes levied on the additional parcels (in addition to the parcels listed for Alternatives 1 and 2) required for the Santa Monica Extension Alternative.

Table 6-3: Property Tax Assessments for Alternative 3 – Santa Monica Extension (Properties to be acquired in addition to those required in Alternative 1 & 2)

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
12071 Wilshire Boulevard	Los Angeles	$3,908
12081 Wilshire Boulevard	Los Angeles	$27,640
AIN 4265016050[1]	Los Angeles	$9,657
12036 Wilshire Boulevard	Los Angeles	$3,022
12040 Wilshire Boulevard	Los Angeles	$3,020
12048 Wilshire Boulevard	Los Angeles	$3,020
12054 Wilshire Boulevard	Los Angeles	$1,659
2601 Wilshire Boulevard	Los Angeles	$15,953
2525 Wilshire Boulevard	Santa Monica	$7,762
2515 Wilshire Boulevard	Santa Monica	$4,074
2501 Wilshire Boulevard	Santa Monica	$7,412
1511 Wilshire Boulevard	Santa Monica	$3,028
1501 Wilshire Boulevard	Santa Monica	$50,854
AIN 4281011010[1]	Santa Monica	$2,078
1433 Wilshire Boulevard	Santa Monica	$6,850
1423 Wilshire Boulevard	Santa Monica	$249,179
1419 Wilshire Boulevard	Santa Monica	$4,156
412 Wilshire Boulevard	Santa Monica	$12,476
1207 4th Street	Santa Monica	$87,142
Total		$502,890
Alternative 3 GRAND TOTAL (Alternative 2 + Alternative 3)		$2,399,775

Source: Los Angeles County Assessor

[1]Denotes parcels that do not have a recorded address in the county database.
AIN = Assessor Identification Number

6.1.1.6 Alternative 4-Westwood/VA Hospital Extension plus West Hollywood Extension

Alternative 4 requires an additional 5.09 miles and the acquisition of a total of 67 parcels from private ownership. Over 80% of the parcels in this alternative are of commercial use.

The total property tax from the parcels associated with this alternative amount to approximately $2.4 million in FY 2009-2010, representing 0.19% of the project Study Area's property tax revenues. Therefore, Alternative 4 is considered to NOT have an adverse effect under NEPA (significant effect under CEQA).While the construction of this alternative requires many of the same parcels as Alternative 1, the project's requirements from these parcels are not the same for both alternatives. For example, there are instances where a parcel for Alternative 1 requires only for temporary easement but in Alternative 4, needs to be acquired fee simple. For this alternative, it will be clearer to present the *total* parcels to be acquired (see

Table 6-4), as opposed to incremental parcels as presented for Alternatives 2 and 3.

Table 6-4: Property Tax Assessments for Westwood/VA Hospital Extension plus West Hollywood Extension (TOTAL Parcels to be acquired)

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
3818 Wilshire Boulevard	Los Angeles	$3,094
3820 Wilshire Boulevard	Los Angeles	$3,453
3828 Wilshire Boulevard	Los Angeles	$2,943
3832 Wilshire Boulevard	Los Angeles	$23,947
3846 Wilshire Boulevard	Los Angeles	$11,287
3835 Ingraham Ave	Los Angeles	$6,802
3841 Ingraham Ave	Los Angeles	$6,802
3847 Ingraham Ave	Los Angeles	$5,603
675 Crenshaw Boulevard	Los Angeles	$11,225
5200 Wilshire Boulevard	Los Angeles	$126,479
5220 Wilshire Boulevard	Los Angeles	$84,197
711 S La Brea Ave	Los Angeles	$33,414
5318 Wilshire Boulevard	Los Angeles	$11,965
729 S La Brea Ave	Los Angeles	$2,986
718 S Detroit Street	Los Angeles	$2,377
722 S Detroit Street	Los Angeles	$1,857
726 S Detroit Street	Los Angeles	$1,857
6000 Wilshire Boulevard	Los Angeles	$56,765
6010 Wilshire Boulevard	Los Angeles	$9,061
6018 Wilshire Boulevard	Los Angeles	$14,959
6030 Wilshire Boulevard	Los Angeles	$74,915
6111 Wilshire Boulevard	Los Angeles	$13,110
6121 Wilshire Blvd	Los Angeles	*
6133 Wilshire Boulevard	Los Angeles	$11,690
6139 Wilshire Blvd	Los Angeles	$11,690
6155 Wilshire Boulevard	Los Angeles	$43,286
6120 Wilshire Blvd	Los Angeles	$18,499
6122 Wilshire Blvd	Los Angeles	$41,074
6130 Wilshire Blvd	Los Angeles	$4,019
6146 Wilshire Blvd	Los Angeles	$4,856
AIN 5088002036[1]	Los Angeles	$3,810
8400 Wilshire Boulevard	Beverly Hills	$17,648
8412 Wilshire Boulevard	Beverly Hills	$3,595
8420 Wilshire Boulevard	Beverly Hills	$7,681
AIN: 4333029014[1]	Beverly Hills	$1,867
8471 Wilshire Boulevard	Beverly Hills	$21,955
8755 Wilshire Blvd	Beverly Hills	$4,954
8767 Wilshire Blvd	Beverly Hills	$10,089
9430 Wilshire Boulevard	Beverly Hills	$135,762
9460 Wilshire Boulevard[2]	Beverly Hills	$222,344
1100 Veteran Ave[2]	Los Angeles	**

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
10990 Wilshire Boulevard[2]	Los Angeles	$814,261
AIN: 4365008904[1] (VA Medical Center)[2]	Los Angeles	**
6768 Hollywood Blvd	Los Angeles	$33,028
1651 S Highland Ave	Los Angeles	$4,500
1639 N Highland Ave	Los Angeles	$8,974
1622 N Highland Ave	Los Angeles	$28,036
1610 N Highland Ave	Los Angeles	$39,019
1604 N Highland Ave	Los Angeles	$61,582
1600 N Highland Ave	Los Angeles	$19,350
6831 Hawthorn Ave	Los Angeles	$5,950
AIN: 5548006001[1]	Los Angeles	$12,251
7073 Santa Monica Boulevard	West Hollywood	$73,612
AIN: 5531014021[1]	West Hollywood	$9,194
1111 N La Brea Ave	West Hollywood	$95,262
7857 Santa Monica Boulevard	West Hollywood	$9,027
7881 Santa Monica Boulevard	West Hollywood	$3,356
1129 N Orange Grove Ave	West Hollywood	$12,998
1116 N Fairfax Ave	West Hollywood	$1,104
1130 N Fairfax Ave	West Hollywood	$4,353
1140 N Fairfax Ave	West Hollywood	$21,587
7854 Santa Monica Boulevard	West Hollywood	$2,781
7868 Santa Monica Boulevard	West Hollywood	$1,960
7870 Santa Monica Boulevard	West Hollywood	$35,039
8741 Santa Monica Boulevard	West Hollywood	$30,425
8730 Santa Monica Boulevard	West Hollywood	$12,220
301 La Cienega Boulevard	Los Angeles	$24,609
Alternative 4 GRAND TOTAL		$2,438,395

Source: Los Angeles County Assessor

[1]Denotes parcels that do not have a recorded address in the county database.
[2]Denotes parcels that would be acquired partially. The property at 1100 Veteran Ave and the VA Medical Center will require a temporary construction easement during station construction and a permanent easement for station entrances.
*Assessed value not available
**Assessed value not available (government-owned property)
AIN = Assessor Identification Number

6.1.1.7 Alternative 5-Santa Monica Extension plus West Hollywood Extension

As a combination of the Santa Monica Extension of Alternative 3 plus the West Hollywood Extension described in Alternative 4, Alternative 5 is the longest and in total, requires the acquisition of an additional 19 parcels from private ownership, compared to Alternative 4. Over 90% of these parcels are commercial property.

In FY 2009-2010, the total property tax from the parcels associated with this alternative is approximately $2.9 million, representing 0.23% of total tax revenues of the project Study Area. Therefore, Alternative 5 is considered to NOT have an adverse effect under NEPA (significant effect under CEQA).

Table 6-5: Property Tax Assessments for Santa Monica Extension plus West Hollywood Extension (Additional parcels to be acquired in additional to those necessary for Alternative 4)

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
12071 Wilshire Boulevard	Los Angeles	$3,908
12081 Wilshire Boulevard	Los Angeles	$27,640
AIN 4265016050[1]	Los Angeles	$9,657
12036 Wilshire Boulevard	Los Angeles	$3,022
12040 Wilshire Boulevard	Los Angeles	$3,020
12048 Wilshire Boulevard	Los Angeles	$3,020
12054 Wilshire Boulevard	Los Angeles	$1,659
2601 Wilshire Boulevard	Santa Monica	$15,953
2525 Wilshire Boulevard	Santa Monica	$7,762
2515 Wilshire Boulevard	Santa Monica	$4,074
2501 Wilshire Boulevard	Santa Monica	$7,412
1511 Wilshire Boulevard	Santa Monica	$3,028
1501 Wilshire Boulevard	Santa Monica	$50,854
AIN 4281011010[1]	Santa Monica	$2,078
1433 Wilshire Boulevard	Santa Monica	$6,850
1423 Wilshire Blvd	Santa Monica	$249,179
1419 Wilshire Boulevard	Santa Monica	$4,156
412 Wilshire Boulevard	Santa Monica	$12,476
1207 4th Street	Santa Monica	$87,142
Total		$502,890
Alternative 5 GRAND TOTAL		$2,941,285

Source: Los Angeles County Assessor

[1]Denotes parcels that do not have a recorded address in the county database.
AIN = Assessor Identification Number

6.1.1.8 MOS 1-Fairfax Extension

MOS 1 follows the same alignment as Alternative 1 but terminates at the Wilshire/Fairfax station instead of the Westwood/UCLA station. This alignment requires the fee simple acquisition of 31 parcels, as listed in Table 6-6. The FY 2009-2010 property tax revenue from these parcels total $648,022, representing only 0.05% of the project Study Area's property tax revenue. Therefore, MOS 1 does NOT have an adverse impact under NEPA (significant impact under CEQA).

Table 6-6: Property Tax Assessments for Acquired Properties MOS 1

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
3818 Wilshire Blvd	Los Angeles	$3,094
3820 Wilshire Blvd	Los Angeles	$3,453
3828 Wilshire Blvd	Los Angeles	$2,942
3832 Wilshire Blvd	Los Angeles	$23,943
3846 Wilshire Blvd	Los Angeles	$11,288
3835 Ingraham St	Los Angeles	$6,802
3841 Ingraham St	Los Angeles	$6,802
3847 Ingraham St	Los Angeles	$5,603
675 Crenshaw Blvd	Los Angeles	$11,226
5200 Wilshire Blvd	Los Angeles	$126,479
5220 Wilshire Blvd	Los Angeles	$84,197
711 S La Brea Ave	Los Angeles	$33,414
5318 Wilshire Blvd	Los Angeles	$11,965
729 S La Brea Ave	Los Angeles	$2,986
718 S Detroit St	Los Angeles	$2,377
722 S Detroit St	Los Angeles	$1,857
726 S Detroit St	Los Angeles	$1,857
6000 Wilshire Blvd	Los Angeles	$56,765
6010 Wilshire Blvd	Los Angeles	$9,062
6018 Wilshire Blvd	Los Angeles	$14,960
6030 Wilshire Blvd	Los Angeles	$74,915
6111 Wilshire Blvd	Los Angeles	$13,110
6121 Wilshire Blvd	Los Angeles	*
6133 Wilshire Boulevard	Los Angeles	$11,690
6155 Wilshire Boulevard	Los Angeles	$43,286
6139 Wilshire Boulevard	Los Angeles	$11,690
6120 Wilshire Blvd	Los Angeles	$18,499
6122 Wilshire Blvd	Los Angeles	$41,074
6130 Wilshire Blvd	Los Angeles	$4,019
6146 Wilshire Blvd	Los Angeles	$4,856
AIN 5088002036[1]	Los Angeles	$3,810
Total		$648,021

Source: Los Angeles County Assessor

[1]Denotes parcels that do not have a recorded address in the county database.
*Assessed value not available
AIN = Assessor Identification Number

6.1.1.9 MOS 2-Century City Extension

MOS 2 follows the same alignment as Alternative 1 but terminates at the Century City Station on Santa Monica Boulevard instead of the Westwood/UCLA station. This alignment requires the fee simple acquisition of 40 parcels, as listed in Table 6-7.

The FY 2009-2010 property tax revenue from these parcels total $1.1 million. and represents only 0.08% of the project Study Area's property tax revenue. Therefore, MOS 2 also does NOT have an adverse impact under NEPA (significant impact under CEQA).

Table 6-7: Property Tax Assessments for Acquired Properties MOS 2

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
3818 Wilshire Blvd	Los Angeles	$3,094
3820 Wilshire Blvd	Los Angeles	$3,453
3828 Wilshire Blvd	Los Angeles	$2,942
3832 Wilshire Blvd	Los Angeles	$23,943
3846 Wilshire Blvd	Los Angeles	$11,288
3835 Ingraham St	Los Angeles	$6,802
3841 Ingraham St	Los Angeles	$6,802
3847 Ingraham St	Los Angeles	$5,603
675 Crenshaw Blvd	Los Angeles	$11,226
5200 Wilshire Blvd	Los Angeles	126,492
5220 Wilshire Blvd	Los Angeles	84,197
711 S La Brea Ave	Los Angeles	33,414
5318 Wilshire Blvd	Los Angeles	11,965
729 S La Brea Ave	Los Angeles	2,986
718 S Detroit St	Los Angeles	2,377
722 S Detroit St	Los Angeles	1,857
726 S Detroit St	Los Angeles	1,857
6000 Wilshire Blvd	Los Angeles	56,765
6010 Wilshire Blvd	Los Angeles	9,062
6018 Wilshire Blvd	Los Angeles	14,960
6030 Wilshire Blvd	Los Angeles	74,915
6111 Wilshire Blvd	Los Angeles	13,110
6121 Wilshire Blvd	Los Angeles	*
6133 Wilshire Boulevard	Los Angeles	$11,690
6155 Wilshire Boulevard	Los Angeles	$43,286
6139 Wilshire Boulevard	Los Angeles	$11,690
6120 Wilshire Blvd	Los Angeles	$18,499
6122 Wilshire Blvd	Los Angeles	$41,074
6130 Wilshire Blvd	Los Angeles	$4,019
6146 Wilshire Blvd	Los Angeles	$4,856
AIN 5088002036[1]	Los Angeles	$3,810
8400 Wilshire Blvd	Beverly Hills	$17,649
8412 Wilshire Blvd	Beverly Hills	$3,596
8420 Wilshire Blvd	Beverly Hills	$7,681
AIN: 4333029014[1]	Beverly Hills	$1,867
8471 Wilshire Blvd	Beverly Hills	$21,956
8755 Wilshire Blvd	Beverly Hills	$4,954
8767 Wilshire Blvd	Beverly Hills	$10,089

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
9430 Wilshire Blvd	Beverly Hills	$135,762
9460 Wilshire Blvd	Beverly Hills	$222,344
Total		$1,073,932

Source: Los Angeles County Assessor

[1]Denotes parcels that do not have a recorded address in the county database.
*Assessed value not available
AIN = Assessor Identification Number

6.1.1.10 Station Options

Station Options 1, 2, and 6 would not affect the number of location of acquired properties. However, station options 3, 4, and 5 would result in the acquisition of different properties from the base.

6.1.1.11 Option 3 – Wilshire/La Cienega Station – West with Transfer Structure

Option 3 would shift the Wilshire La Cienega Station from the base location east of La Cienega to a location west of La Cienega. This station option would also eliminate the need for the connection structure at Robertson Boulevard because Option 3 would serve as a transfer station. Table 6-8 summarizes the properties that would have been acquired with the base Wilshire/La Cienega station location, but would no longer need to be acquired in Option 3. Table 6-9 lists the properties that would not have been acquired with the base Wilshire/La Cienega Station, but would need to be acquired with Option 3.

In FY 2009-2010, the total property tax from the parcels associated with Option 3 is approximately $131,894. This is difference between the property tax from the properties that would be removed from the base and the properties that would be added to the baseline. Option 3 could be combined with any of the Alternatives (except MOS-1). Combined with Alternative 5, the total property tax is approximately $3.0 million, representing 0.23% of total tax revenues Therefore, Option 3 combined with any of the five Alternatives is considered to NOT have an adverse effect under NEPA (significant under CEQA).

Table 6-8: Properties Removed from Base with Option 3

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
8400 Wilshire Blvd	Beverly Hills	$17,649
8412 Wilshire Blvd	Beverly Hills	$3,596
8420 Wilshire Blvd	Beverly Hills	$7,681
AIN: 4333029014[1]	Beverly Hills	$1,867
8471 Wilshire Blvd	Beverly Hills	$21,956
8755 Wilshire Blvd	Beverly Hills	$4,954
8767 Wilshire Blvd	Beverly Hills	$10,089
Total		$67,792

Source: Los Angeles County Assessor

[1]Denotes parcels that do not have a recorded address in the county database.
AIN = Assessor Identification Number

Table 6-9: Properties Added to Base with Option 3

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
8537 Wilshire Blvd	Beverly Hills	$120,060
8545 Wilshire Blvd	Beverly Hills	$4,617
8555 Wilshire Blvd	Beverly Hills	$17,310
AIN: 4333030130[1,2]	Beverly Hills	$57,699
Total		$199,686

Source: Los Angeles County Assessor

[1]Denotes parcels that do not have a recorded address in the county database.
[2]Denotes parcels that would be acquired partially.
AIN = Assessor Identification Number

6.1.1.12 Option 4: Century City Station – Constellation Boulevard

Option 4 would shift the Century City Station from the base location along Santa Monica Boulevard to Constellation Boulevard. Since the Century City – Santa Monica location did not require the acquisition of any properties, shifting the station to Constellation Blvd would require the acquisition of one additional parcel.

Table 6-10 lists the properties that would not have been acquired with the base Century City Station on Santa Monica Blvd, but would need to be acquired with the Constellation Boulevard location.

In FY 2009-2010, the total property tax from the parcels associated with Option 4 is approximately $106,657. This is difference between the property tax from the properties that would be removed from the base and the properties that would be added to the baseline. Option 4 could be combined with any of the Alternatives (except MOS-1). Combined with Alternative 5, the total property tax is approximately $3.0 million, representing 0.23% of total tax revenues Therefore, Option 4 combined with any of the five Alternatives is considered to NOT have an adverse effect under NEPA (significant under CEQA).

Table 6-10: Properties Added to Base with Option 4

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
1950 Century Park East	Los Angeles	$106,657
Total		$106,657

Source: Los Angeles County Assessor

AIN = Assessor Identification Number

6.1.1.13 Option 5: Westwood/UCLA Station – On-Street

Option 5 would shift the Westwood/UCLA Station from the base location off-street, under Lot 36 to an on-street location beneath Wilshire Blvd. Table 6-11 summarizes the properties that would have been acquired with the base Westwood/UCLA station location, but would no longer need to be acquired in Option 5. No additional parcels would need to be acquired with the Westwood/UCLA Station on-street. Since there are fewer property acquisitions with Option 5 than in the base, Option 5 combined with any of the Alternatives is considered to NOT have an adverse effect under NEPA (significant effect under CEQA).

Table 6-11: Properties Removed from Base with Option 5

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
10990 Wilshire Blvd[2]	Los Angeles	$814,261
Total		$814,261

Source: Los Angeles County Assessor

[2]Denotes parcels that would be acquired partially.
AIN = Assessor Identification Number

6.1.1.14 Maintenance Yard Options

There are two maintenance yard options. The first option (Division 20) includes all properties listed in Table 6-13 below. This option is applicable to Alternatives 1 and 2 and MOS-1 and 2.

The property value of most of the parcels associated with this option cannot be found in the Los Angeles County Assessor database. For the remainder of the parcels, the total property taxes levied amounted to $68,018 in FY 2009-2010. See Table 6-12 for the property taxes levied on the parcels required for the Division 20 maintenance yard facility.

Combined with Alternative 2, the total property tax from the parcels associated with this alternative is approximately $1.9 million, representing 0.15% of total tax revenues of the project Study Area. Therefore, the Division 20 maintenance yard option, combined with either Alternative 1 or Alternative 2, is considered to NOT have an adverse effect under NEPA (significant under CEQA).

Table 6-12: Properties Added to Base with Maintenance Yard Option 1

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
AIN 5164016908	Los Angeles	*
AIN 5164016803	Los Angeles	*
AIN 5164016902	Los Angeles	*
AIN 5164016902	Los Angeles	*
590 S Santa Fe Ave	Los Angeles	$24,711
AIN 5164004008	Los Angeles	$23,850
AIN 5164005800	Los Angeles	*
1354 Willow Street	Los Angeles	$1,540
AIN 5164004007	Los Angeles	$6,390
AIN 5164004002	Los Angeles	$11,527
AIN 5164004902	Los Angeles	*
AIN 5163017001	Los Angeles	*
Total		$68,018

Source: Los Angeles County Assessor
*Assessed value not available
AIN = Assessor Identification Number

The second option is to expand the Union Pacific Railroad Los Angeles Transportation Center Rail Yard. In this option, the parcels listed in Table 6-14 below will be acquired. This is option is applicable to Alternatives 3-5.

The property value of most of the parcels associated with this option cannot be found in the Los Angeles County Assessor database. For the only parcel with property value information, the total property taxes levied amounted to $34, 912 in FY 2009-2010. See Table 6-13 for the property taxes levied on the parcels required for the Union Pacific maintenance yard facility.

Combined with Alternative 5, the total property tax from the parcels associated with this maintenance yard option is approximately $2.9 million, representing 0.22% of total tax revenues of the project Study Area. Therefore, the Union Pacific maintenance yard option, combined with either Alternative 3, 4 or 5, is considered to NOT have an adverse effect under NEPA (significant under CEQA).

Table 6-13: Properties Added to Base with Maintenance Yard Option 2

Property to be Acquired		Property Taxes Levied, FY2009-2010
Address	City	
840 E Commercial Street	Los Angeles	*
AIN 5173020901	Los Angeles	*
AIN 5173020908	Los Angeles	*
837 E Commercial Street	Los Angeles	$ 34,912
AIN 5409021902	Los Angeles	*
AIN 5409020909	Los Angeles	*
AIN 5409020907	Los Angeles	*
AIN 5409020906	Los Angeles	*
AIN 5409020905	Los Angeles	*
AIN 5409020904	Los Angeles	*
AIN 5409020902	Los Angeles	*
AIN 5409020910	Los Angeles	*
AIN5410002901	Los Angeles	*
AIN 5410002817	Los Angeles	*
1041 Richmond Street	Los Angeles	*
1049 Richmond Street	Los Angeles	*
AIN 5410001800	Los Angeles	*
Total		$34, 912

Source: Los Angeles County Assessor
*Assessed value not available
AIN = Assessor Identification Number

6.2 Summary of Property Tax Losses

Presented in Table 6-14 below is a summary of all the alternatives in terms of estimated property tax losses. Alternative 5, which involves the acquisition of the most parcels, has the relatively largest negative impact on property revenues in the project Study Area. However, the impact remains minimal at 0.22% and is not considered to be an adverse effect under NEPA (significant impact under CEQA).

Table 6-15 summarizes the estimated property tax loss associated with each station and maintenance yard option. Option 3 has the relatively largest negative impact on property revenues in the project Study Area compared to other options. However, the impact still

remains minimal at 0.23% and is not considered to be an adverse effect under NEPA (significant impact under CEQA).

Table 6-14: Estimated Property Tax Losses for All Alternatives

Alternative	Estimated Property Tax Revenue Loss (2009)	% Loss of Study Area Property Taxes Levied in 2009
Alt. 1 Westwood/UCLA	$1,896,885	0.15%
Alt. 2 Westwood/VA Hospital	$1,896,885	0.15%
Alt. 3 Santa Monica Ext.	$2,399,775	0.18%
Alt. 4 Westwood VA+ Santa Monica	$2,438,395	0.19%
Alt. 5 Santa Monica + W Hollywood	$2,941,285	0.23%
MOS 1 Fairfax Extension	$648,021	0.05%
MOS 2 Century City Extension	$1,073,932	0.08%

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

Table 6-15: Estimated Property Tax Losses for Station and Maintenance Yard Options

Alternative	Estimated Property Tax Revenue Loss (2009)	% Loss of Study Area Property Taxes Levied in 2009
Option 3 (with Alternative 5)	$2,987,923	0.23%
Option 4 (with Alternative 5)	$2,962,686	0.23%
Option 5 (with Alternative 5)	$2,041,768	0.16%
Division 20 Maintenance Yard (with Alternative 2)	$1,892,645	0.15%
Union Pacific Maintenance Yard (with Alternative 5)	$2,890,941	0.22%

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

6.2.1 Employment Losses from ROW Acquisition

Employment loss as a result of property acquisition is insignificant for all alternatives in each of the jurisdictions within the project Study Area, falling between the range of 0 to 474, or 0.00% to 0.11% of total estimated 2009 employment in the project Study Area.

6.2.1.1 Methodology & Assumptions

The most recent employment data available, which was obtained from the State of California Employment Development Department, was used in this analysis. Due to the lack of city-level employment data for the year 2009, employment data from 2008 was used as a basis to compute the percentage of employment losses that would result from the ROW acquisition.

Employment density figures (average employee per square foot) was obtained from the Los Angeles County Economic Development Corporation study on industrial land redevelopment. These density figures (as seen in Table 6-16 below) were applied to the parcel building area information obtained from the Los Angeles County Assessor database to compute the job loss associated with each acquired parcel.

Table 6-16: Employee Density for Los Angeles Business Establishments

Type of Establishment	Employee Density (person per square foot)
Retail	534
Office	285
Freight Warehouse	780
Apparel & Furniture Manufacturing	304
Other Manufacturing	450

Source: Los Angeles County Economic Development Corporation, "Redeveloping Obsolete Industrial Land with Modern Manufacturing Facilities."

All job losses considered in this analysis were from retail, general stores, restaurants, parking lots and service stations where their removal from their local customer base will likely lead to the disruption and possible termination of the business. These were treated as permanent job losses, lasting through the entire 20-year forecast period.

On the other hand, all businesses located in commercial office buildings were assumed to be able to relocate to other building spaces within the county. This assumption is reasonable as there is an abundance of vacancies in the area at the time of writing. According to real estate firm Grubb & Ellis, the county gained 4.8 million square feet of vacant office space in 2009, increasing the vacancy rate by 380 basis points to 16 percent. It is expected that availability of spaces will continue to be high over the short term.

Summarized in Table 6-17 is the estimated loss of permanent employment as a result of ROW acquisition.

The impact of the options on job losses from ROW acquisitions associated with the station options is as follows:

- Option 3 will result in the net loss of two additional jobs (7 would be lost from the parcels to be added and 5 would have been lost with the parcels to be removed) in the Beverly Hills area.
- Option 4 will not result in any changes to employment loss associated with the alternatives.
- Option 5 will not result in any changes to employment loss associated with the alternatives.

Table 6-17: Employment Loss Due to Property Acquisitions

Alternative	Jurisdiction	Project Study Area Totals		Job Losses From Property Acquisitions		
		Estimated 2009 Employment*	Estimated 2035 Employment	Number of Jobs	Job Loss as Percentage of Total Jobs in Jurisdiction	
					2009	2035
Alternative 1 Westwood/UCLA Extension	Los Angeles	345,338	426,560	267	0.08%	0.06%
	Santa Monica	51,600	60,185	0	0.00%	0.00%
	West Hollywood	24,300	27,843	0	0.00%	0.00%
	Beverly Hills	15,719	22,252	35	0.22%	0.16%
	Project Study Area Total	436,957	536,840	302	0.07%	0.05%
Alternative 2 Westwood/VA Hospital Extension	Los Angeles	345,338	426,560	267	0.08%	0.06%
	Santa Monica	51,600	60,185	0	0.00%	0.00%
	West Hollywood	24,300	27,843	0	0.00%	0.00%
	Beverly Hills	15,719	22,252	35	0.22%	0.16%
	Project Study Area Total	436,957	536,840	302	0.07%	0.05%
Alternative 3 Santa Monica Extension	Los Angeles	345,338	426,560	301	0.09%	0.06%
	Santa Monica	51,600	60,185	78	0.15%	0.13%
	West Hollywood	24,300	27,843	-	0.00%	0.00%
	Beverly Hills	15,719	22,252	35	0.22%	0.16%
	Project Study Area Total	436,957	536,840	413	0.09%	0.07%
Alternative 4 Westwood/VA Hospital Extension Plus West Hollywood Extension	Los Angeles	345,338	426,560	127	0.04%	0.02%
	Santa Monica	51,600	60,185	-	0.00%	0.00%
	West Hollywood	24,300	27,843	231	0.93%	0.83%
	Beverly Hills	15,719	22,252	5	0.03%	0.02%
	Project Study Area Total	436,957	536,840	**363**	0.08%	0.06%
Alternative 5 Santa Monica Extension Plus West Hollywood Extension	Los Angeles	345,338	426,560	260	0.04%	0.03%
	Santa Monica	51,600	60,185	78	0.15%	0.13%
	West Hollywood	24,300	27,843	231	0.93%	0.83%
	Beverly Hills	15,719	22,252	5	0.03%	0.02%
	Project Study Area Total	436,957	536,840	**474**	0.11%	0.08%
MOS 1 Fairfax Extension	Los Angeles	345,338	426,560	216	0.06%	0.04%
	Santa Monica	51,600	60,185	0	0.00%	0.00%
	West Hollywood	24,300	27,843	0	0.00%	0.00%
	Beverly Hills	15,719	22,252	0	0.00%	0.00%
	Project Study Area Total	436,957	536,840	**216**	0.05%	0.04%
MOS 2 Century City Extension	Los Angeles	345,338	426,560	245	0.06%	0.05%
	Santa Monica	51,600	60,185	0	0.00%	0.00%
	West Hollywood	24,300	27,843	0	0.00%	0.00%
	Beverly Hills	15,719	22,252	35	0.22%	0.16%
	Project Study Area Total	436,957	536,840	**280**	0.06%	0.05%

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

*Due to the lack of 2009 employment data, please note that 2009 Employment Totals in the third column was estimated based on 2006 project Study Area employment data provided by LA Metro and on the 2006-2009 growth rate of employment in the LA County from the State of California Employment Development Department

6.3 Estimated Property Tax Revenue Losses by Jurisdiction

Prior to Proposition 13, jurisdictions established their tax rates independently and property tax revenues depended only on the rate levied and the assessed value of the land within the agency's boundaries. However, the enactment of Proposition 13 means that property tax revenues are now collected by the Auditor-Controller, which then allocates the revenue to the local jurisdictions.

Presented in Table 6-18 through Table 6-24 are the tax revenues allocated to all jurisdictions (within the project Study Area) in the No Build scenario and the estimated property tax losses associated with each alternative in FY 2009-2010 terms. The property tax revenue loss figures include both the one percent general property tax and the debt service tax revenue of all the parcels in each alternative.

Not one tax district, under all alternatives, is expected to experience a loss of over 0.1% in property tax revenue in FY 2009-2010 terms as a result of the ROW acquisitions.

Table 6-18: Estimated Tax Revenue by Tax District Alternative 1 Westwood/UCLA Extension

Tax District	2009 Property Tax Revenue Allocation (No Build) in thousand US dollars	Estimated 2009 Property Tax Revenue Loss by Jurisdiction in thousand US dollars	Loss as % of Property Tax Revenues
Los Angeles County	$2,599,631	$429	0.02%
Cities	$1,864,208	$284	0.02%
School Districts	$5,788,533	$865	0.01%
Special Districts	$851,615	$115	0.01%
Redevelopment agencies	$1,487,376	$201	0.01%
Total	$12,588,364	$1,896	0.02%

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

Table 6-19: Estimated Tax Revenue by Tax District Alternative 2 Westwood/VA Hospital Extension

Tax District	2009 Property Tax Revenue Allocation (No Build) in thousand US dollars	Estimated 2009 Property Tax Revenue Loss by Jurisdiction in thousand US dollars	Loss as % of Property Tax Revenues
Los Angeles County	$2,599,631	$429	0.02%
Cities	$1,864,208	$284	0.02%
School Districts	$5,788,533	$865	0.01%
Special Districts	$851,615	$115	0.01%
Redevelopment agencies	$1,487,376	$201	0.01%
Total	$12,588,364	$1,896	0.02%

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

Table 6-20: Estimated Tax Revenue by Tax District Alternative 3 Santa Monica Extension

Tax District	2009 Property Tax Revenue Allocation (No Build) in thousand US dollars	Estimated 2009 Property Tax Revenue Loss by Jurisdiction in thousand US dollars	Loss as % of Property Tax Revenues
Los Angeles County	$2,599,631	$537	0.02%
Cities	$1,864,208	$358	0.02%
School Districts	$5,788,533	$1,095	0.02%
Special Districts	$851,615	$149	0.02%
Redevelopment agencies	$1,487,376	$260	0.02%
Total	$12,588,364	$2,400	0.02%

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

Table 6-21: Estimated Tax Revenue by Tax District Alternative 4 Westwood/VA Hospital Extension Plus West Hollywood Extension

Tax District	2009 Property Tax Revenue Allocation (No Build)in thousand US dollars	Estimated 2009 Property Tax Revenue Loss by Jurisdiction in thousand US dollars	Loss as % of Property Tax Revenues
Los Angeles County	$2,599,631	$538	0.02%
Cities	$1,864,208	$360	0.02%
School Districts	$5,788,533	$1,129	0.02%
Special Districts	$851,615	$149	0.02%
Redevelopment agencies	$1,487,376	$260	0.02%
Total	$12,588,364	$2,425	0.02%

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

Table 6-22: Estimated Tax Revenue by Tax District Alternative 5 Santa Monica Extension Plus West Hollywood Extension

Tax District	2009 Property Tax Revenue Allocation (No Build)in thousand US dollars	Estimated 2009 Property Tax Revenue Loss by Jurisdiction in thousand US dollars	Loss as % of Property Tax Revenues
Los Angeles County	$2,599,631	$644	0.02%
Cities	$1,864,208	$431	0.02%
School Districts	$5,788,533	$1,357	0.02%
Special Districts	$851,615	$181	0.02%
Redevelopment agencies	$1,487,376	$317	0.02%
Total	$12,588,364	$2,930	0.02%

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

Table 6-23: Estimated Tax Revenue by Tax District MOS 1

Tax District	2009 Property Tax Revenue Allocation (No Build)in thousand US dollars	Estimated 2009 Property Tax Revenue Loss by Jurisdiction in thousand US dollars	Loss as % of Property Tax Revenues
Los Angeles County	$2,599,631	$173	0.00%
Cities	$1,864,208	$92	0.00%
School Districts	$5,788,533	$284	0.00%
Special Districts	$851,615	$35	0.00%
Redevelopment agencies	$1,487,376	$62	0.00%
Total	$12,588,364	$648	0.01%

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

Table 6-24: Estimated Tax Revenue by Tax District MOS 2

Tax District	2009 Property Tax Revenue Allocation (No Build)in thousand US dollars	Estimated 2009 Property Tax Revenue Loss by Jurisdiction in thousand US dollars	Loss as % of Property Tax Revenues
Los Angeles County	$2,599,631	$267	0.01%
Cities	$1,864,208	$156	0.01%
School Districts	$5,788,533	$471	0.01%
Special Districts	$851,615	$65	0.01%
Redevelopment agencies	$1,487,376	$114	0.01%
Total	$12,588,364	$1,074	0.01%

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

6.4 Construction Impacts

The economic effects of the alternatives' construction phase include both impacts and benefits. The impacts arise from temporary re-routing of pedestrian and vehicular traffic and other disruptions, while the benefits analyzed here are a result of the construction expenditures on material and labor, leading to increases in earnings, jobs and economic output.

6.4.1 Construction-Related Economic Losses

Construction would have temporary impacts on commercial and industrial businesses, particularly those near or adjacent to construction sites. Although specific impacts cannot be known until construction plans and traffic routing patterns are finalized, potential impacts include: traffic disruption, increased noise, vibration and dust, modified vehicular and pedestrian traffic patterns, and utility disruptions. Sidewalk space may be obstructed temporarily for station and alignment construction, thereby reducing business access. Business impacts also could include reduced visibility of commercial signs and business locations. These construction impacts could in turn produce economic impacts to commercial establishments.

An analysis would identify businesses which could experience such impacts during the construction phase and develop standard and site-specific mitigation measures to minimize temporary business disruption.

6.4.2 Construction-Related Employment

Construction would have a substantial beneficial effect on the regional and local economy due to new direct and indirect employment. Direct employment is construction-related employment in industries which jobs and services are purchased to build the project. Indirect employment benefits are created by the secondary demand for goods and services across a broader spectrum of industrial sectors as a result of the economic multiplier effect of construction.

6.4.2.1 Methodology and Assumptions

To quantify the near-term economic benefits of this project an analysis was conducted utilizing Bureau of Economic Analysis (BEA) Regional Input-Output Modeling System (RIMS II) multipliers. RIMS II multipliers classify each capital cost category according to industrial sectors, using North American Industry Classification System (NAICS) industry codes, and can vary widely depending on the geographic region being analyzed. This particular analysis utilizes RIMS II data for the State of California and Los Angeles County. The multipliers were used to determine the quantity and industry composition of benefits generated by the project resulting in estimations of short-term job creation, earnings, and economic output as a result of the project. The multipliers estimate two types of impacts:

- Direct Impacts: Direct impacts represent new spending, hiring, and production by civil engineering construction and transit manufacturing companies to accommodate the demand for resources in order to complete the project.
- Indirect/Induced Impacts: Indirect impacts result from the quantity of inter-industry purchases necessary to support the increase in production from the construction industry experiencing new demand for its goods and services. All industries that produce goods and services consumed by the construction industry will also increase production and help preserve or create new jobs to meet the additional demand. The level of inter-industry trade within the area will determine the size of the indirect impact. Induced impacts stem from the re-spending of wages earned by workers benefitting from the direct and indirect activity within area. For example, if an increase in demand leads to new employment and earnings in a set of industries, workers in these industries will spend some proportion of their increased earnings at local retail shops, restaurants, and other places of commerce, further stimulating economic activity.

In addition to measuring the effects of the project on the Los Angeles regional economy, the economic impacts of the project that will be realized in other areas were also quantified. These impacts, referred to as “spillover” benefits, reflect the inter-county trade that occurs with supply industries.

This analysis utilizes capital cost estimates produced in the FTA’s Standard Cost Category (SCC) format. For the analysis, it was assumed that SCC’s 10 (Guideway and Track Elements), 20 (Stations, Stops, Terminals, Intermodal), 30 (Support Facilities), and 40 (Sitework and Special Conditions) contributed directly to RIMS II industry code 7 (Construction). Further, SCC’s 50 (Systems) and 70 (Vehicles) were assumed to contribute directly to RIMS II industry code 16 (Other Transportation Equipment Manufacturing),

while SCC 60 (ROW, Land, Existing Improvements) was assumed to contribute to RIMS II industry code 45 (Real Estate) and SCC 80 (Professional Services) was assumed to contribute to RIMS II industry code 47 (Professional, Scientific, and Technical Services). SCC 90 (Unallocated Contingency) was distributed proportionately amongst SCC's 10 through 80.

6.4.2.2 Construction Related Employment

Capital expenditures resulting from the project are expected to have a significant impact on the Los Angeles region. As is shown in Table 6-25, projected construction related employment is directly proportional to the magnitude of capital expenditures. As such, higher cost construction alternatives can be expected to generate more construction related employment. It should be noted that the number of jobs produced is given in person years, which is equivalent to the full-time employment of one person for one year.

Table 6-25: Estimated Full Time Employment Generated by Construction Spending

	Direct Employment (Person Years)	Indirect/Induced Employment (Person Years)	Total Employment (Person Years)
Alternative 1	33,930	26,177	60,108
Alternative 2	36,218	27,933	64,151
Alternative 3	51,182	39,328	90,509
Alternative 4	60,002	46,193	106,195
Alternative 5	75,579	58,116	133,695
MOS 1	15,409	11,934	27,343
MOS 2	28,623	21,912	50,535

Table 6-25 demonstrates that projected construction related employment can vary from 27,343 person years for MOS 1 to 133,695 person years for Alternative 5. Approximately 56% of the jobs expected to be produced are direct jobs.

Figure 6-1 provides a breakdown of jobs created by industry for the seven alternatives studied. As expected, construction, professional services, and manufacturing are three of the top four industries impacted by the construction spending. Other industries that will see significant job impacts from the project include retail trade, health care, food services, administration and waste management, and real estate.

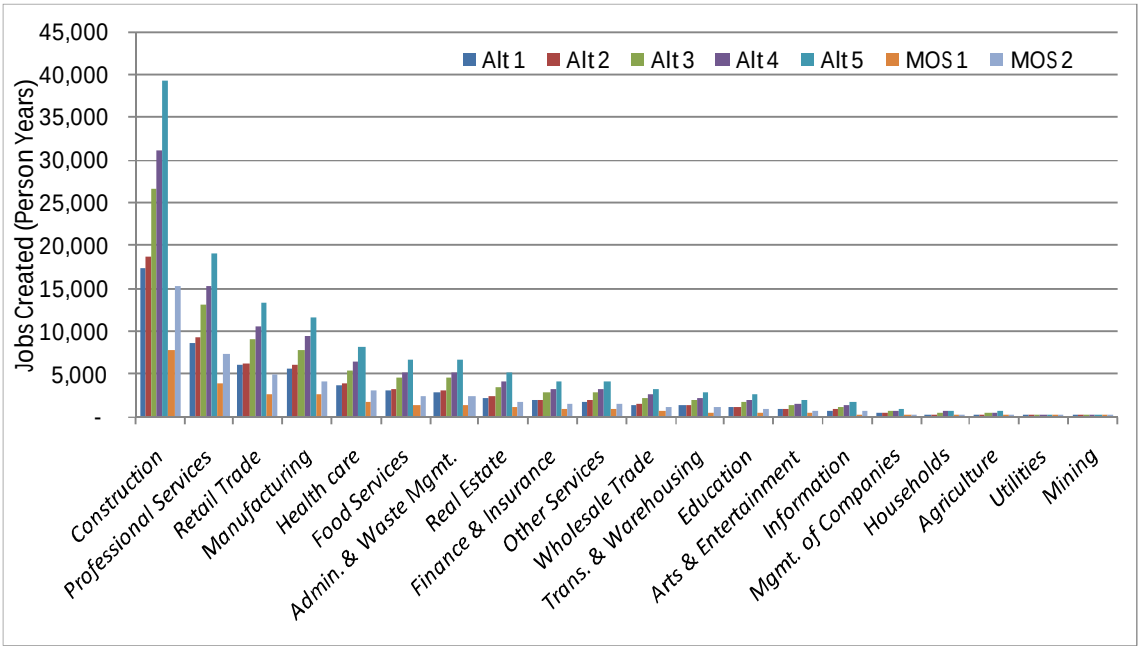

Figure 6-1: Breakdown of Construction Related Job Creation by Industry

It is also important to consider the quality of the jobs that would be created by the project, which can be most easily measured by the number of jobs created at various levels of compensation. Figure 6-2 shows that the majority of jobs generated by the project would receive compensation above $40,000 per year for all seven alternatives. This indicates that the project will help to stimulate the local economy.

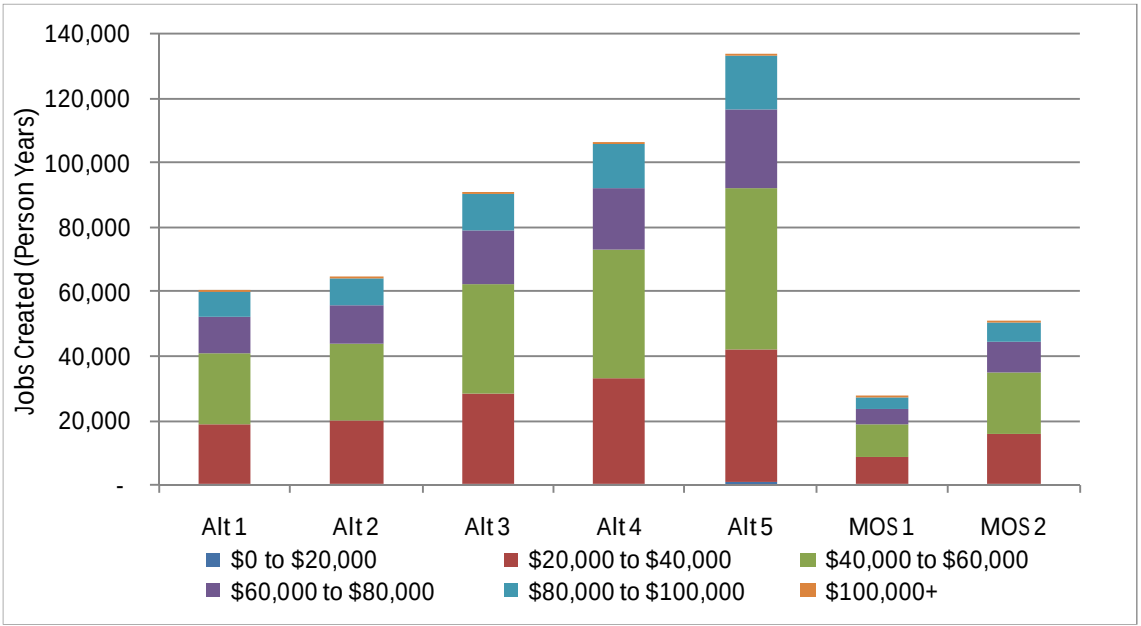

Figure 6-2 Breakdown of Construction Related Job Creation by Earnings Range

6.4.3 Construction Spending on the Regional Economy

The jobs created as a result of construction spending on the project will result in both direct and indirect economic impacts on the Los Angeles region. This can be quantified as the overall output for the Los Angeles region. Output can be defined as the total value of sales made for all intermediate and final purchases within a region resulting from increased demand for an industry's goods or services. It should not be confused with Gross Regional Product (similar to Gross Domestic Product), which is the sum of value added for all industries; value added is an economic concept which nets out the cost of intermediate purchases for materials and labor. The overall output generated for each alternative as a result of construction spending for the project is provided in Table 6-26.

Table 6-26: Estimated Construction Related Economic Output by Alternative

	Direct Output (2009 $ millions)	Indirect/Induced Output (2009 $ millions)	Total Output (2009 $ millions)
Alternative 1	$4,410	$5,037	$9,447
Alternative 2	$4,700	$5,375	$10,075
Alternative 3	$6,616	$7,561	$14,176
Alternative 4	$7,780	$8,884	$16,664
Alternative 5	$9,798	$11,173	$20,971
MOS 1	$2,037	$2,295	$4,332
MOS 2	$3,647	$4,213	$7,861

As is shown in Table 6-26, projected economic output can range from $4.3 billion for MOS 1 to $21 billion for Alternative 5. Approximately 47% of the projected output is directly related to the construction of the project, while the remaining is expected to result from indirect and induced spending.

6.5 Employment Gains from Operating and Maintenance Expenditures – Impacts on the Regional Economy

Similar to construction spending, projected Operating and Maintenance (O&M) expenditures can be expected to have a significant economic impact on the Los Angeles region. The impact will be in the form of direct and indirect jobs generated by the O&M spending, which will then result in increased economic output for the region.

6.5.1 Methodology and Assumptions

O&M related economic impacts were quantified utilizing the same Bureau of Economic Analysis (BEA) Regional Input-Output Modeling System (RIMS II) multipliers that were used to determine the direct and indirect economic impacts of the construction expenditures.

In addition to measuring the effects of the project on the Los Angeles regional economy, the economic impacts of the project that will be realized in other areas were also quantified. These impacts, referred to as "spillover" benefits, reflect the inter-county trade that occurs with supply industries.

This analysis utilizes annual O&M cost estimates for the 2030 design year for each of the seven alternatives and the No Build scenario. It assumes that RIMS II industry code 30 (Rail Transportation) can be directly attributed to each 2030 design year O&M cost estimate.

6.5.2 Operating and Maintenance Related Employment

Table 6-27 provides the O&M related employment for each alternative and the No Build scenario. As is shown, O&M related employment is expected to range from 15,360 person years for the no build scenario to 16,467 person years for Alternative 5. Approximately 37% of the jobs produced are expected to be direct.

Table 6-27: Full-Time Employment Generated by Annual Operations and Maintenance Expenditure

	Direct On-Site Employment (Person Years)	Direct Off-Site Employment (Person Years)	Indirect/Induced Employment (Person Years)	Total Employment (Person Years)
No Build	3,942	1,693	9,724	15,360
Alternative 1	4,040	1,735	9,965	15,741
Alternative 2	4,050	1,739	9,989	15,779
Alternative 3	4,100	1,761	10,112	15,972
Alternative 4	4,158	1,786	10,257	16,201
Alternative 5	4,227	1,815	10,425	16,467
MOS 1	4,016	1,725	9,906	15,647
MOS 2	4,034	1,733	9,951	15,719

Figure 6-3 shows the industries that will be most impacted by the projected annual O&M expenditures. As expected, the transportation and warehousing category will see the most job creation; these can be considered direct jobs. Other industries that will experience significant indirect job creation include retail trade, health care, administration and waste management, professional services, food services, and real estate.

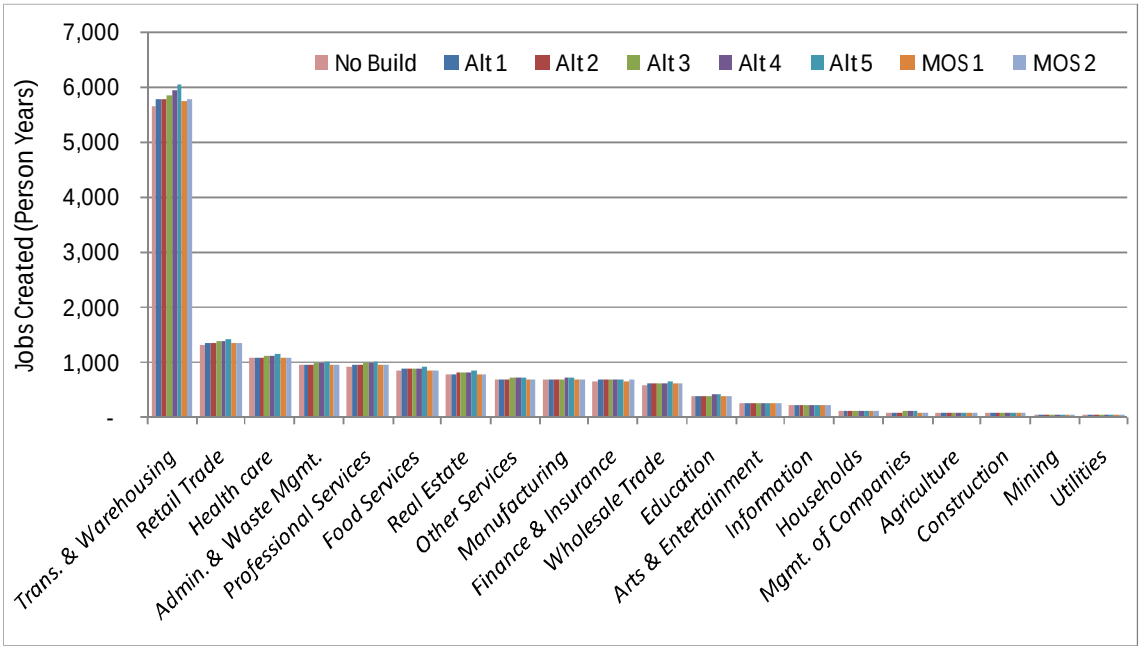

Figure 6-3 Breakdown of O&M Related Job Creation by Industry

It is also important to consider the quality of the jobs that would be created, which can be most easily measured by the number of jobs created at various levels of compensation. Figure 6-4 shows that the majority of jobs generated by the O&M expenditures would receive compensation above $40,000 per year for all seven alternatives. This indicates that the project will help to stimulate the local economy.

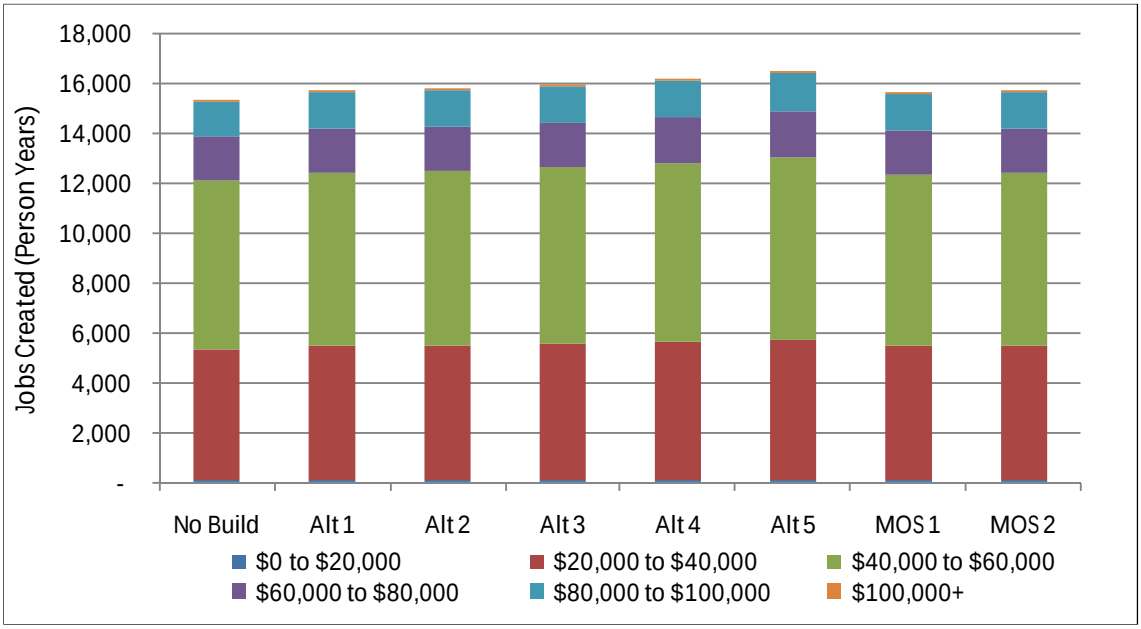

Figure 6-4 Breakdown of O&M Related Job Creation by Earnings Range

6.5.3 Operating and Maintenance Spending on the Regional Economy

The jobs created as a result of O&M spending will result in both direct and indirect economic impacts on the Los Angeles region. This can be quantified as the overall output for the Los Angeles region. Output can be defined as the total value of sales made for all intermediate and final purchases within a region resulting from increased demand for an industry's goods or services. It should not be confused with Gross Regional Product (similar to Gross Domestic Product), which is the sum of value added for all industries; value added is an economic concept which nets out the cost of intermediate purchases for materials and labor. The overall output generated for each alternative as a result of projected 2030 design year O&M spending is provided in Table 6-28.

Table 6-28: Estimated O&M Related Economic Output by Alternative

	Direct Output (2009 $ millions)	Indirect/Induced Output (2009 $ millions)	Total Output (2009 $ millions)
No Build	$1,570	$1,977	$3,547
Alternative 1	$1,609	$2,026	$3,635
Alternative 2	$1,613	$2,031	$3,644
Alternative 3	$1,633	$2,056	$3,689
Alternative 4	$1,656	$2,085	$3,741
Alternative 5	$1,683	$2,119	$3,803
MOS 1	$1,600	$2,014	$3,614
MOS 2	$1,607	$2,023	$3,630

As demonstrated in Table 6-28, O&M related economic output can range from $3.5 billion for the No Build scenario to $3.8 billion for Alternative 5. Approximately 44% of the projected O&M related economic output can be directly related to actual O&M expenditures. The remaining output is indirect/induced.

6.6 Fiscal and Long Term Economic and Real Property Development Impacts

Long term economic benefits can be expected to occur primarily due to the much 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 (e.g., bus) to access jobs, stores, and other destinations within the corridor, and those who would be using transit in the future under the No Build. These direct user benefits (primarily travel time savings), which are captured and reported elsewhere in the Cost Effectiveness analysis, 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 dependant 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 ¼ to ½ mile ranges around stations, particularly at those stations with the highest volumes of boardings and alightings.

6.6.1 Economic Benefits Due to Improved Accessibility

The Study Area economy is highly dependent on commuters from outside the Study Area, with many more jobs than workers (504,000 jobs vs. 265,000 workers residing in the Study Area in 2006). Currently, and under the No Build, the fastest commute option to the Study Area is by car. Furthermore, with most workers in Los Angeles driving to work (approximately 89% according to the 2000 Census), any lengthening of the auto commute will make it more difficult for Study Area businesses to attract and retain qualified workers.

Under the No Build, travel times to the Study Area are expected to increase due to increased auto travel demand resulting in congestion and slower travel speeds, both for autos and, more importantly, for bus access, which must share surface streets with cars. Figure 6-5 illustrates travel time increases under the No Build for selected commutes to the Study Area.

The Build Alternatives, by providing a transit option that is more competitive with and, in some cases, faster than auto travel times, can have a positive long term effect on the regional and local economy resulting from:

- Increased worker and business productivity resulting from reduced travel times for some commutes and local business trips, and more direct transit access than is afforded by the existing bus system.
- Increased ability of corridor employers to find qualified employees, as reductions in corridor travel (access) times occur. For example, if it is assumed that the maximum amount of time that a person is willing to commute to work is an hour in each direction, the area from which a business can draw employees will expand as a one-hour travel radius expands outward from the workplace.

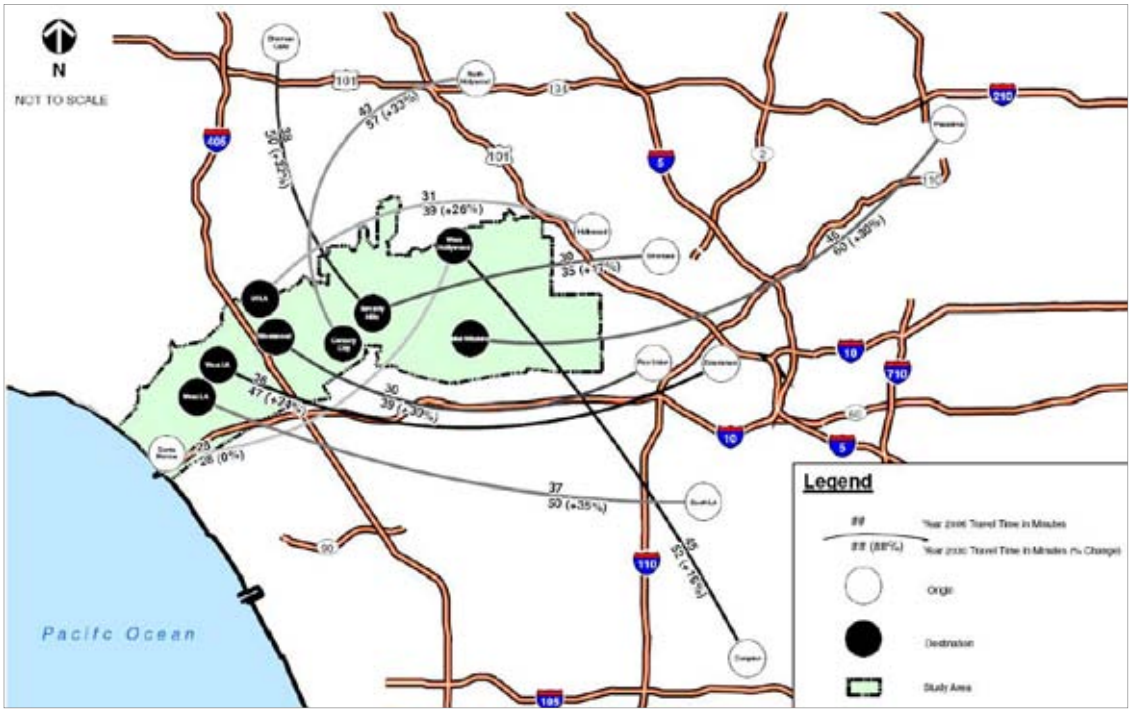

Figure 6-5 AM Peak Hour Travel Time to Work by Auto for 2006 and 2035

- Congestion adds to the time and money households spend on transportation. With both auto and transit times growing substantially under the No Build, the opportunities for households to rideshare or use transit for some or all of their trips will decrease.
- With 479,000 jobs located in the Study Area, growing congestion under the No Build will result in some workers (those residing outside the Study Area) having to relocate to move closer to their job. Such moves result in lost productivity and resources spent moving, as well as dislocating other household members from their jobs and local support systems (e.g., day care providers, schools, etc.).

The Build Alternatives, and to a much lesser extent, the TSM Alternative, will mitigate these negative impacts by reducing transit travel times, and by making transit more competitive with auto travel, particularly during peak commuting hours. The travel time savings are illustrated in Table 6-29 and Table 6-30 which look at peak hour travel times for selected origin-destination pairs in the No Build and under Alternative 2.

Alternative 2 is a representative alternative – it is not as extensive as Alternative 5, but still serves Wilshire Boulevard stations from the end of the purple line to the Westwood/VA Hospital. The selected origin-destination pairs include trips within and into/out of the Study Area, and the origins include both areas with proposed new stations (e.g., UCLA, Century City) as well as areas that do not have new rail stations under Alternative 2 (e.g., Santa Monica).

As Table 6-29 shows, transit travel times to the Study Area are substantially reduced under the Build Alternatives, with savings of around 20% to 30% (about 15 to 30 minutes per one-way trip). Benefits will vary depending on location, with travel time savings between Hollywood and UCLA of nearly 45 minutes, while other destination pairs (further away from proposed station areas) experience much lower time savings.

Table 6-29: Selected Transit Travel Times, No Build vs. Representative Build Alternative (Alternative 2)

OD Pair		Distance (miles)	Transit Travel Time (in minutes)		Improvement	
Origin	Destination		2035 No Build	2035 Alternative 2	# of minutes	% reduction
Sherman Oaks	Beverly Hills	8.8	77.8	61.9	15.9	20%
North Hollywood	Beverly Hills	11.3	89.7	70.7	19.0	21%
West LA	Downtown	14.8	64.2	48.3	15.9	25%
Santa Monica	West Hollywood	10.6	53.4	53.4	0	0%
Hollywood	UCLA	9.3	101.0	56.5	44.5	44%
East LA	Century City	16.9	84.0	59.5	24.5	29%
South LA	West LA	16.0	79.1	59.8	19.3	24%
Compton	West Hollywood	19.1	81.9	78.2	3.7	5%
Pico Union	Westwood	11.5	70.0	40.0	30.0	43%
Silverlake	Beverly Hills	9.5	67.9	47.2	20.7	30%
Pasadena	Mid Wilshire	15.5	70.7	55.6	15.1	21%

Table 6-30 compares auto travel times with Build Alternatives transit travel times in 2035 (auto travel times in Build vs. No Build Alternatives are virtually the same). While transit travel times are more competitive with auto (compared to No Build transit travel times), in many cases, auto trips are still faster. In the selected origin-destination pairs shown, only three trips are faster by transit, and only one of these (Pasadena to Mid-Wilshire) saves more than 2-3 minutes.

It should be noted that the in-vehicle travel times for transit trips are frequently shorter than auto travel times, but when walk and wait times are added, the transit trip generally takes longer than an auto trip. For this reason, individuals working or living very close to an existing or planned transit station are more likely to experience faster-than-auto travel times than those located farther away from the station.

Table 6-30: Selected Auto vs. Transit Travel Times for Representative Build Alternative (Alternative 2)

OD Pair		Distance (miles)	2035 Auto Travel Time (in minutes)	Transit Travel Time (in minutes)			Total Trip Travel Time Comparison (Auto vs. Transit)
Origin	Destination			In-Vehicle Time	Walk and Wait Time	2035 Alternative 2	
Sherman Oaks	Beverly Hills	8.8	56.2	44.5	17.4	61.9	-5.72
North Hollywood	Beverly Hills	11.3	63.9	36.5	34.2	70.7	-6.82
West LA	Downtown	14.8	35.7	28.3	20	48.3	-12.56
Santa Monica	West Hollywood	10.6	29.5	39.2	14.2	53.4	-23.92
Hollywood	UCLA	9.3	45.5	34	22.5	56.5	-11.05
East LA	Century City	16.9	62.5	38.6	20.9	59.5	3.02
South LA	West LA	16.0	53.5	35.6	24.2	59.8	-6.32
Compton	West Hollywood	19.1	54.8	54.2	24	78.2	-23.41
Pico Union	Westwood	11.5	42.1	21.3	18.7	40	2.09
Silverlake	Beverly Hills	9.5	37.4	23.7	23.5	47.2	-9.85
Pasadena	Mid Wilshire	15.5	66.4	37.9	17.7	55.6	10.81

While congestion will still exist, the ability of people to avoid congestion under the Build Alternatives will have a number of beneficial long-term impacts on the economy, as discussed above and further below.

The preponderance of transportation research literature supports these findings – that providing high-volume public transit service to dense and highly congested urban areas which significantly improves access – generates positive long term economic and commercial real estate and development benefits within a regional transit corridor.[1]

[1] For a review of empirical studies of transit's impacts on regional economic output, productivity, and land values, see for example: Federal Transit Administration Office of Policy Development, "Transit Benefits 2000 Working Papers: A Public Choice Policy Analysis", 2000.

6.6.2 Benefits for the Transit Dependent

There are a large number of transit dependent individuals in Los Angeles. In the county as a whole, 13 percent of households do not have access to a personal vehicle, and an additional 37 percent of households have only one vehicle (which, for households with more than one adult, can indicate that the household is dependent on transit for at least some of its travel). Transit-dependent individuals include both low-income households that cannot afford a car, as well as the elderly, workers and students who are under legal driving age, and individuals with sight impairments and other disabilities which impact driving ability.

As indicated by the sample trips shown in Table 6-29, in 2035 travel times for transit trips both within and into/out of the Study Area will be much shorter under the Build alternatives. This improved mobility will result in a wide range of benefits to transit dependent individuals, including, but not limited to:

- Providing access to a larger number of job opportunities (in Alternative 5, up to 226,000 jobs will be within walking distance of proposed station areas in 2035)
- Improving access to educational opportunities
- Providing access to additional shopping and medical facilities (increasing the choices available to transit-dependent households)
- Improved access to parks, cultural and recreational opportunities

These benefits accrue not just to transit dependent individuals living within the Study Area, but also to those traveling to the Study Area from other transit-accessible locations in the region.

6.6.2.1 Station Area Development Benefits

Benefits for Station Area Employers

Employers located within walking distance of the proposed transit stations will benefit in a number of ways from the proposed project. The Build Alternatives will improve station area businesses' access to government offices, other businesses, and potential customers located within walking distance from other rapid transit stations, both existing and planned. Specific benefits include increased productivity resulting from shorter business trip times, as well as decreased transportation costs, including potential savings on providing employee parking.

For commercial properties, transit proximity potentially broadens the customer base as it increases foot traffic near businesses, and contributes to customer accessibility.

Station area businesses will also benefit, as noted above, from access to a wider range of potential employees. Transit dependent workers will find station-area businesses much more attractive to work for, as trip times are cut by twenty percent or more from some areas. Non-transit dependent workers living in close proximity to rapid transit stations may also find that the Build Alternatives reduce their commute time to the Study Area.

And for those trips where Build transit times will be lower than auto travel times (as shown in some rows of Table 6-30), the pool of potential employees becomes even larger – with a one-hour transit commute range extending out nearly 16 miles in some directions (for example, from East Los Angeles or Pasadena). This can greatly increase a station-area employer's access to higher-skilled workers living throughout the region.

As noted above, the accessibility benefits that businesses and workers will experience are most concentrated around the stations, since people coming by transit to the corridor will then need to walk to their destinations. The longer the walk time, the less the benefit will be.

Benefits to Study Area Residents

The Study Area is home to over half a million residents. While relatively few of these are located near the station areas, by 2035, there may be (under Alternative 5, depending on station location options) as many as 71,400 residents within walking distance of the proposed stations.

The Build Alternatives will greatly enhance personal mobility for station area residents, dramatically reducing transit travel times to destinations near rapid transit stations. In some cases, transit travel times may even be reduced below auto travel times, and even when that is not the case, improved transit access (leading to increased transit use) can reduce travel costs.

Residents living further away from proposed stations will also benefit somewhat from improved transit access, to the extent that they transfer to the rail from local bus service, take a bike to the rail station, or have other household members drop them off by car.

Homeowners, especially those with good access to the Metro system as a whole, may also experience increased property values as a result of increased demand for housing with better access to jobs.

6.6.2.2 Property Value Impacts

To the extent that station areas would be well served by the transit system, it is likely that properties within walking distance of the stations would realize value premiums over similar properties that are farther away. In addition to simple proximity to the station, other community and system characteristics are important in creating real estate value premiums near station sites. These include relatively high-density zoning, a safe pedestrian-friendly environment, and a balanced origin/destination mix within the fixed guideway system. All these characteristics are present for many of the proposed stations.

Based on studies of other regions with transit systems (i.e., San Francisco, San Diego, and San Jose, California; New York, New York; and Portland, Oregon), an average home price increase of 6.4 percent within one-half mile of each transit station may be experienced. The research presented in Table 6-31 shows that residential property values increased as much as $2,300 in market value for every 100 feet closer to a station. This has been documented in densely populated areas such as New York City. In other areas, value increases were also realized but to a lesser extent.

Table 6-31: Fixed Guideway System Benefits Research Summary

Rail System	Technology	Increase in Home Sales Price	Source
BART—San Francisco	Rapid Rail	$1,578 increase for every 100 feet closer to a station	Lewis-Workman 1997
MTA—New York City	Rapid Rail	$2,300 increase for every 100 feet closer to a station	Lewis-Workman 1997
San Diego	LRT	$82.90 increase for every 100 feet closer to a station	Landis 1995
San Jose	LRT	$60 increase for every 100 feet closer to a station	Landis 1995
MAX—Portland	LRT	$202 increase for every 100 feet closer to a station	Al-Mosaind 1993
Metro—Washington, D.C.	Rapid Rail	$0.23 increase *in per-square-foot rent* for every 100 feet closer to a station	FTA 2000

This table presents a small sample of the research that has been performed on this topic, using a variety of methods and assumptions. This information is not meant to suggest that any of these value increases will specifically occur in the Study Area. Indeed, most studies on real estate value impacts from transit show increases in value, but they cannot explicitly isolate transit benefits from other market forces that affect real estate values.
BART = Bay Area Rapid Transit MTA = Metropolitan Transportation Authority MAX = Metropolitan Area Express

Value increases within proximity of a transit station are realized in sales price as well as rent premiums. For residential properties, these increases resulted from potential commute or recreational travel time savings and associated vehicle cost reductions (including both reduced mileage as well as a reduction in the number of cars owned by the household).

6.6.2.3 Potential Negative Effects

It should be noted that negative impacts on property values from transit (termed "nuisance" effects) can also 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 in the immediate vicinity of a fixed guideway station. These nuisance effects would most likely occur in areas where value is not attributed to the accessibility improvements that transit provides, but to other factors such as isolation from high-density areas and other aesthetic characteristics. This does not appear likely within the Study Area, due to the fact that stations are planned to be located in areas that are already densely developed and are located near major roads and bus routes. Furthermore, in cases where a transit system does not provide travel-time savings or accessibility benefits, the system may be more likely to depress values than to increase them.

6.6.2.4 Land Use Impacts

To a significant extent, the previous section on potential impacts on property values represents a correlate of induced development. This is because in locations where the Build Alternatives would result in an increase in property values, this is a signal that the real estate market is responsive to improvements in corridor accessibility and mobility and to the additional marketability of land within the station area itself. These market responses would be manifested both in terms of higher property values and possibly more development. Such impacts are likely to occur within the station areas, but may extend out more generally in the corridor. Conditions that would generally be associated with induced development include:

- Strong underlying real estate and economic fundamentals, both within the corridor and within the region as a whole
- Available land (vacant or re-developable) around stations
- Transit-oriented zoning, land use patterns, and existing development patterns

When a location becomes more valuable, whether in terms of its desirability as a place to live or to situate a business, or simply because of its higher cost to purchase or rent, there will be pressures to intensify land use. Generally, this intensification is expressed either by an increase in density (such as a change from a duplex to a multi-story apartment building, or turning a surface parking lot into a multi-story parking garage) or by a change in use (for example from residential to commercial).

For this project, land use changes are expected to be relatively minor. Much of the land surrounding the proposed stations is already pedestrian-friendly, transit-oriented, and of a high density. More than half of the Study Area's housing units are in multi-family structures. Furthermore, current station area plans do not call for changes to existing zoning.

There are a few areas where additional development could occur. As Table 6-32shows, some proposed stations have as much as 12 percent of the surrounding land (within a quarter-mile radius) dedicated to parking, or currently vacant[2]. The proposed station areas average 4.4 percent vacant land, but even that small percentage works out to as much as 7 million square feet under Alternative 5.

If the vacant land and parking lots are converted to commercial, office, or residential use because of the transit improvements making the property more attractive, property values would increase substantially, along with property tax receipts.

Smaller changes are also likely to be made to some non-vacant parcels to make each station area more transit-oriented. While the eastern half of the proposed extension is already pedestrian-oriented, the western half has many areas that are dense, but still oriented to autos. As foot traffic increases due to passengers entering and exiting the new stations, it is likely that street-level commercial businesses will develop along major pedestrian routes. In addition, along Restaurant Row (La Cienega Boulevard) much of the currently auto-oriented parcels (those with surface parking in the front or on the sides of buildings) may be re-developed to provide additional square footage for existing or similar businesses. This can be encouraged both by increased property values and property taxes, which make the land too valuable to use for parking, and also by the fact that customers will be able to visit the area by transit, potentially reducing the demand for customer parking.

New development and re-development, once begun, will have a self-reinforcing effect, as it attracts additional foot traffic, leading to additional shopping opportunities for adjacent properties, making these locations more attractive for commercial businesses. New, more transit-oriented land uses will also increase transit usage, as the increased number of transit-accessible destinations attracts more transit users.

[2] Vacant land in this analysis excludes parkland and the grounds of the VA hospital. It is assumed that these land uses are exempt from possible development.

Table 6-32: Vacant Land and Land Devoted to Parking Within a Quarter-Mile of Proposed Stations

Station	Area (Square Feet)	Percent of Station Area
Wilshire/Crenshaw (Optional)	249,877	4.1%
Wilshire/La Brea	433,020	6.2%
Wilshire/Fairfax	282,797	3.4%
Wilshire/Fairfax (East)	317,406	4.0%
Wilshire/La Cienega	170,283	2.8%
Wilshire/La Cienega (Option 3 - Transfer)	193,589	2.6%
Wilshire/Rodeo	1,094,469	8.3%
Century City (Santa Monica)	452,543	4.3%
Century City (Constellation)	1,168,644	7.3%
Westwood/UCLA (Off-Street)	190,640	1.7%
Westwood/UCLA (On-Street)	223,305	1.9%
Westwood/VA Hospital (South)	0	0.0%
Westwood/VA Hospital (North)	2,461	0.0%
Wilshire/Bundy	150,785	2.2%
Wilshire/26th	233,335	3.5%
Wilshire/16th	310,319	5.7%
Wilshire/4th	328,059	5.6%
Hollywood/Highland	1,622,935	12.0%
Santa Monica/La Brea	595,036	9.0%
Santa Monica/Fairfax	102,530	1.7%
Santa Monica/San Vicente	346,773	3.5%
Beverly Center Area	330,587	6.4%

It is impossible to predict the level or timing of new development in the proposed station areas, as development relies on many factors other than transit access, including economic pressures. The same is true of property values, as recent declines in property values throughout California may take a while to recover. However, it is reasonable to expect that in the future, the property values and level of development around station areas will be higher under the Build Alternatives than under the No Build and TSM Alternatives.

6.6.3 Benefits Outside the Study Area

Just as residents and employers within the proposed station areas will benefit from greatly improved and more reliable access to destinations at existing rapid transit stations – including the property value and development benefits that may follow – similar benefits will accrue to residents and employers in proximity to rapid transit stations outside of the project Study Area. This effect will be less than for the new station areas because the station areas have already adjusted to the benefits of improved transit access. Extension of the rail system will simply enhance these benefits, by encouraging increased use of the stations.

Residential properties with good access to stations will benefit, as the Build Alternatives will greatly improve accessibility from these areas to as many as 226,000 jobs – many of them are high wage jobs – which would be within walking distance of the proposed Westside stations

in 2035. This access makes residences in proximity to rapid transit much more attractive to prospective renters, as well as to individuals in the market for houses and condominiums, increasing property values, reducing vacancy rates, and providing an incentive for development of higher-density housing. Good access to stations includes residences within walking distance of existing rapid transit stations, as well as homes within easy driving distance from stations with park-and-ride lots, or with good bus or bicycle access to stations.

Employers located near existing stations will also benefit, as the individuals living within the service areas of the proposed Westside stations will have an easier commute to these locations, increasing the potential worker pool. Businesses also benefit from shorter travel time and lower travel costs required for business trips to the Study Area.

Commercial properties near existing stations will benefit as well. Under the Build Alternatives, total rail ridership will grow as a result of the thousands of additional destinations (stores, jobs, residences) that will be added to the rail system. Most importantly, the project, being located in a major regional employment center, should attract many new users to the transit system, as jobs are one of the most common destinations for choice riders (those with personal vehicles) using transit. With increased ridership systemwide, auto and foot traffic around many of the existing stations will increase. Commercial businesses, such as restaurants and stores, generally benefit from additional passersby, and will find station areas more desirable as locations than would be the case under the No Build.

6.6.4 Overall Regional Benefits

From a regional perspective, some of the induced growth discussed above will be growth that, under the No Build, would have been built in a different location. However, some portion of the economic growth will be induced by the existence of the project itself – benefits that would not exist under the No Build, either inside or outside the Study Area. These benefits can result from reduced business costs, a more-educated workforce, higher wages, and simply as a result of the concentration of uses that occurs in transit-oriented development, which can lead to more-efficient businesses, higher productivity, and the benefits of agglomeration (i.e., having a large number of skilled and specialized workers and organizations located in close proximity).

Overall, the Build Alternatives will improve connections for individuals who are transit dependent, and to a lesser extent, other individuals, particularly those who live or work in proximity to rapid transit stations. By better linking customers, workers, and students of all income and skill levels with jobs, shopping, education and healthcare destinations in the Study Area, the region will benefit in countless small ways from reduced travel times, lower travel costs, and more reliable travel times, allowing for a more competitive and efficient regional economy, and a healthier, more educated workforce.

7.0 MITIGATION MEASURES DURING CONSTRUCTION

Construction of the alternatives may affect access to business for a temporary period of time. Both standard and site-specific mitigation measures will be developed by the Project Engineering team to minimize disruption of pedestrian access to business and disruption of general vehicular traffic flow or access to specific businesses. Mitigation measures will take into consideration the needs of the local business community and the potentially adverse impacts construction activities may have on businesses. The analysis would identify businesses, which could experience such impacts during the construction phase and develop standard and site-specific mitigation measures to minimize temporary business disruption.

7.1 CEQA Determination

Property tax losses in excess of one percent of the area tax base would be considered a significant effect under CEQA. No impacts above this threshold were determined in the foregoing analysis.