

Table 2-1. Future Transit Network Changes between No Build and TSM Alternatives

Operator	Route Group No.	Route ID and Description	No Build		TSM	
			Peak Headway (min)	Off-peak Headway (min)	Peak Headway (min)	Off-peak Headway (min)
Metro	2	Sunset Blvd (Short Line, Westwood)	12	30	6	15
Metro	4	Santa Monica Blvd (Short Line)	7	14	6	12
Metro	14	Beverly Blvd (Short Line)	20	18	10	20
Metro	16	W 3rd St Ltd (WB)	12	24	6	12
Metro	720	EB-SM-Vermont	10	12	5	10
Metro	720	WB-Vermont-SM	5	11	2	6

Source: Metro

## 2.4 Build Alternatives

This section describes the five Build Alternatives developed as previously described in response to public comment, design parameters, and those that best meet the Purpose and Need to improve mobility and provide fast, reliable, high-capacity, and environmentally sound transportation solutions in the Study Area. The alternatives described in this section (and the stations described in Section 2.6) are considered to be the “base” alternatives (and stations). Alignment (or segment) and station options described later in this chapter were developed in response to public comment, design refinement, and to avoid and minimize impacts to the environment. The options will be compared against the base alternatives and stations to compare the potential transportation and environmental impacts, the ability to meet the goals and objectives, and how they meet the Project’s Purpose and Need.

Station and alignment options are described in Section 2.5, the remaining stations (the base stations) in Section 2.6, other components of the Build Alternatives in Section 2.7, and the phasing of the alternatives (MOSSs) in Section 2.8.

For all Build Alternatives, the ultimate length will depend on the alignment option selected; therefore, distances and travel times vary depending upon which alignment option is selected (Table 2-2). This table presents information on rail operating plans for the Build Alternatives. While variations would occur for items such as length and number of vehicles above the No Build Alternative, some items would be constant. These items include dwell time (20 seconds) maximum speeds (70 miles per hour). No major changes are anticipated under the Build Alternatives with regard to the operating conditions for buses, including travel times, average speeds, and dwell times.

In addition, for all Build Alternatives less frequent train operation would occur during the early morning and evening periods when demand is lower than during midday.

The Build Alternatives all overlay new rail service on the rail and bus networks in the No Build and TSM Alternatives. HRT systems provide high speed (maximum of 70 mph), 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. For the Build Alternatives, the separated

right-of-way is all in a tunnel, with the top of the tunnel at least 30 to 70 feet below the ground surface. The subway would be powered by electrical power from a third rail adjacent to and parallel with the running rail.

HRT meets the transit usage characteristics in the Study Area since it is designed to provide service in long, high-density corridors to connect the central city with major activity centers and large, dense suburban communities.

Each of the Build Alternatives provides a fast, high-capacity transit alternative to the automobile. The differences between these high-capacity alternatives will be determined in the chapters that follow that analyze various environmental impacts of each of the alternatives, as well as in Chapter 7, which evaluates the alternatives based on the environmental analysis and the goals and objectives identified during in Chapter 1, Purpose and Need. The lengths of all five Build Alternatives are illustrated in Figure 2-10 and aerial maps of the Build Alternatives appear in Figure 2-11 through Figure 2-14 summarizes the operating plan for each Build Alternative.

### 2.4.1 Bus Network

With the Build Alternatives, no major route restructuring of bus routes would be anticipated. Also bus fleet requirement would not be modified in a major way as a result of Build Alternatives. Thus cost savings that would be associated with major bus service changes would not be expected.



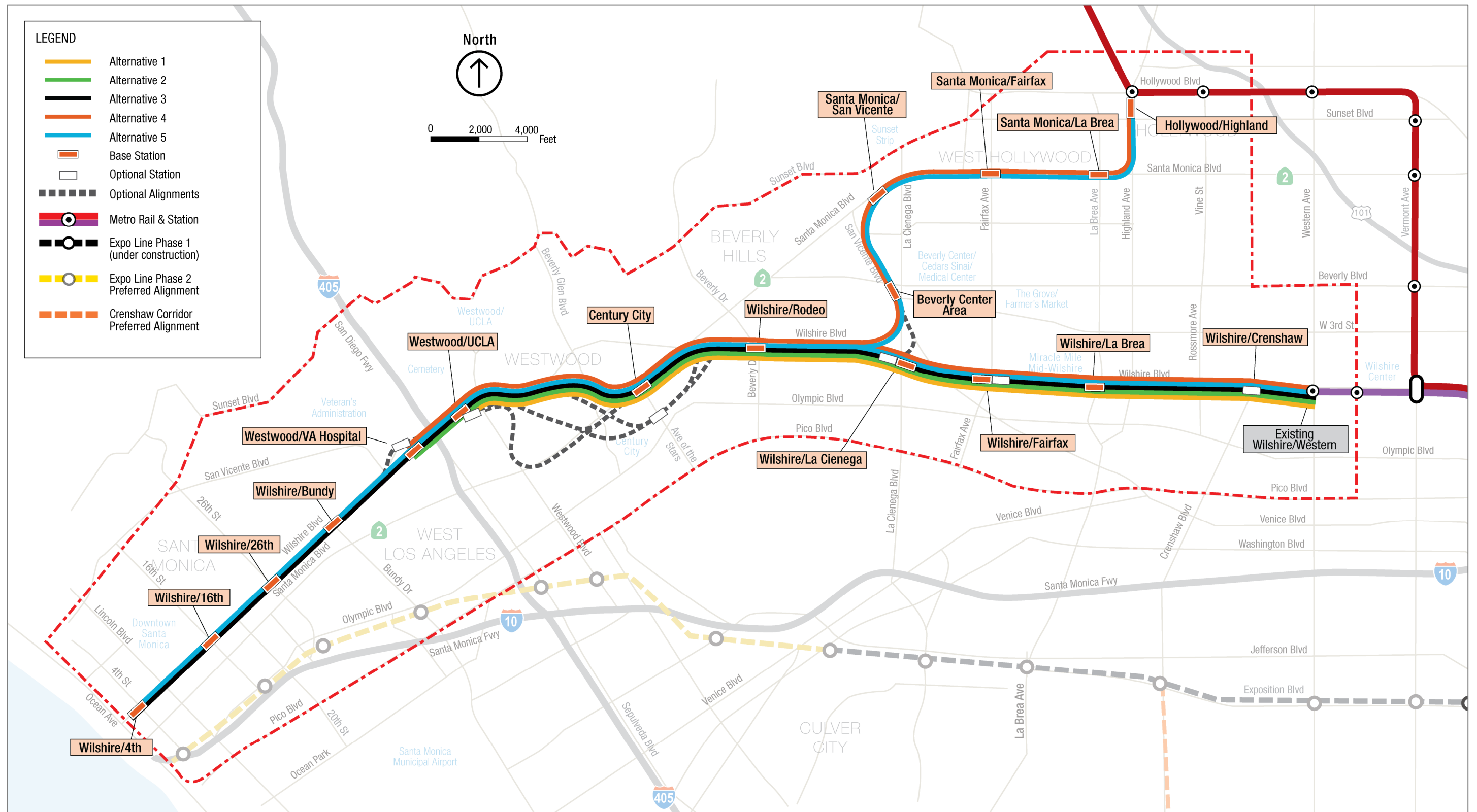


Figure 2-10. All Build Alternatives





Figure 2-11. Activity Centers (Wilshire/Crenshaw Station to Wilshire/Fairfax Station)



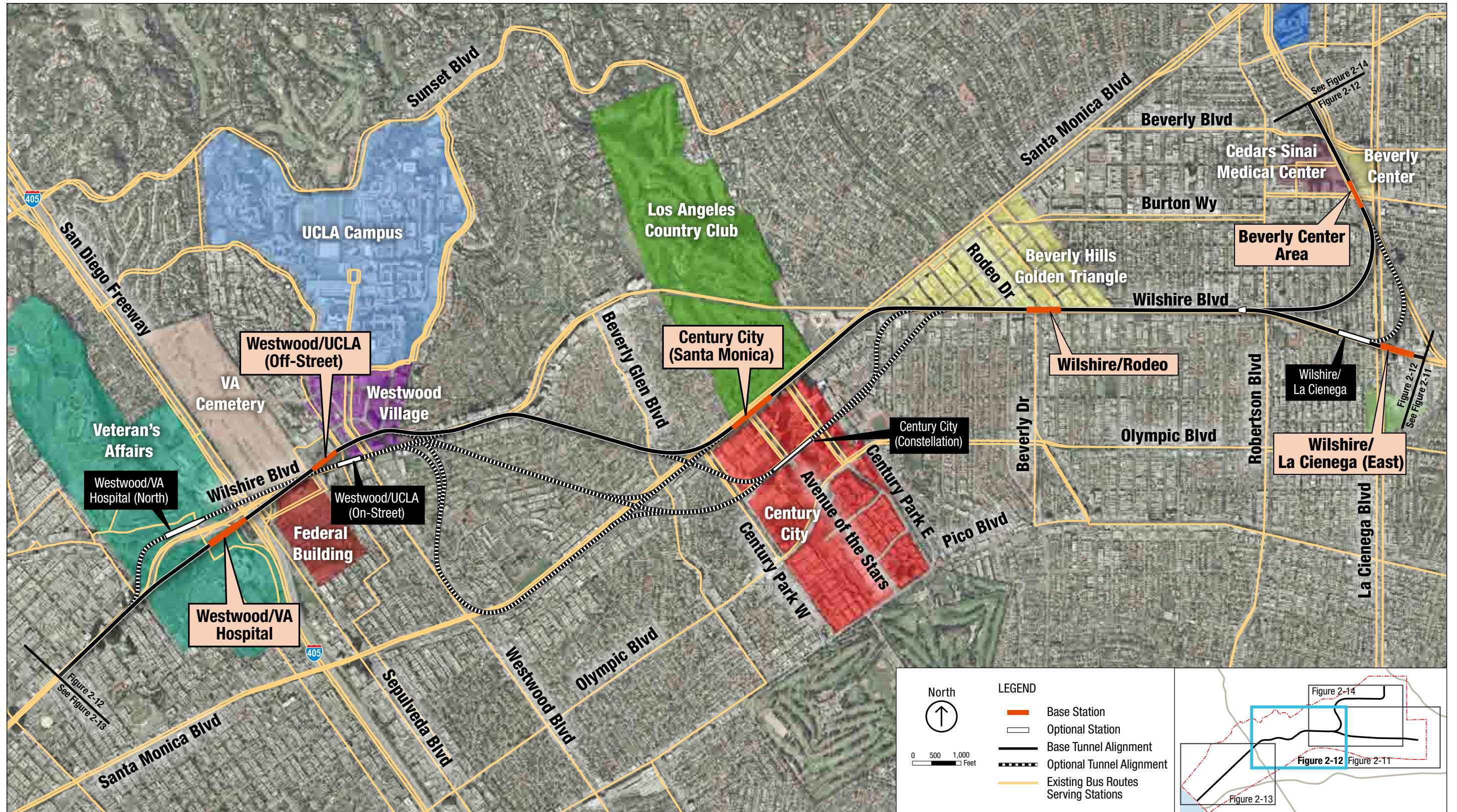


Figure 2-12. Activities Centers (Beverly Center Area Station and Wilshire/La Cienega Station to Westwood/VA Hospital Station)





Figure 2-13. Activities Centers (Wilshire/Bundy Station to Wilshire/4th Station)





Figure 2-14. Activities Centers (Hollywood/Highland Station to Wilshire/La Cienega Station)



Table 2-2. Rail Operating Plans for Build Alternatives

Operating Characteristic	Build Alternatives				
	1	2	3	4	5
Length	8.60 miles	8.96 miles	12.38 miles	14.06 miles	17.49 miles
Total Number of Vehicles	250	250	268	308	336
Number of Vehicles Above No Build	104	104	122	162	190
Headway					
From Wilshire/ Western Station	3.3 minutes (am/pm peaks); 10 minutes midday	3.3 minutes (am/pm peaks); 10 minutes midday	3.3 minutes (am/pm peaks); 10 minutes midday	3.3 minutes (am/pm peaks); 10 minutes midday	3.3 minutes (am/pm peaks); 10 minutes midday
From West Hollywood Branch	—	—	—	5 minutes (am/pm peaks); 10 minutes midday	5 minutes (am/pm peaks); 10 minutes midday
Dwell Time	20 seconds	20 seconds	20 seconds	20 seconds	20 seconds
Maximum Speeds	70mph	70mph	70mph	70mph	70mph
Average Speeds	39.3mph	30.9mph	31.8mph	30.9mph/ 33.9mph	31.8,ph/34.6mph
One Way Run Time					
From Wilshire/ Western Station	12 minutes, 39 seconds	13 minutes, 53 seconds	19 minutes, 27 seconds	13 minutes, 53 seconds	19 minutes, 27 seconds
From Hollywood/ Highland to Westwood/VA Hospital	—	—	—	17 minutes, 2 seconds	—
From Hollywood/ Highland to Wilshire/4th	—	—	—	—	22 minutes, 6 seconds

Source: Metro

Bus service in the Study Area for all Build Alternatives is expected to operate seven days per week 365 days per year, with hours of operation from 6:00 a.m. to 3:00 a.m. Peak-period headways of 5 minutes would be in effect during weekday non-holidays, from 6:00 a.m. to 9:00 a.m. and from 3:00 p.m. to 7:00 p.m. Off-peak headways of 10 minutes would be in effect during the remaining weekday hours of operation and on weekends.

### 2.4.2 Alternative 1—Westwood/UCLA Extension

This alternative extends HRT, in subway, from the existing Metro Purple Line Wilshire/Western Station to a Westwood/UCLA Station (Figure 2-15). The alignment is approximately 8.60 miles in length.

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.



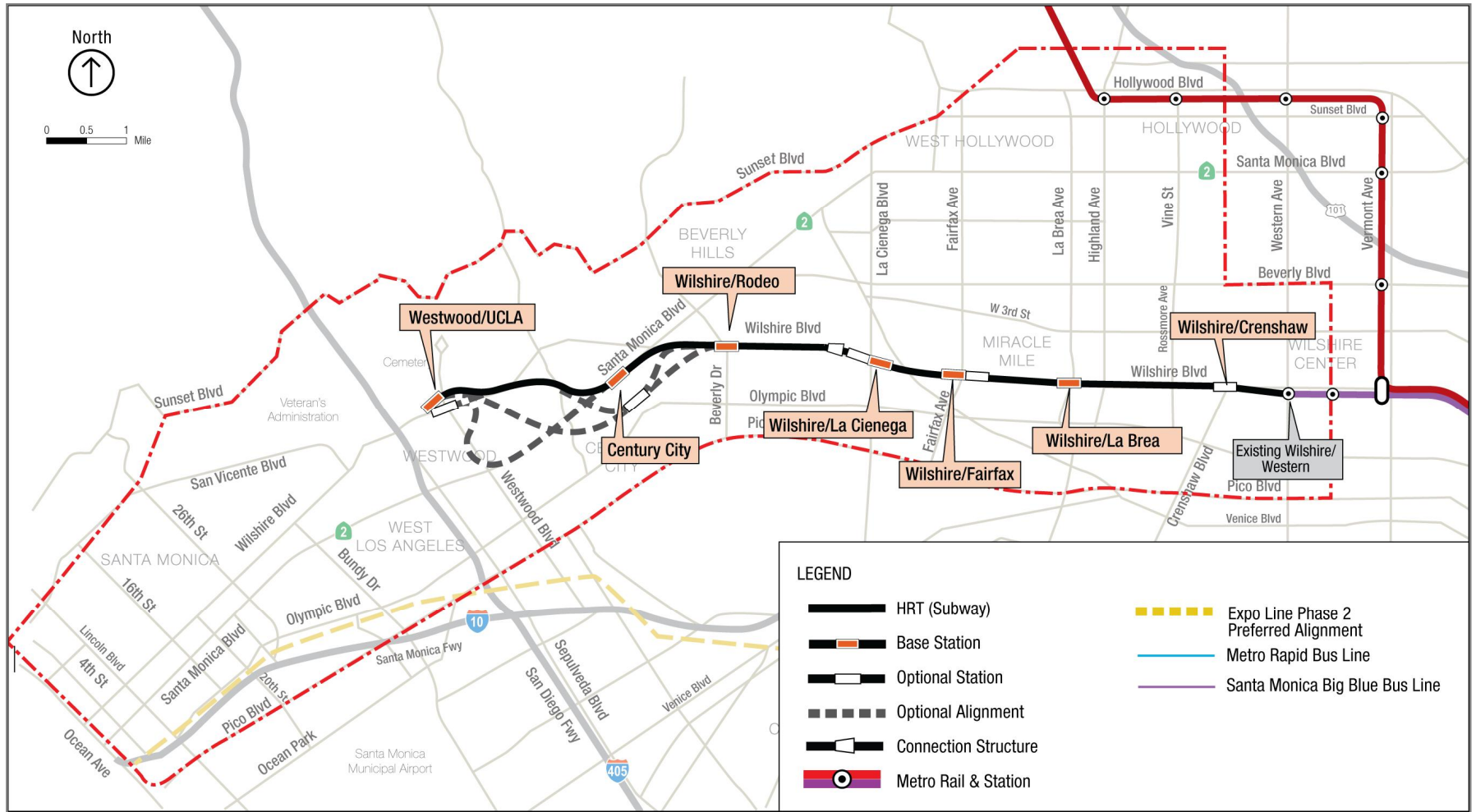


Figure 2-15. Alternative 1—Westwood/UCLA Extension



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. Service frequencies on other Metro Rail lines and bus routes in the corridor would be the same as for the No Build Alternative. The estimated one-way running time is 12 minutes 39 seconds from the Wilshire/Western Station.

There are five stations and alignment options that are described in Sections 2.5.1 through 2.5.5.

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

This alternative extends HRT, in subway, from the existing Metro Purple Line Wilshire/Western Station to a Westwood/VA Hospital Station (Figure 2-16). This alignment is 8.96 miles in length from the Wilshire/Western Station.

Similar to Alternative 1, from the Wilshire/Western Station, Alternative 2 travels westerly beneath Wilshire Boulevard to the Wilshire/Rodeo Station and then southwesterly toward a Century City Station, then toward 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.

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. Service frequencies on other Metro Rail lines and bus routes in the corridor would be the same as for the No Build Alternative. The estimated one-way running time is 13 minutes 53 seconds from the Wilshire/Western Station.

There are six options station and alignment options that are described in Sections 2.5.1 through 2.5.6.

### 2.4.4 Alternative 3—Santa Monica Extension

This alternative extends HRT, in subway, from the existing Metro Purple Line Wilshire/Western Station to the Wilshire/4th Station in Santa Monica (Figure 2-17). The alignment is 12.38 miles in length from the Wilshire/Western Station.

Similar to Alternative 1, from the Wilshire/Western Station, Alternative 3 travels westerly beneath Wilshire Boulevard to the Wilshire/Rodeo Station and then southwesterly toward a Century City Station, then toward a Westwood/UCLA Station. Similar to Alternative 2, Alternative 3 continues westerly under Veteran Avenue and continues west under the I-405 Freeway to a Westwood/VA Hospital Station.

Alternative 3 would then continue westerly under Wilshire Boulevard, terminating at the Wilshire/4th Street Station between 4th and 5th Streets.

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.

There are six options station and alignment options that are described in Sections 2.5.1 through 2.5.6.



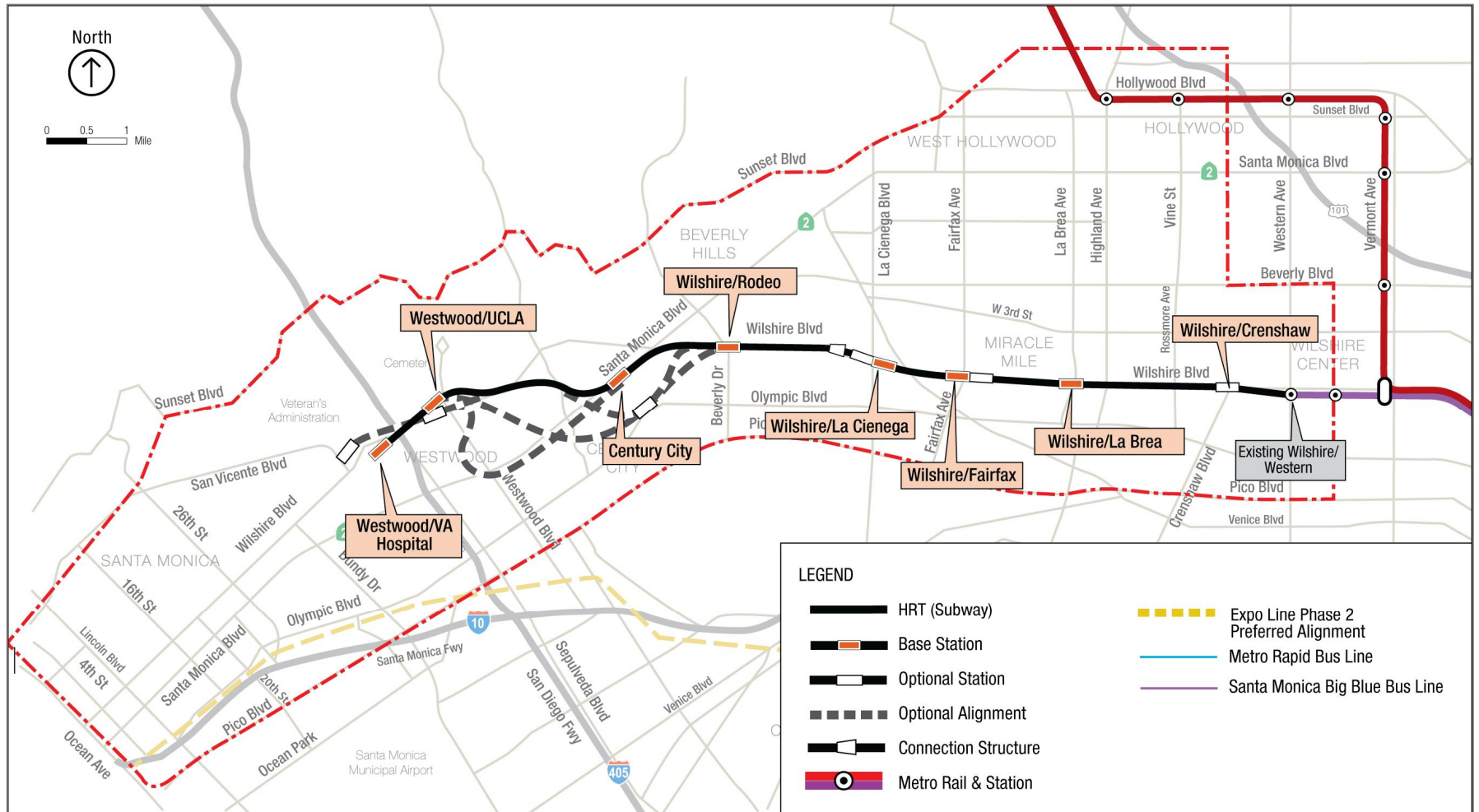


Figure 2-16. Alternative 2—Westwood/Veterans Administration (VA) Hospital Extension



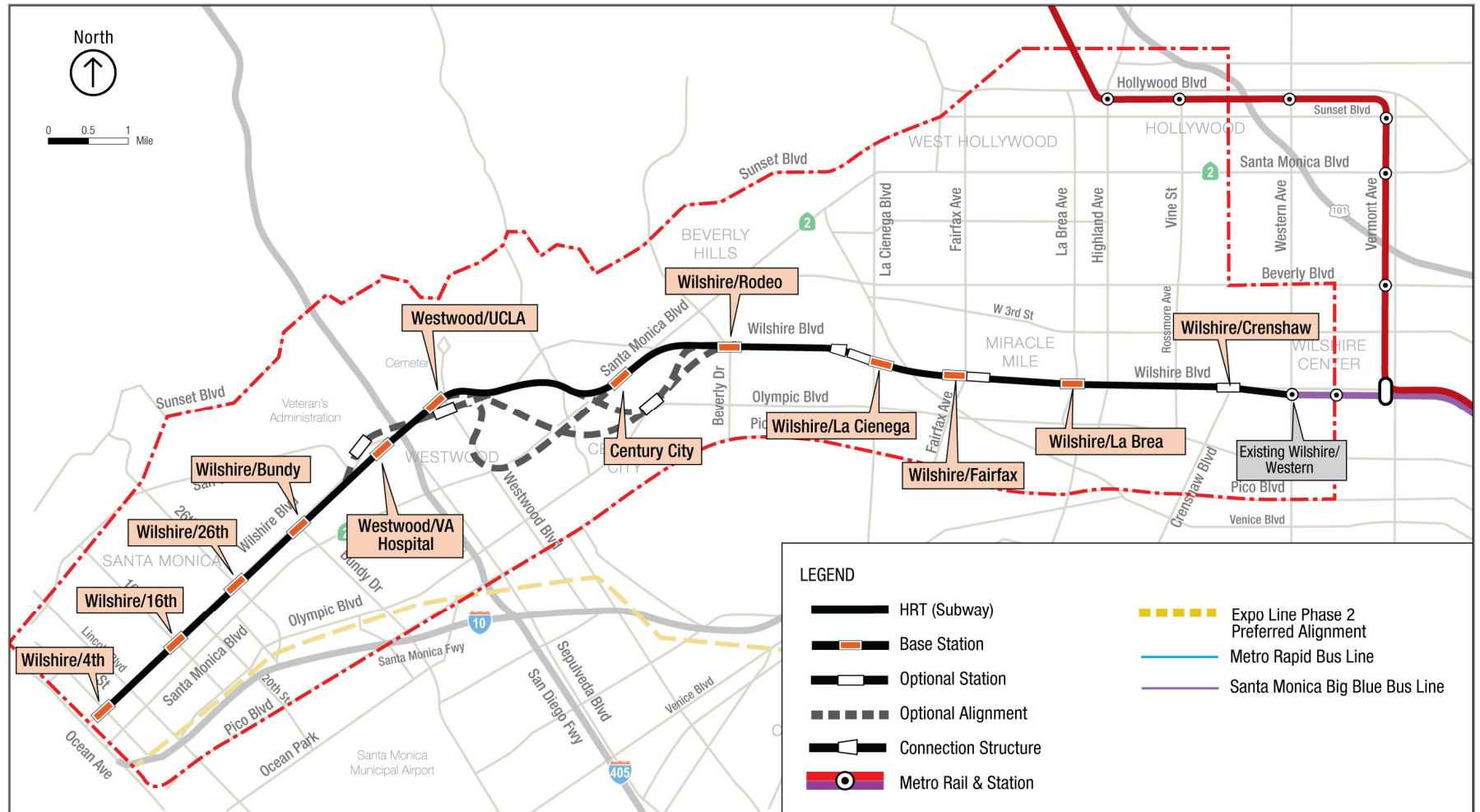


Figure 2-17. Alternative 3—Santa Monica Extension



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

Similar to Alternative 2, this alternative extends HRT, in subway, from the existing Metro Purple Line Wilshire/Western Station to a Westwood/VA Hospital Station but also adds a West Hollywood Extension (Figure 2-18). The West Hollywood branch extends from the existing Metro Red Line Hollywood/Highland Station to the track connection structure near Robertson and Wilshire Boulevards (shown as a white box in Figure 2-18 to the west of the Wilshire/La Cienega Station). The alignment is 14.06 miles in length.

From a new station at Hollywood/Highland, the West Hollywood Line extends south under Highland Avenue to just north of Fountain Avenue where the alignment curves southwest. At Orange Drive, the alignment turns westerly under Santa Monica Boulevard.

At the Sycamore Avenue/Santa Monica Boulevard intersection, the alignment continues westerly under Santa Monica Boulevard to just east of the Santa Monica/San Vicente Boulevard intersection. The alignment turns south at Larrabee Street, under San Vicente Boulevard to Ashcroft Avenue.

At Ashcroft Avenue, the alignment continues south between Sherbourne Drive and San Vicente Boulevard, crossing under Beverly Boulevard, and is then under San Vicente Boulevard to just north of 3rd Street. Near 4th Street, the alignment begins to curve under Burton Way. At Colgate Avenue, the alignment turns southwesterly, crossing under Clifton Way, Le Doux Road, and Stanley Drive. West of Stanley Drive, the alignment curves westerly under Carson Road, Hamel Drive, and Amaz Drive, and then connects into the alignment of Alternative 2 at a track connection structure at Robertson and Wilshire Boulevards.

Alternative 4 would operate from Wilshire/Western to the 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 branch of Alternative 4 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.

There are six options station and alignment options that are described in Sections 2.5.1 through 2.5.6.



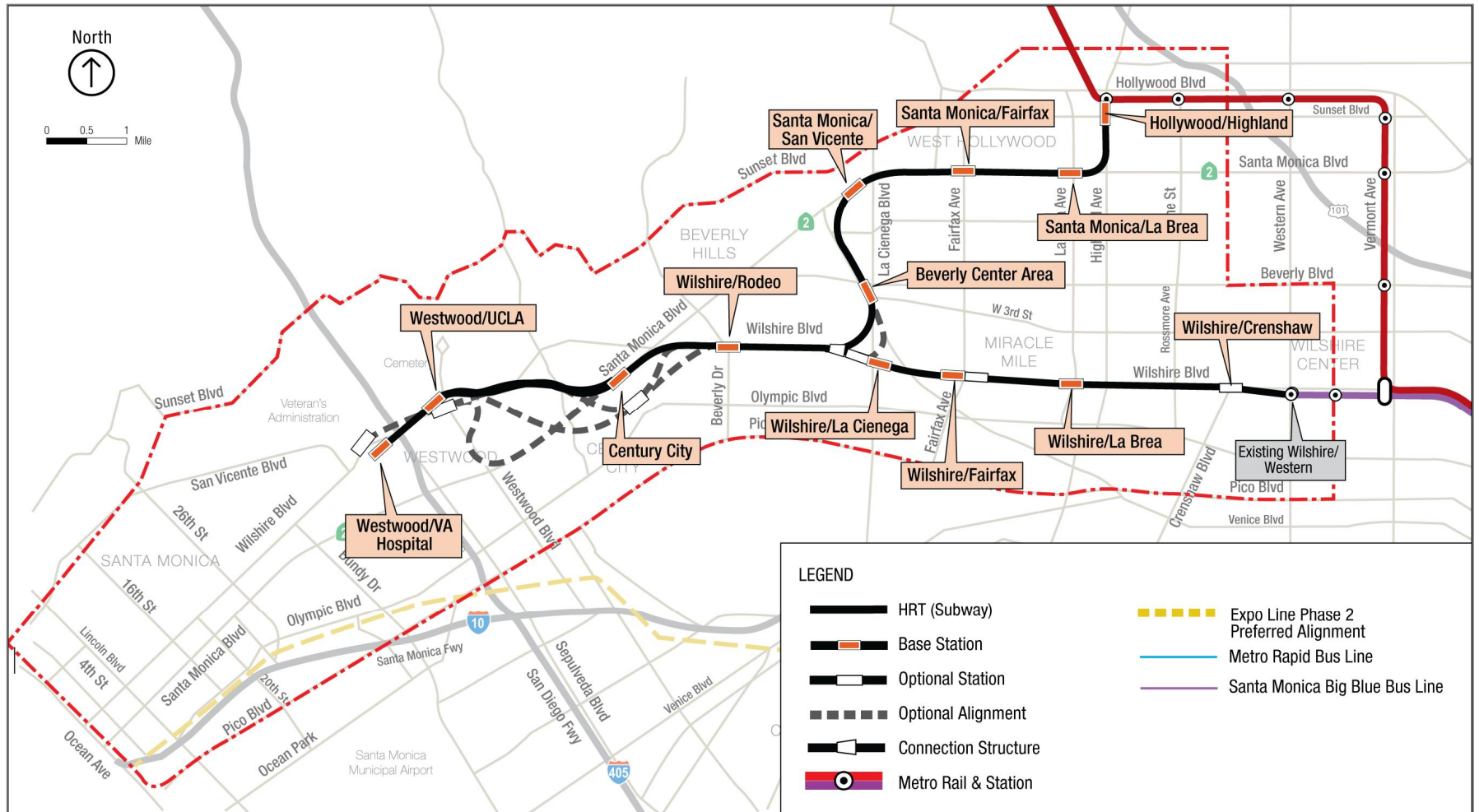


Figure 2-18. Alternative 4—Westwood/VA Hospital Extension plus West Hollywood Extension



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

Similar to Alternative 3, this alternative extends HRT, in subway, from the existing Metro Purple Line Wilshire/Western Station to the Wilshire/4th Station and adds a West Hollywood Extension similar to the extension described in Alternative 4 (Figure 2-19). The alignment is 17.49 miles in length.

Alternative 5 is comprised of two elements: a Metro Purple Line extension to Santa Monica plus a West Hollywood branch to Santa Monica. The Metro Purple Line extension would operate 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 branch 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 for the West Hollywood Line from the Hollywood/Highland Station to the Wilshire/4th Station is 22 minutes 36 seconds.

## 2.5 Stations and Segment Options

There are six station and segment options that are described in Sections 2.5.1 through 2.5.6.

Table 2-3 lists the stations and station options evaluated in this Draft EIS/EIR and to which alternatives they are applicable. Figure 2-20 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

Each of these options are described below and shown in figures. These are alternative station location options and are not additional stations.



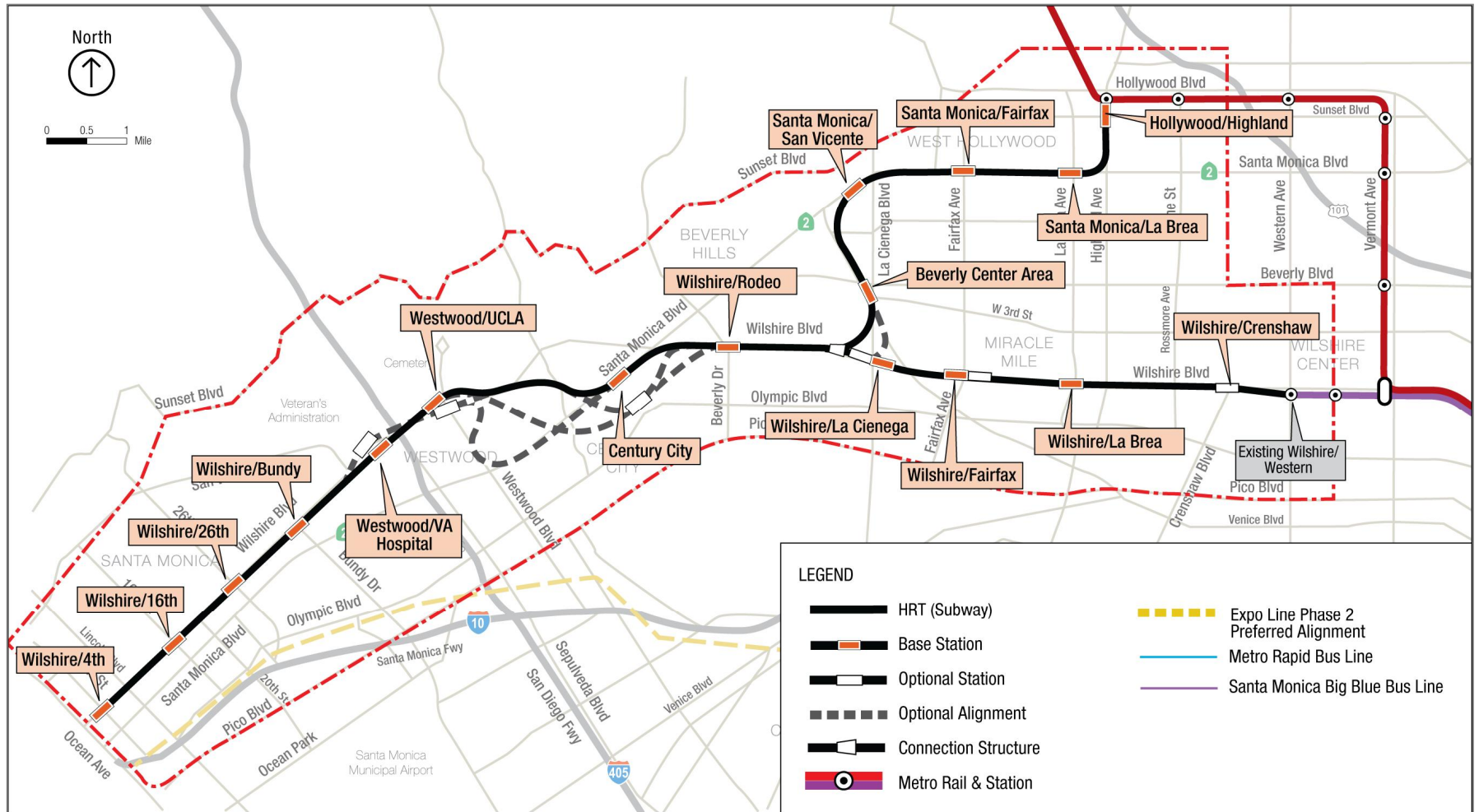


Figure 2-19. Alternative 5—Santa Monica Extension plus West Hollywood Extension