WESTSIDE SUBWAY EXTENSION

Visual and Aesthetic Resources Impact Technical Report

Metro

August 2010
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<th>Description</th>
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<tbody>
<tr>
<td>AA</td>
<td>Alternatives Analysis</td>
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<tr>
<td>ADA</td>
<td><em>Americans with Disabilities Act</em> (42 USC 126; PL 101-336)</td>
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<tr>
<td>APM</td>
<td>automated people mover</td>
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<td>BRS</td>
<td>blast relief shafts</td>
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<td>BRT</td>
<td>bus rapid transit</td>
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<td>CCTV</td>
<td>closed-circuit television</td>
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<td>CEQA</td>
<td><em>California Environmental Quality Act</em> (PRC 21000-21177)</td>
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<td>CFR</td>
<td>Code of Federal Regulations</td>
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<tr>
<td>CNG</td>
<td>compressed natural gas</td>
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<td>CSOP</td>
<td>control standard operating procedure</td>
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<td>EIR</td>
<td>environmental impact report</td>
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<td>EIS</td>
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<td>Exposition Boulevard Light Rail Phase I</td>
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<td>Federal Highway Administration</td>
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<td>FTA</td>
<td>Federal Transit Administration</td>
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<td>GLAVA</td>
<td>Greater Los Angeles Veterans Administration</td>
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<td>HOV</td>
<td>high-occupancy vehicle</td>
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<td>HRT</td>
<td>heavy rail transit</td>
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<td>HRV</td>
<td>heavy rail vehicles</td>
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<td>I-10</td>
<td>Interstate 10 Freeway</td>
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<td>I-405</td>
<td>Interstate 405 Freeway</td>
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<td>LADOT</td>
<td>Los Angeles Department of Transportation</td>
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<td>LAWA</td>
<td>Los Angeles World Airports</td>
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<td>LAX</td>
<td>Los Angeles Airport</td>
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<td>LPA</td>
<td>Locally Preferred Alternative</td>
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<td>LRT</td>
<td>light rail transit</td>
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<td>LRTP</td>
<td>Long Range Transportation Plan</td>
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<td>Metro</td>
<td>Los Angeles County Metropolitan Transportation Authority</td>
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<td>MOS</td>
<td>minimum operable segments</td>
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<td>mph</td>
<td>miles per hour</td>
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<tr>
<td>Acronym</td>
<td>Definition</td>
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<td>NEPA</td>
<td>National Environmental Policy Act (42 USC 4321-4347)</td>
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<td>OTE</td>
<td>over track exhaust</td>
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<td>PTEL</td>
<td>passenger assistance telephones</td>
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<td>ROC</td>
<td>Rail Operations Center</td>
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<td>RTP</td>
<td>Regional Transportation Plan</td>
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<td>SOP</td>
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<td>State Route 90</td>
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<td>transit passenger information system</td>
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<tr>
<td>TPSS</td>
<td>traction power substation</td>
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<td>TSM</td>
<td>transportation system management</td>
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<td>TVM</td>
<td>ticket vending machines</td>
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<td>UMTA</td>
<td>Urban Mass Transportation Administration</td>
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<tr>
<td>UPE</td>
<td>under platform exhaust</td>
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<td>UPRR</td>
<td>Union Pacific Railroad</td>
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<td>United States Code</td>
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1.0 INTRODUCTION

Visual or aesthetic resources are the natural and built features of the landscape that can be seen. The combination of landform, water, and vegetation patterns represents the natural landscape features that define an area’s visual character. Built features, such as buildings, roads, utility structures, and ornamental plantings, reflect human modifications to the landscape. These natural and built landscape features, or visual resources, contribute to the public’s experience and appreciation of the environment.

The process used in this visual impact assessment generally follows the guidelines outlined in the Federal Highway Administration’s (FHWA) guide, *Visual Impact Assessment for Highway Projects* (FHWA 1981). Although this guidance was developed for highway projects, it is easily adaptable, and the Federal Transit Administration (FTA) has not issued guidance for the visual assessment of transit projects. The major components of the visual impact assessment include establishing the visual setting and assessing impacts of the project alternatives on visual resources, such as nearby natural or constructed features.

The viewer population is a mix of major viewer groups that includes residents, tourists, shoppers, commuters, people taking advantage of the cultural and culinary attractions in the study area, and people who work in this area. Scenic views are defined as long-range views toward preserved natural areas or recognized visual and/or historic landmarks. A visual change would be considered adverse if it introduces obstructive elements substantially out of character with existing land uses or substantially obscures a scenic view or vista available to major viewer groups near project features. The degree of visual impact is determined by assessing visible changes that would be introduced by the Project during construction and operation, as well as viewers’ exposure and sensitivity to these changes. Consideration has been give for removal of existing buildings as well as well as affects to open plazas adjacent to buildings.
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 large 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
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 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...
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
would operate in each direction at 5-minute headways during peak periods and 10-minute headways during the midday, off-peak period. The estimated one-way running time for the Metro Purple Line extension is 19 minutes 27 seconds, and the running time from the Hollywood/Highland Station to the Wilshire/4th Station is 22 minutes 36 seconds.

2.3.6 Stations and Segment Options

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

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

<table>
<thead>
<tr>
<th>Stations</th>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Westwood/UCLA Extension</td>
<td></td>
</tr>
<tr>
<td>Westwood/VA Hospital Extension</td>
<td>●</td>
</tr>
<tr>
<td>Santa Monica Extension</td>
<td></td>
</tr>
<tr>
<td>Westwood/VA Hospital Extension Plus West Hollywood Extension</td>
<td></td>
</tr>
<tr>
<td>Santa Monica Extension Plus West Hollywood Extension</td>
<td></td>
</tr>
</tbody>
</table>

**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
2.3.7 Option 1—Wilshire/Crenshaw Station Option

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

![Figure 2-7. Option 1—No Wilshire/Crenshaw Station Option](image)

2.3.8 Option 2—Wilshire/Fairfax Station East Option

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

![Figure 2-8. Option 2—Fairfax Station Option](image)
2.3.9 Option 3—Wilshire/La Cienega Station Option

- **Base Station: Wilshire/La Cienega Station**—The base station would be under the center of Wilshire Boulevard, immediately east of La Cienega Boulevard. A direct transfer between the Metro Purple Line and the potential future West Hollywood Line is not provided with this station. Instead, a connection structure is proposed west of Robertson Boulevard as a means to provide a future HRT connection to the West Hollywood Line.

- **Station Option: Wilshire/La Cienega Station West with Connection Structure**—The station option would be located west of La Cienega Boulevard, with the station box extending from the Wilshire/Le Doux Road intersection to just west of the Wilshire/Carson Road intersection (Figure 2-9). It also contains an alignment option that would provide an alternate HRT connection to the future West Hollywood Extension. This alignment portion of Option 3 is only applicable to Alternatives 4 and 5.

![Figure 2-9. Option 3—La Cienega Station Option](image)

2.3.10 Option 4—Century City Station and Segment Options

**Century City Station and Beverly Hills to Century City Segment Options**

- **Base Station: Century City (Santa Monica) Station**—The base station would be under Santa Monica Boulevard, centered on Avenue of the Stars.

- **Station Option: Century City (Constellation) Station**—With Option 4, the Century City Station has a location option on Constellation Boulevard (Figure 2-10), straddling Avenue of the Stars and extending westward to east of MGM Drive.

- **Segment Options**: 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.

2.3.10.1 Century City to Westwood Segment Options

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

Figure 2-10. Century City Station Options

2.3.11 Option 5—Westwood/UCLA Station Options

- **Base Station: Westwood/UCLA Station Off-Street Station Option**—The base station is located under the UCLA Lot 36 on the north side of Wilshire Boulevard between Gayley and Veteran Avenues.

- **Station Option: Westwood/UCLA On-Street Station Option**—This station option would be located under the center of Wilshire Boulevard, immediately west of Westwood Boulevard (Figure 2-11).
2.3.12 Option 6—Westwood/VA Hospital Station Option

- **Base Station: Westwood/VA Hospital**—The base station would be below the VA Hospital parking lot on the south side of Wilshire Boulevard in between the I-405 exit ramp and Bonsall Avenue.

- **Station Option: Westwood/VA Hospital North Station**—This station option would locate the Westwood/VA Hospital Station on the north side of Wilshire Boulevard between Bonsall Avenue and Wadsworth Theater. (Shown in Figure 2-12)

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

2.4 Base Stations

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

- **Wilshire/La Brea Station**—This station would be located between La Brea and Cloverdale Avenues.
2.5 Other Components of the Build Alternatives

2.5.1 Traction Power Substations

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

2.5.2 Emergency Generators

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

2.5.3 Mid-Tunnel Vent Shaft

Each alternative would require mid-tunnel ventilation shafts. The vent shafts are emergency ventilation shafts with dampers, fans, and sound attenuators generally placed at both ends of a station box to exhaust smoke. In addition, emergency vent shafts could
be used for station cooling and gas mitigation. The vent shafts are also required in tunnel segments with more than 6,000 feet between stations to meet fire/life safety requirements. There would be a connecting corridor between the two tunnels (one for each direction of train movement) to provide emergency egress and fire-fighting ingress. A vent shaft is approximately 150 square feet; with the opening of the shaft located in a sidewalk and covered with a grate about 200 square feet.

Table 2-2. Mid-Tunnel Vent Shaft Locations

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

2.5.4 Trackwork Options

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

- Tail tracks—a track, or tracks, that extends beyond a terminal station (the last station on a line)
- Pocket tracks—an additional track, or tracks, adjacent to the mainline tracks generally at terminal stations
- Crossovers—a pair of turnouts that connect two parallel rail tracks, allowing a train on one track to cross over to the other
- Double crossovers—when two sets of crossovers are installed with a diamond allowing trains to cross over to another track
Table 2-3. Special Trackwork Locations

<table>
<thead>
<tr>
<th>Station</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
<th>Alternative 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Westwood/UCLA Extension</td>
<td>Westwood/VA Hospital Extension</td>
<td>Santa Monica Extension</td>
<td>Westwood/VA Hospital Extension</td>
<td>Santa Monica Extension</td>
</tr>
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<td>None</td>
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<td>Double Crossover</td>
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<td>Double Crossover</td>
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<tr>
<td>Wilshire/La Brea</td>
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<td>Double Crossover</td>
<td>Double Crossover</td>
<td>Double Crossover</td>
</tr>
<tr>
<td>Wilshire/Fairfax</td>
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<td>Wilshire/VA Hospital Extension</td>
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<tr>
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<tr>
<td>Santa Monica/Fairfax</td>
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</tr>
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<td>Additional Special Trackwork Location (Optional Trackwork)</td>
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<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Wilshire/Fairfax</td>
<td>Double Crossover</td>
<td>Double Crossover</td>
<td>Double Crossover</td>
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<td>Double Crossover</td>
</tr>
<tr>
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<td>Double Crossover</td>
<td>Double Crossover</td>
<td>Double Crossover</td>
</tr>
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<td>Pocket Track</td>
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<td>Pocket Track</td>
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<td>None</td>
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</tr>
</tbody>
</table>
### 2.5.5 Rail Operations Center

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

![Figure 2-13: Location of the Rail Operations Center and Maintenance Yards](image)

### 2.5.6 Maintenance Yards

If any of the Build Alternatives are chosen, additional storage capacity would be needed. Two options for providing this expanded capacity are as follows:

- 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 2-15).
2.6 Minimum Operable Segments

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

2.6.1 MOS 1—Fairfax Extension

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

2.6.2 MOS 2—Century City Extension

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