Westside Purple Line Extension

Draft Supplemental Environmental Impact Statement and Section 4(f) Evaluation
Appendix D: Traffic Analysis





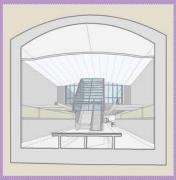


LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

WESTSIDE PURPLE LINE EXTENSION PROJECT, SECTION 2 ADVANCED PRELIMINARY ENGINEERING

Contract No. PS-4350-2000







Century City Station Updated Traffic Analysis Technical Memorandum

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1.0 INTRODUCTION

The Federal Transit Administration (FTA) and the Los Angeles County Metropolitan Transportation Authority (Metro) prepared and distributed a Final Environmental Impact Statement/Environmental Impact Report (Final EIS/EIR) for the Westside Subway Extension (now called the Westside Purple Line Extension, or The Project) in March 2012. The Project was planned to be constructed in three sections (see Section 2.0. Project History and Overview, below). The Final EIS/EIR identified environmental impacts and mitigations for the Project. The Metro Board of Directors approved Section 1 of the Project in April 2012, followed by the approvals of Section 2 and Section 3 in May 2012. A Record of Decision (ROD) was issued by FTA in August 2012 for all three sections of the Project.

This technical memorandum presents the updated existing traffic conditions in 2016 at the Century City/Constellation Station area taking into consideration the opening and operation of a medical rehabilitation facility at the northeast corner of Century Park East and Olympic Boulevard. During the traffic evaluation of the various construction stages, the new 138-bed medical rehabilitation facility, located 2080 Century Park East, was not in operation, thus potential impacts to the facility were not assessed. This nine-story medical rehabilitation facility opened for business in June 2016. An updated existing conditions traffic analysis is presented in the next section, which takes into account the facility being operational. In addition, an updated traffic analysis was also prepared for the Tunnel Boring Machine (TBM) Launch Box Full Closure construction stage, which consists of the rerouting of traffic due to the construction activity.

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2.0 PROJECT HISTORY AND OVERVIEW

The Westside Purple Line Extension (the Project) is an approximately 9-mile heavy rail transit subway that will operate as an extension of the Metro Purple Line from its current western terminus at Wilshire/Western Station to a new western terminus near the West Los Angeles Veterans Affairs (VA) Hospital (Figure 2-1). The Project will improve mobility and provide fast, reliable, high-capacity, and environmentally sound transportation solutions for the Westside of Los Angeles. The improvement in public transit service will bring about a significant increase in east-west capacity and improvement in person-mobility by reducing transit travel times. On a county-wide level, the project will strengthen regional access by connecting Metro bus, Metro rail, and Metrolink networks to a high-capacity transit solution serving the Study Area.

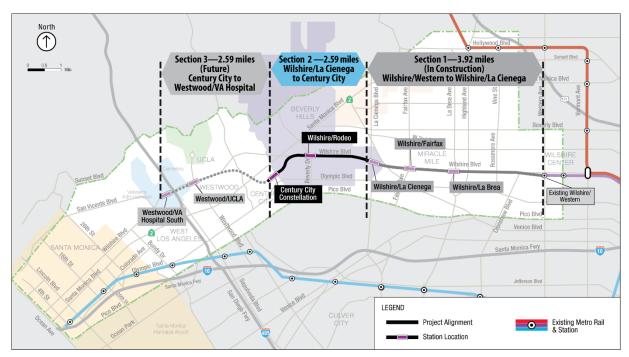


Figure 2-1: Westside Purple Line Extension

The Study Area for the Project is located in western Los Angeles County and encompasses approximately 38 square miles. The Study Area is east/west oriented and includes portions of the Cities of Los Angeles, West Hollywood, Beverly Hills, and Santa Monica, as well as unincorporated areas of Los Angeles County. The Study Area boundaries generally extend north to the base of the Santa Monica Mountains along Hollywood, Sunset, and San Vicente Boulevards; east to the Metro Rail stations at Hollywood/Highland and Wilshire/Western; south to Pico Boulevard, and west to the Pacific Ocean.

The Project was planned to be constructed in three phases:

- Section 1: 3.92-mile section from the existing Wilshire/Western to Wilshire/La Cienega with three new stations: Wilshire/La Brea, Wilshire/Fairfax, and Wilshire/La Cienega.
- Section 2: 2.59-mile section from Wilshire/La Cienega to Century City with two new stations: Wilshire/Rodeo and Century City Constellation.

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■ Section 3: 2.59-mile section from Century City to Westwood/VA Hospital with two new stations: Westwood/UCLA and Westwood/VA Hospital.

In November 2014, construction broke ground for Section 1 of the Project, which is anticipated to begin revenue service in October 2024. Construction for Section 2 of the Project, which is the subject of this Air Quality Technical Memorandum, is scheduled to begin in January 2017 with revenue service starting in December 2026. Construction for Section 3 is scheduled to begin in 2025 with revenue service starting in 2035.

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3.0 EXISTING TRAFFIC CONDITIONS

The existing AM and PM peak hour turning movement traffic volumes for the intersections surrounding the Constellation Station construction area were collected on a typical non-holiday weekday in January 2016. Since these counts were collected prior to the opening of the 138-bed medical rehabilitation facility, the trips generated by this land use were calculated, using the ITE Trip Generation Handbook, 9th Edition, and distributed onto the adjacent roadway network. The operation of this medical rehabilitation facility is considered similar in nature to a "Hospital" land use, which was used to generate the AM and PM peak hour trips to and from the facility onto the adjacent intersections. The 138-bed facility is estimated to generate 182 vehicles per hour in the AM peak hour and 196 vehicles per hour in the PM peak hour. The facility has three access points, two on Olympic Boulevard and one on Century Park East. All three access points operate as right in and right out driveways. During the AM peak hour, about 131 vehicles enter the facility and 51 vehicles exit the facility. These trips are distributed evenly between the three access points and assigned to the adjacent intersections accordingly. Similarly in the PM peak hour, about 65 vehicles enter the facility and 131 vehicles exit the facility. These trips are also distributed evenly between the three access points and assigned to the adjacent intersections accordingly. The resulting 2016 AM and PM peak hour turning movement traffic volumes, at each one of the ten study intersections around the Constellation Station, which take into account the operation of the medical rehabilitation facility, are presented in Figure 3-1.

A total of ten (10) intersections were evaluated in the vicinity of the Century City/Constellation Station construction area. The AM and PM peak hour existing (2016) conditions level of service (LOS) results are presented in Table 3-1.

		Existing Conditions (2016)			
	AM Pe	AM Peak Hour		PM Peak Hour	
Intersection	LOS	Delay	LOS	Delay	
Century Park East/Santa Monica Blvd	F	125.6	F	130.0	
Century Park East/Constellation Blvd	С	30.6	D	40.0	
Century Park East/Olympic Blvd	E	59.3	Е	55.0	
Avenue of the Stars/Santa Monica Blvd	F	129.6	F	114.9	
Avenue of the Stars/Constellation Blvd	С	30.5	С	29.2	
Avenue of the Stars/WB Olympic Blvd	В	16.1	А	9.1	
Avenue of the Stars/EB Olympic Blvd	С	29.8	D	36.3	
Century Park West/Santa Monica Blvd	F	151.8	F	152.7	
Century Park West/Constellation Blvd	А	7.7	E	55.8	
Century Park West/Olympic Blvd	F	89.0	E	77.9	

Table 3-1. Existing (2016) Level of Service Results

All three intersections along Santa Monica Boulevard are currently operating at LOS F during both the AM and PM peak hours. In addition, the intersection of Century Park West and Olympic Boulevard is operating at LOS F in the AM peak hour and LOS E in the PM peak hour and the intersection of Century Park East and Olympic Boulevard is operating at LOS E in the AM and PM peak hours. Also, the intersection of Century Park West and Constellation Boulevard is operating at LOS E in the PM peak hour. The remaining four study intersections are operating at LOS D or better during both peak hours.

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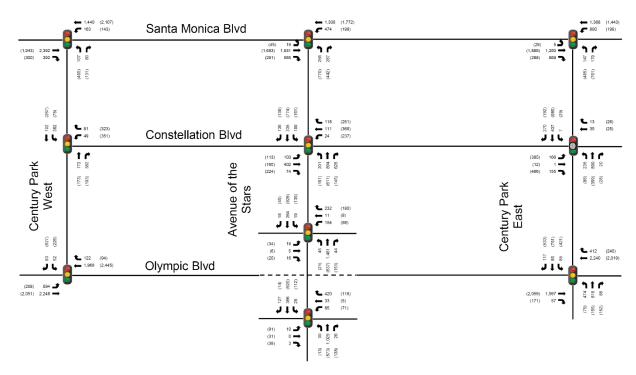


Figure 3-1. Exisiting (2016) Weekday AM(PM) Peak Hour Traffic Volumes Constellation Station Area



4.0 TBM LAUNCH BOX FULL CLOSURE

Work area during this stage will be across the full width of Constellation Boulevard between Century Park East and the underground parking garage entrance to 10100 Constellation Boulevard. During this stage, the construction activity consists of decking installation of the TBM launch box. This will require a full closure of Constellation Boulevard between Century Park East and the underground parking garage entrance to 10100 Constellation Boulevard. The affected travel control zone will extend from approximately east of Avenue of the Stars to the west and Century Park East to the east.

During this construction stage, northbound and southbound traffic turning westbound onto Constellation Boulevard from Century Park East would be diverted around the construction area and use Avenue of the Stars to get to their destination. Similarly, eastbound traffic on Constellation Boulevard will be detoured before crossing Avenue of the Stars, although local access traffic destined to the buildings along this segment of Constellation Boulevard will be permitted to continue straight through Avenue of the Stars until reaching the entrance of the underground parking garage at 10100 Constellation Boulevard. Access will be maintained to all driveways, alleys, and garage entrances at all times.

All work performed during this stage will occur over several weekends from Friday 9:00 pm to Monday 6:00 am, with lanes becoming operational on Monday at 6:00 am. However, if there is a change in this proposed schedule and the full closure extends to the weekday AM and/or PM peak hours, then the level of service results of the intersection operating conditions, due to the potential full closure along Constellation Boulevard, are presented in Table 4-1.

		Existing Conditions (2016)			
	AM Pe	AM Peak Hour		ak Hour	
Intersection	LOS	Delay	LOS	Delay	
Century Park East/Santa Monica Blvd	E	79.9	F	201.0	
Century Park East/Constellation Blvd	A	8.3	А	7.3	
Century Park East/Olympic Blvd	D	49.1	D	46.6	
Avenue of the Stars/Santa Monica Blvd	F	144.6	F	100.6	
Avenue of the Stars/Constellation Blvd	E	56.6	D	44.5	
Avenue of the Stars/WB Olympic Blvd	С	28.6	А	9.2	
Avenue of the Stars/EB Olympic Blvd	С	28.1	D	41.4	
Century Park West/Santa Monica Blvd	F	135.0	F	155.9	
Century Park West/Constellation Blvd	A	7.8	D	49.7	
Century Park West/Olympic Blvd	E	79.9	Е	78.7	

Table 4-1. TBM Launch Box Full Closure Level of Service Results

During this construction period, with a proposed AM and PM peak period full closure of Constellation Boulevard from Century Park East to the underground parking garage entrance, traffic operations at the intersection of Century Park East and Olympic Boulevard would improve to LOS D during the AM and PM peak hours. Also, all the three intersections along Santa Monica Boulevard would continue to operate at LOS F during both the AM and PM peak hours, except for the AM peak hour at the intersection of Century Park East and Santa Monica Boulevard which would improve to LOS E. In addition, the

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intersection of Century Park West and Olympic Boulevard would improve to LOS E in the AM peak hour and the intersection of Century Park West and Constellation Boulevard would improve to LOS D in the PM peak hour. Also, the intersection of Avenue of the Stars and Constellation Boulevard would deteriorate to LOS E in the AM peak hour. The remaining three study intersections would continue to operate at LOS D or better during both peak hours.