Los Angeles County
Metropolitan Transportation Authority

West Santa Ana Branch Transit Corridor

Draft EIS/EIR Appendix CC
Final Economic and Fiscal Impact Analysis Report

Metro®

WEST SANTA ANA BRANCH TRANSIT CORRIDOR PROJECT

Draft EIS/EIR Appendix CC Final Economic and Fiscal Impact Analysis Report

Prepared for:

Metro

Los Angeles County
Metropolitan Transportation Authority

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ACRONYMS AND ABBREVIATIONS

AA	Alternatives Analysis
BEA	Bureau of Economic Analysis
BRT	bus rapid transit
CEQA	California Environmental Quality Act
FTA	Federal Transit Administration
I-	Interstate
LA	Los Angeles
LAUS	Los Angeles Union Station
LAX	Los Angeles International Airport
LRT	light rail transit
LRTP	Long-Range Transportation Plan
LRV	light rail vehicle
Metro	Los Angeles County Metropolitan Transportation Authority
MSF	maintenance and storage facility
MWD	Metropolitan Water District
NEPA	National Environmental Policy Act
O&M	operation and maintenance
PEROW	Pacific Electric Right-of-Way
Project	West Santa Ana Branch Transit Corridor
RIMS	Regional Input-Output Modeling System
ROW	right-of-way
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SCAG	Southern California Association of Governments
TOC	transit-oriented community
TOD	transit-oriented development
TPSS	traction power substation
UPRR	Union Pacific Railroad
US-101	U.S. Highway 101
WSAB	West Santa Ana Branch

1 INTRODUCTION

1.1 Study Background

The West Santa Ana Branch (WSAB) Transit Corridor (Project) is a proposed light rail transit (LRT) line that would extend from four possible northern termini in southeast Los Angeles (LA) County to a southern terminus in the City of Artesia, traversing densely populated, low-income, and heavily transit-dependent communities. The Project would provide reliable, fixed guideway transit service that would increase mobility and connectivity for historically underserved, transit-dependent, and environmental justice communities; reduce travel times on local and regional transportation networks; and accommodate substantial future employment and population growth.

1.2 Alternatives Evaluation, Screening and Selection Process

A wide range of potential alternatives have been considered and screened through the alternatives analysis processes. In March 2010, the Southern California Association of Governments (SCAG) initiated the *Pacific Electric Right-of-Way (PEROW)/WSAB Alternatives Analysis (AA) Study* (SCAG 2013) in coordination with the relevant cities, Orangeline Development Authority (now known as Eco-Rapid Transit), the Gateway Cities Council of Governments, the Los Angeles County Metropolitan Transportation Authority (Metro), the Orange County Transportation Authority, and the owners of the right-of-way (ROW) other than the PEROW—Union Pacific Railroad (UPRR), BNSF Railway, and the Ports of Los Angeles and Long Beach. The AA Study evaluated a wide variety of transit connections and modes for a broader 34-mile corridor from Union Station in downtown LA to the City of Santa Ana in Orange County. In February 2013, SCAG completed the PEROW/WSAB Corridor Alternatives Analysis Report[1] and recommended two LRT alternatives for further study: West Bank 3 and the East Bank.

Following completion of the AA, Metro completed the *WSAB Transit Corridor Technical Refinement Study* in 2015 focusing on the design and feasibility of five key issue areas along the 19-mile portion of the WSAB Transit Corridor within LA County:

- Access to Union Station in downtown LA
- Northern Section Options
- Huntington Park Alignment and Stations
- New Metro C (Green) Line Station
- Southern Terminus at Pioneer Station in Artesia

In September 2016, Metro initiated the WSAB Transit Corridor Environmental Study with the goal of obtaining environmental clearance of the Project under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA).

[1] Initial concepts evaluated in the SCAG report included transit connections and modes for the 34-mile corridor from Union Station in downtown Los Angeles to the City of Santa Ana. Modes included low speed magnetic levitation (maglev) heavy rail, light rail, and bus rapid transit (BRT).

Metro issued a Notice of Preparation on May 25, 2017, with a revised Notice of Preparation issued on June 14, 2017, extending the comment period. In June 2017, Metro held public scoping meetings in the Cities of Bellflower, Los Angeles, South Gate, and Huntington Park. Metro provided Project updates and information to stakeholders with the intent to receive comments and questions through a comment period that ended in August 2017. A total of 1,122 comments were received during the public scoping period from May through August 2017. The comments focused on concerns regarding the Northern Alignment options, with specific concerns related to potential impacts to Alameda Street with an aerial alignment. Given potential visual and construction issues raised through public scoping, additional Northern Alignment concepts were evaluated

In February 2018, the Metro Board of Directors approved further study of the alignment in the Northern Section due to community input during the 2017 scoping meetings. A second alternatives screening process was initiated to evaluate the original four Northern Alignment options and four new Northern Alignment concepts. The Final *Northern Alignment Alternatives and Concepts Updated Screening Report* was completed in May 2018 (Metro 2018a). The alternatives were further refined and, based on the findings of the second screening analysis and the input gathered from the public outreach meetings, the Metro Board of Directors approved Build Alternatives E and G for further evaluation (now referred to as Alternatives 1 and 2, respectively, in this report).

On July 11, 2018, Metro issued a revised and recirculated CEQA Notice of Preparation, thereby initiating a scoping comment period. The purpose of the revised Notice of Preparation was to inform the public of the Metro Board's decision to carry forward Alternatives 1 and 2 into the Draft Environmental Impact Statement/Environmental Impact Report. During the scoping period, one agency and three public scoping meetings were held in the Cities of Los Angeles, Cudahy, and Bellflower. The meetings provided Project updates and information to stakeholders with the intent to receive comments and questions to support the environmental process. The comment period for scoping ended on August 24, 2018; over 250 comments were received.

Following the July 2018 scoping period, a number of Project refinements were made to address comments received, including additional grade separations, removing certain stations with low ridership, and removing the Bloomfield extension option. The Metro Board adopted these refinements to the project description at their November 2018 meeting.

1.3 Report Purpose and Structure

This technical report describes and evaluates the economic and fiscal impacts of the Project on the Affected Area and the LA County region. For purposes of this economic analysis, the Affected Area is defined as a 0.25-mile area on both sides of the proposed alignment and a 0.50-mile area around the proposed station areas. Economic impacts from construction and operation would likely be experienced within and beyond (for indirect impacts) the defined Affected Area. Some economic or fiscal data and impacts are presented at the regional LA County level.

This report presents the affected environments/existing conditions, the regulatory setting, impact criteria and thresholds, impact analysis of operation and construction of the Project on the local and regional economy, mitigation measures, and CEQA determination related to economic impacts.

Four Build Alternatives are analyzed in this report as well as two design options. Additionally, the Project will include the construction and operation of a maintenance and storage facility (MSF) in one of two potential locations.

This Impact Analysis Report examines the environmental effects of the Project as it relates to economics. The report is organized into nine sections:

- Section 1 – Introduction
- Section 2 – Project Description
- Section 3 – Regulatory Framework
- Section 4 – Affected Environment/Existing Conditions
- Section 5 – Environmental Impacts/Environmental Consequences
- Section 6 – CEQA Determination
- Section 7 – Construction Impacts
- Section 8 – Project Measures and Mitigation Measures
- Section 9 – References

1.4 General Background

The operation and construction of the Project would generate economic activity in the Study Area and the greater LA metropolitan region. The construction of the Project would create jobs and income for those employed by the Project. Also, the construction of the Project would temporarily increase congestion and noise and would change access for businesses and residents in the area, as discussed in the *West Santa Ana Branch Transit Corridor Project Noise and Vibrations Impact Analysis Report* (Metro 2021d) and the *West Santa Ana Branch Transit Corridor Project Transportation Impact Analysis Report* (Metro 2021e).

During operations, the Project would provide employees, residents, and visitors with an additional transportation link to employment and visitor destinations in LA County. LRT operations within the WSAB corridor would also create new jobs for maintenance and operation workers. Finally, the Project could potentially lead to future development opportunities around station areas, consistent with Metro's vision to create transit-oriented communities (TOCs) (Metro 2018b).

1.5 Methodology

The method used to determine the potential economic effects of the Project varied depending on the economic effect assessed. The methodology employed to determine potential economic impacts includes an evaluation of both operational and construction-related effects that may result. Various types of impacts are discussed in Sections 1.5.1 through 1.5.6.

1.5.1 Operational Impacts

After the Project is operational, new jobs and the corresponding earnings would be created through additional operation and maintenance (O&M) expenditures. Funds from local or regional sources, such as transit fares, are considered transfers that could have been spent by residents and businesses on other economic activities, thus would not generate new beneficial economic impacts. Typically, only "new money" to a region from an outside or alternate source has a measurable net economic effect on employment and income gains resulting from project operation. Federal funding is an example of "new money." The

potential for economic impacts associated with these new expenditures is discussed qualitatively in Section 5.

1.5.2 Long-term Impacts on Property Values

The Project is expected to indirectly lead to new development and/or redevelopment of land surrounding the proposed light rail stations, which could have the effect of increasing property tax revenues for the affected local jurisdictions. While development is regulated by the affected jurisdictions and is driven by regional and local economic conditions, light rail lines can advance the timing and increase the intensity of development within the limits allowed by local zoning, particularly surrounding proposed station areas.

Research on the long-term property value impacts associated with light rail systems is presented, and the potential project-related impacts are discussed qualitatively, in Section 5.

1.5.3 Regional Mobility and Connectivity

For broader regional effects, the linkage between transportation infrastructure improvements, mobility, congestion, and economic growth are considered and discussed (Section 5.2.2.1). The benefits of connecting to the regional employment and transportation networks are also discussed qualitatively.

1.5.4 Impacts on Local Tax Bases

Property acquisitions for right-of-way or construction staging areas (permanent acquisition) would result in property tax revenue losses to LA County and local jurisdictions where the respective properties are located. The potential loss of tax revenues to these jurisdictions was assessed based on the land acquisitions required by the Project, including potential modifications to property access and effects during construction.

Property tax losses for each jurisdiction were based on the tax dollar values of the parcel acquisitions. The tax dollar values for these parcels were obtained from the LA County Assessor's records for the most recent fiscal year available. The relevant data from the Assessor's office included property taxes paid in fiscal year 2019, city location, property ownership, land use, and building square footage (LA County 2019).

The initial tax impact for properties affected by the Project was compared to the total property taxes collected for each affected jurisdiction. To the extent that redevelopment occurs around transit stations, local jurisdictions may experience an increase in property tax revenues above what would have occurred without the Project as new or redeveloped properties in the vicinity of the stations experience an increase in assessed values.

1.5.5 Direct Employment Impacts from Displacements

The project alignment would require additional right-of-way that could displace some businesses and residences. The number of businesses and employees located at properties that would be acquired by the Project was estimated. The estimates were prepared based on field verification of addresses and business names obtained from the *West Santa Ana Branch Transit Corridor Project Displacement and Acquisition Impact Analysis Report* (Metro 2021b). Resources consulted to estimate the number of business units and the corresponding number of employees displaced include the RefUSA and CoStar's Tenant module (Metro 2021b). When information was not available in the aforementioned resources, employee-per-square-foot ratios for a small number of parcels were used to estimate the number of employees.

1.5.6 Impact Criteria and Thresholds

No specific laws or executive orders specify the impact criteria and thresholds of economic impacts. NEPA requires a discussion of economic and fiscal effects but does not specifically define threshold criteria. CEQA includes a discussion of economic effects at the discretion of the lead agency. Section 7, CEQA Determination, provides additional information. The most recent CEQA Guideline updates (December 2018, Appendix G of the CEQA Guidelines [14 California Code of Regulations, Section 15000 et seq.]) define the significance of environmental effects from an economic or fiscal perspective and caused by a project. Specifically, economic changes resulting from a project will not be treated as significant effects on the environment, but the economic changes may be used to determine the significance of physical changes on the environment. If the physical change causes adverse economic effects on people, those adverse effects may be used as a factor in determining whether the physical change is significant (CEQA Section 15064).

Social and land use impacts, which are often combined with economics, are discussed separately in the *West Santa Ana Branch Transit Corridor Project Communities and Neighborhoods Impact Analysis Report* (Metro 2021a) and the *West Santa Ana Branch Transit Corridor Project Land Use Impact Analysis Report* (Metro 2021c). The methodologies and impact definitions provided above in Sections 1.5.1 through 1.5.5 were used to determine whether potential adverse effects according to NEPA or potential significant impacts according to CEQA would occur as a result of project construction and operation. Those impact discussions are provided in Sections 5 through 7.

2 PROJECT DESCRIPTION

This section describes the No Build Alternative and the four Build Alternatives studied in the WSAB Transit Corridor Draft Environmental Impact Statement/Environmental Impact Report, including design options, station locations, and MSF site options. The Build Alternatives were developed through a comprehensive AA process and meet the purpose and need of the Project.

The No Build Alternative and four Build Alternatives are generally defined as follows:

- **No Build Alternative** - Reflects the transportation network in the 2042 horizon year without the proposed Build Alternatives. The No Build Alternative includes the existing transportation network along with planned transportation improvements that have been committed to and identified in the constrained Metro 2009 *Long-Range Transportation Plan* (2009 LRTP) (Metro 2009) and SCAG's *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) (SCAG 2016), as well as additional projects funded by Measure M that would be completed by 2042.
- **Build Alternatives**: The Build Alternatives consist of a new LRT line that would extend from different termini in the north to the same terminus in the City of Artesia in the south. The Build Alternatives are referred to as:
  - Alternative 1: Los Angeles Union Station (LAUS) to Pioneer Station; the northern terminus would be located underground at LAUS Forecourt
  - Alternative 2: 7th Street/Metro Center to Pioneer Station; the northern terminus would be located underground at 8th Street between Figueroa Street and Flower Street near 7th Street/Metro Center Station
  - Alternative 3: Slauson/A (Blue) Line to Pioneer Station; the northern terminus would be located just north of the intersection of Long Beach Avenue and Slauson Avenue in the City of Los Angeles, connecting to the current Metro A (Blue) Line Slauson Station
  - Alternative 4: I-105/C (Green) Line to Pioneer Station; the northern terminus would be located at I-105 in the city of South Gate, connecting to the Metro C (Green) Line along the I-105

Two design options are under consideration for Alternative 1. Design Option 1 would locate the northern terminus station box at the LAUS Metropolitan Water District (MWD) east of LAUS and the MWD building, below the baggage area parking facility. Design Option 2 would add the Little Tokyo Station along the WSAB alignment. The design options are further discussed in Section 2.3.6.

Figure 2-1 presents the four Build Alternatives and the design options. In the north, Alternative 1 would terminate at LAUS and primarily follow Alameda Street south underground to the proposed Arts/Industrial District Station. Alternative 2 would terminate near the existing 7th Street/Metro Center Station in the Downtown Transit Core and would primarily follow 8th Street east underground to the proposed Arts/Industrial District Station.

Figure 2-1. Project Alternatives

Source: Metro 2020

From the Arts/Industrial District Station to the southern terminus at Pioneer Station, Alternatives 1 and 2 share a common alignment. South of Olympic Boulevard, the Alternatives 1 and 2 would transition from an underground configuration to an aerial configuration, cross over the Interstate (I-) 10 freeway and then parallel the existing Metro A (Blue) Line along the Wilmington Branch ROW as it proceeds south. South of Slauson Avenue, which would serve as the northern terminus for Alternative 3, Alternatives 1, 2, and 3 would turn east and transition to an at-grade configuration to follow the La Habra Branch ROW along Randolph Street. At the San Pedro Subdivision ROW, Alternatives 1, 2, and 3 would turn southeast to follow the San Pedro Subdivision ROW and then transition to the Pacific Electric Right-of-Way (PEROW), south of the I-105 freeway. The northern terminus for Alternative 4 would be located at the I-105/C Line Station. Alternatives 1, 2, 3, and 4 would then follow the PEROW to the southern terminus at the proposed Pioneer Station in Artesia. The Build Alternatives would be grade-separated where warranted, as indicated on Figure 2-2.

Figure 2-2. Project Alignment by Alignment Type

Source: Metro 2020

2.1 Geographic Sections

The approximately 19-mile corridor is divided into two geographic sections—the Northern and Southern Sections. The boundary between the Northern and Southern Sections occurs at Florence Avenue in the City of Huntington Park.

2.1.1 Northern Section

The Northern Section includes approximately 8.0 miles of Alternatives 1 and 2 and 3.8 miles of Alternative 3. Alternative 4 is not within the Northern Section. The Northern Section covers the geographic area from downtown LA to Florence Avenue in the City of Huntington Park and would generally traverse the Cities of Los Angeles, Vernon, Huntington Park, and Bell, and the unincorporated Florence-Firestone community of LA County (Figure 2-3). Alternatives 1 and 2 would traverse portions of the Wilmington Branch (between approximately Martin Luther King Jr Boulevard along Long Beach Avenue to Slauson Avenue). Alternatives 1, 2, and 3 would traverse portions of the La Habra Branch ROW (between Slauson Avenue along Randolph Street to Salt Lake Avenue) and San Pedro Subdivision ROW (between Randolph Street to approximately Paramount Boulevard).

Figure 2-3. Northern Section

Source: Metro 2020

2.1.2 Southern Section

The Southern Section includes approximately 11.0 miles of Alternatives 1, 2, and 3 and includes all 6.6 miles of Alternative 4. The Southern Section covers the geographic area from south of Florence Avenue in the City of Huntington Park to the City of Artesia and would generally traverse the Cities of Huntington Park, Cudahy, South Gate, Downey, Paramount, Bellflower, Cerritos, and Artesia (Figure 2-4). In the Southern Section, all four Build Alternatives would utilize portions of the San Pedro Subdivision and the Metro-owned PEROW (between approximately Paramount Boulevard to South Street).

Figure 2-4. Southern Section

Source: Metro 2020

2.2 No Build Alternative

For the NEPA evaluation, the No Build Alternative is evaluated in the context of the existing transportation facilities in the Transit Corridor (the Transit Corridor extends approximately 2 miles from either side of the proposed alignment) and other capital transportation improvements and/or transit and highway operational enhancements that are reasonably foreseeable. Because the No Build Alternative provides the background transportation

network, against which the Build Alternatives' impacts are identified and evaluated, the No Build Alternative does not include the Project.

The No Build Alternative reflects the transportation network in 2042 and includes the existing transportation network along with planned transportation improvements that have been committed to and identified in the constrained Metro 2009 LRTP and the SCAG 2016 RTP/SCS, as well as additional projects funded by Measure M, a sales tax initiative approved by voters in November 2016. The No Build Alternative includes Measure M projects that are scheduled to be completed by 2042.

Table 2.1 lists the existing transportation network and planned improvements included as part of the No Build Alternative.

Table 2.1. No Build Alternative 2042 – Existing Transportation Network and Planned Improvements

Project	To / From	Location Relative to Transit Corridor
Rail (Existing)		
Metro Rail System (LRT and Heavy Rail Transit)	Various locations	Within Transit Corridor
Metrolink (Southern California Regional Rail Authority) System	Various locations	Within Transit Corridor
Rail (Under Construction/Planned)[1]		
Metro Westside D (Purple) Line Extension	Wilshire/Western to Westwood/VA Hospital	Outside Transit Corridor
Metro C (Green) Line Extension[2] to Torrance	96th Street Station to Torrance	Outside Transit Corridor
Metro C (Green) Line Extension	Norwalk to Expo/Crenshaw[3]	Outside Transit Corridor
Metro East-West Line/Regional Connector/Eastside Phase 2	Santa Monica to Lambert Santa Monica to Peck Road	Within Transit Corridor
Metro North-South Line/Regional Connector/Foothill Extension to Claremont Phase 2B	Long Beach to Claremont	Within Transit Corridor
Metro Sepulveda Transit Corridor	Metro G (Orange) Line to Metro E (Expo) Line	Outside Transit Corridor
Metro East San Fernando Valley Transit Corridor	Sylmar to Metro G (Orange) Line	Outside Transit Corridor
Los Angeles World Airport Automated People Mover	96th Street Station to LAX Terminals	Outside Transit Corridor
Metrolink Capital Improvement Projects	Various projects	Within Transit Corridor
California High-Speed Rail	Burbank to LA LA to Anaheim	Within Transit Corridor
Link LAUS	LAUS	Within Transit Corridor

Project	To / From	Location Relative to Transit Corridor
Bus (Existing)		
Metro Bus System (including BRT, Express, and local)	Various locations	Within Transit Corridor
Municipality Bus System[4]	Various locations	Within Transit Corridor
Bus (Under Construction/Planned)		
Metro G (Orange) Line (BRT)	Del Mar (Pasadena) to Chatsworth Del Mar (Pasadena) to Canoga Canoga to Chatsworth	Outside Transit Corridor
Vermont Transit Corridor (BRT)	120th Street to Sunset Boulevard	Outside Transit Corridor
North San Fernando Valley BRT	Chatsworth to North Hollywood	Outside Transit Corridor
North Hollywood to Pasadena	North Hollywood to Pasadena	Outside Transit Corridor
Highway (Existing)		
Highway System	Various locations	Within Transit Corridor
Highway (Under Construction/Planned)		
High Desert Multi-Purpose Corridor	SR-14 to SR-18	Outside Transit Corridor
I-5 North Capacity Enhancements	SR-14 to Lake Hughes Rd	Outside Transit Corridor
SR-71 Gap Closure	I-10 to Rio Rancho Rd	Outside Transit Corridor
Sepulveda Pass Express Lane	I-10 to US-101	Outside Transit Corridor
SR-57/SR-60 Interchange Improvements	SR-70/SR-60	Outside Transit Corridor
I-710 South Corridor Project (Phases 1 and 2)	Ports of Long Beach and LA to SR-60	Within Transit Corridor
I-105 Express Lane	I-405 to I-605	Within Transit Corridor
I-5 Corridor Improvements	I-605 to I-710	Outside Transit Corridor

Source: Metro 2018, WSP 2019
Notes: [1] Where extensions are proposed for existing Metro rail lines, the origin/destination is defined for the operating scheme of the entire rail line following completion of the proposed extensions and not just the extension itself.
[2] Metro C (Green) Line extension to Torrance includes new construction from Redondo Beach to Torrance; however, the line will operate from Torrance to 96th Street.
[3] The currently under construction Metro Crenshaw/LAX Line will operate as the Metro C (Green) Line.
[4] The municipality bus network system is based on service patterns for Bellflower Bus, Cerritos on Wheels, Cudahy Area Rapid Transit, Get Around Town Express, Huntington Park Express, La Campana, Long Beach Transit, Los Angeles Department of Transportation, Norwalk Transit System and the Orange County Transportation Authority.
BRT = Bus Rapid Transit; I- = Interstate; LA = Los Angeles; LAUS = Los Angeles Union Station; LAX = Los Angeles International Airport; LRT = light rail transit; SR = State Route; VA = Veterans Affairs

2.3 Build Alternatives

2.3.1 Proposed Alignment Configuration for the Build Alternatives

This section describes the alignment for each of the Build Alternatives. The general characteristics of the four Build Alternatives are summarized in Table 2.2. Figure 2-5 illustrates the freeway crossings along the alignment. Additionally, the Build Alternatives would require relocation of existing freight rail tracks within the ROW to maintain existing operations where there would be overlap with the proposed light rail tracks. Figure 2-6 depicts the alignment sections that would share operation with freight and the corresponding ownership.

Table 2.2. Summary of Build Alternative Components

Component	Quantity			
Alternatives	**Alternative 1**	**Alternative 2**	**Alternative 3**	**Alternative 4**
Alignment Length	19.3 miles	19.3 miles	14.8 miles	6.6 miles
Stations Configurations	11 3 aerial; 6 at-grade; 2 underground[3]	12 3 aerial; 6 at-grade; 3 underground	9 3 aerial; 6 at-grade	4 1 aerial; 3 at-grade
Parking Facilities	5 (approximately 2,780 spaces)	5 (approximately 2,780 spaces)	5 (approximately 2,780 spaces)	4 (approximately 2,180 spaces)
Length of underground, at-grade, and aerial	2.3 miles underground; 12.3 miles at-grade; 4.7 miles aerial[1]	2.3 miles underground; 12.3 miles at-grade; 4.7 miles aerial[1]	12.2 miles at-grade; 2.6 miles aerial[1]	5.6 miles at-grade; 1.0 miles aerial[1]
At-grade crossings	31	31	31	11
Freight crossings	10	10	9	2
Freeway Crossings	6 (3 freeway undercrossings[2] at I-710; I-605, SR-91)	6 (3 freeway undercrossings[2] at I-710; I-605, SR-91)	4 (3 freeway undercrossings[2] at I-710; I-605, SR-91)	3 (2 freeway undercrossings[2] at I-605, SR-91)
Elevated Street Crossings	25	25	15	7
River Crossings	3	3	3	1
TPSS Facilities	22[3]	23	17	7
Maintenance and Storage Facility site options	2	2	2	2

Source: WSP 2020
Notes: [1] Alignment configuration measurements count retained fill embankments as at-grade.
[2] The light rail tracks crossing beneath freeway structures.
[3] Under Design Option 2 – Add Little Tokyo Station, an additional underground station and TPSS site would be added under Alternative 1.
I- = Interstate; SR = State Route; TPSS = traction power substation

Figure 2-5. Freeway Crossings

Source: WSP 2020

Figure 2-6. Existing Rail Right-of-Way Ownership and Relocation

Source: WSP 2020

2.3.2 Alternative 1: Los Angeles Union Station to Pioneer Station

The total alignment length of Alternative 1 would be approximately 19.3 miles, consisting of approximately 2.3 miles of underground, 12.3 miles of at-grade, and 4.7 miles of aerial alignment. Alternative 1 would include 11 new LRT stations, 2 of which would be underground, 6 would be at-grade, and 3 would be aerial. Under Design Option 2, Alternative 1 would have 12 new LRT stations, and the Little Tokyo Station would be an additional underground station. Five of the stations would include parking facilities, providing a total of up to 2,780 new parking spaces. The alignment would include 31 at-grade crossings, 3 freeway undercrossings, 2 aerial freeway crossings, 1 underground freeway crossing, 3 river crossings, 25 aerial road crossings, and 10 freight crossings.

In the north, Alternative 1 would begin at a proposed underground station at/near LAUS either beneath the LAUS Forecourt or, under Design Option 1, east of the MWD building beneath the baggage area parking facility (Section 2.3.6). Crossovers would be located on the north and south ends of the station box with tail tracks extending approximately 1,200 feet north of the station box. A tunnel extraction portal would be located within the tail tracks for both Alternative 1 terminus station options.

From LAUS, the alignment would continue underground crossing under the US-101 freeway and the existing Metro L (Gold) Line aerial structure and continue south beneath Alameda Street to the optional Little Tokyo Station between 1st Street and 2nd Street (note: under Design Option 2, Little Tokyo Station would be constructed). From the optional Little Tokyo Station, the alignment would continue underground beneath Alameda Street to the proposed Arts/Industrial District Station under Alameda Street between 6th Street and Industrial Street (note: Alternative 2 would have the same alignment as Alternative 1 from this point south. Refer to Section 2.3.3 for additional information on Alternative 2.).

The underground alignment would continue south under Alameda Street to 8th Street, where the alignment would curve to the west and transition to an aerial alignment south of Olympic Boulevard. The alignment would cross over the I-10 freeway in an aerial viaduct structure and continue south, parallel to the existing Metro A (Blue) Line at Washington Boulevard. The alignment would continue in an aerial configuration along the eastern half of Long Beach Avenue within the UPRR-owned Wilmington Branch ROW, east of the existing Metro A (Blue) Line and continue south to the proposed Slauson/A Line Station. The aerial alignment would pass over the existing pedestrian bridge at E. 53rd Street. The Slauson/A Line Station would serve as a transfer point to the Metro A (Blue) Line via a pedestrian bridge. The vertical circulation would be connected at street level on the north side of the station via stairs, escalators, and elevators (The Slauson/A Line Station would serve as the northern terminus for Alternative 3; refer to Section 2.3.4 for additional information on Alternative 3.).

South of the Slauson/A Line Station, the alignment would turn east along the existing La Habra Branch ROW (also owned by UPRR) in the median of Randolph Street. The alignment would be on the north side of the La Habra Branch ROW and would require the relocation of existing freight tracks to the southern portion of the ROW. The alignment would transition to an at-grade configuration at Alameda Street and would proceed east along the Randolph Street median. Wilmington Avenue, Regent Street, Albany Street, and Rugby Avenue would be closed to traffic crossing the ROW, altering

the intersection design to a right-in, right-out configuration. The proposed Pacific/Randolph Station would be located just east of Pacific Boulevard.

From the Pacific/Randolph Station, the alignment would continue east at-grade. Rita Avenue would be closed to traffic crossing the ROW, altering the intersection design to a right-in, right-out configuration. At the San Pedro Subdivision ROW, the alignment would transition to an aerial configuration and turn south to cross over Randolph Street and the freight tracks, returning to an at-grade configuration north of Gage Avenue. The alignment would be located on the east side of the existing San Pedro Subdivision ROW freight tracks, and the existing tracks would be relocated to the western side of the ROW. The alignment would continue at-grade within the San Pedro Subdivision ROW to the proposed at-grade Florence/Salt Lake Station south of the Salt Lake Avenue/Florence Avenue intersection.

South of Florence Avenue, the alignment would extend from the proposed Florence/Salt Lake Station in the City of Huntington Park to the proposed Pioneer Station in the City of Artesia, as shown on Figure 2-4. The alignment would continue southeast from the proposed at-grade Florence/Salt Lake Station within the San Pedro Subdivision ROW, crossing Otis Avenue, Santa Ana Street, and Ardine Street at-grade. The alignment would be located on the east side of the existing San Pedro Subdivision freight tracks and the existing tracks would be relocated to the western side of the ROW. South of Ardine Street, the alignment would transition to an aerial structure to cross over the existing UPRR tracks and Atlantic Avenue. The proposed Firestone Station would be located on an aerial structure between Atlantic Avenue and Firestone Boulevard.

The alignment would then cross over Firestone Boulevard and transition back to an at-grade configuration prior to crossing Rayo Avenue at-grade. The alignment would continue south along the San Pedro Subdivision ROW, crossing Southern Avenue at-grade and continuing at-grade until it transitions to an aerial configuration to cross over the LA River. The proposed LRT bridge would be constructed next to the existing freight bridge. South of the LA River, the alignment would transition to an at-grade configuration crossing Frontage Road at-grade, then passing under the I-710 freeway through the existing box tunnel structure and then crossing Miller Way. The alignment would then return to an aerial structure to cross the Rio Hondo Channel. South of the Rio Hondo Channel, the alignment would briefly transition back to an at-grade configuration and then return to an aerial structure to cross over Imperial Highway and Garfield Avenue. South of Garfield Avenue, the alignment would transition to an at-grade configuration and serve the proposed Gardendale Station north of Gardendale Street.

From the Gardendale Station, the alignment would continue south in an at-grade configuration, crossing Gardendale Street and Main Street to connect to the proposed I-105/C Line Station, which would be located at-grade north of Century Boulevard. This station would be connected to the new infill C (Green) Line Station in the middle of the freeway via a pedestrian walkway on the new LRT bridge. The alignment would continue at-grade, crossing Century Boulevard and then over the I-105 freeway in an aerial configuration within the existing San Pedro Subdivision ROW bridge footprint. A new Metro C (Green) Line Station would be constructed in the median of the I-105 freeway. Vertical pedestrian access would be provided from the LRT bridge to the proposed I-105/C Line Station platform via stairs and elevators. To accommodate the construction of the new station platform, the existing Metro C (Green) Line tracks would be widened and, as part of the I-105 Express Lanes Project, the I-105 lanes would be reconfigured. The I-105/C Line Station would serve

as the northern terminus for Alternative 4; refer to Section 2.3.5 for additional information on this alternative.)

South of the I-105 freeway, the alignment would continue at-grade within the San Pedro Subdivision ROW. In order to maintain freight operations and allow for freight train crossings, the alignment would transition to an aerial configuration as it turns southeast and enter the PEROW. The existing freight track would cross beneath the aerial alignment and align on the north side of the PEROW east of the San Pedro Subdivision ROW. The proposed Paramount/Rosecrans Station would be located in an aerial configuration west of Paramount Boulevard and north of Rosecrans Avenue. The existing freight track would be relocated to the east side of the alignment beneath the station viaduct.

The alignment would continue southeast in an aerial configuration over the Paramount Boulevard/Rosecrans Avenue intersection and descend to an at-grade configuration. The alignment would return to an aerial configuration to cross over Downey Avenue descending back to an at-grade configuration north of Somerset Boulevard. One of the adjacent freight storage tracks at Paramount Refinery Yard would be relocated to accommodate the new LRT tracks and maintain storage capacity. There are no active freight tracks south of the World Energy facility.

The alignment would cross Somerset Boulevard at-grade. South of Somerset Boulevard, the at-grade alignment would parallel the existing Bellflower Bike Trail that is currently aligned on the south side of the PEROW. The alignment would continue at-grade crossing Lakewood Boulevard, Clark Avenue, and Alondra Boulevard. The proposed at-grade Bellflower Station would be located west of Bellflower Boulevard.

East of Bellflower Boulevard, the Bellflower Bike Trail would be realigned to the north side of the PEROW to accommodate an existing historic building located near the southeast corner of Bellflower Boulevard and the PEROW. It would then cross back over the LRT tracks at-grade to the southern side of the ROW. The LRT alignment would continue southeast within the PEROW and transition to an aerial configuration at Cornuta Avenue, crossing over Flower Street and Woodruff Avenue. The alignment would return to an at-grade configuration at Walnut Street. South of Woodruff Avenue, the Bellflower Bike Trail would be relocated to the north side of the PEROW. Continuing southeast, the LRT alignment would cross under the SR-91 freeway in an existing underpass. The alignment would cross over the San Gabriel River on a new bridge, replacing the existing abandoned freight bridge. South of the San Gabriel River, the alignment would transition back to an at-grade configuration before crossing Artesia Boulevard at-grade.

East of Artesia Boulevard the alignment would cross beneath the I-605 freeway in an existing underpass. Southeast of the underpass, the alignment would continue at-grade, crossing Studebaker Road. North of Gridley Road, the alignment would transition to an aerial configuration to cross over 183rd Street and Gridley Road. The alignment would return to an at-grade configuration at 185th Street, crossing 186th Street and 187th Street at-grade. The alignment would then pass through the proposed Pioneer Station on the north side of Pioneer Boulevard at-grade. Tail tracks accommodating layover storage for a three-car train would extend approximately 1,000 feet south from the station, crossing Pioneer Boulevard and terminating west of South Street.

2.3.3 Alternative 2: 7th Street/Metro Center to Pioneer Station

The total alignment length of Alternative 2 would be approximately 19.3 miles, consisting of approximately 2.3 miles of underground, 12.3 miles of at-grade, and 4.7 miles of aerial alignment. Alternative 2 would include 12 new LRT stations, 3 of which would be underground, 6 would be at-grade, and 3 would be aerial. Five of the stations would include parking facilities, providing a total of approximately 2,780 new parking spaces. The alignment would include 31 at-grade crossings, 3 freeway undercrossings, 2 aerial freeway crossings, 1 underground freeway crossing, 3 river crossings, 25 aerial road crossings, and 10 freight crossings.

In the north, Alternative 2 would begin at the proposed WSAB 7th Street/Metro Center Station, which would be located underground beneath 8th Street between Figueroa Street and Flower Street. A pedestrian tunnel would provide connection to the existing 7th Street/Metro Center Station. Tail tracks, including a double crossover, would extend approximately 900 feet beyond the station, ending east of the I-110 freeway. From the 7th Street/Metro Center Station, the underground alignment would proceed southeast beneath 8th Street to the South Park/Fashion District Station, which would be located west of Main Street beneath 8th Street.

From the South Park/Fashion District Station, the underground alignment would continue under 8th Street to San Pedro Street, where the alignment would turn east toward 7th Street, crossing under privately owned properties. The tunnel alignment would cross under 7th Street and then turn south at Alameda Street. The alignment would continue south beneath Alameda Street to the Arts/Industrial District Station located under Alameda Street between 7th Street and Center Street. A double crossover would be located south of the station box, south of Center Street. From this point, the alignment of Alternative 2 would follow the same alignment as Alternative 1, which is described further in Section 2.3.2.

2.3.4 Alternative 3: Slauson/A (Blue) Line to Pioneer Station

The total alignment length of Alternative 3 would be approximately 14.8 miles, consisting of approximately 12.2 miles of at-grade, and 2.6 miles of aerial alignment. Alternative 3 would include nine new LRT stations, six would be at-grade and three would be aerial. Five of the stations would include parking facilities, providing a total of approximately 2,780 new parking spaces. The alignment would include 31 at-grade crossings, 3 freeway undercrossings, 1 aerial freeway crossing, 3 river crossings, 15 aerial road crossings, and 9 freight crossings. In the north, Alternative 3 would begin at the Slauson/A Line Station and follow the same alignment as Alternatives 1 and 2, described in Section 2.3.2.

2.3.5 Alternative 4: I-105/C (Green) Line to Pioneer Station

The total alignment length of Alternative 4 would be approximately 6.6 miles, consisting of approximately 5.6 miles of at-grade and 1.0 mile of aerial alignment. Alternative 3 would include four new LRT stations, three would be at-grade, and one would be aerial. Four of the stations would include parking facilities, providing a total of approximately 2,180 new parking spaces. The alignment would include 11 at-grade crossings, 2 freeway undercrossings, 1 aerial freeway crossing, 1 river crossing, 7 aerial road crossings, and 2 freight crossings. In the north, Alternative 4 would begin at the I-105/C Line Station and follow the same alignment as Alternatives 1, 2, and 3, described in Section 2.3.2.

2.3.6 Design Options

Alternative 1 includes two design options:

- **Design Option 1:** LAUS at the MWD – The LAUS station box would be located east of LAUS and the MWD building, below the baggage area parking facility instead of beneath the LAUS Forecourt. Crossovers would be located on the north and south ends of the station box with tail tracks extending approximately 1,200 feet north of the station box. From LAUS, the underground alignment would cross under the US-101 freeway and the existing Metro L (Gold) Line aerial structure and continue south beneath Alameda Street to the optional Little Tokyo Station between Traction Avenue and 1st Street. The underground alignment between LAUS and the Little Tokyo Station would be located to the east of the base alignment.
- **Design Option 2:** Add the Little Tokyo Station – Under this design option, the Little Tokyo Station would be constructed as an underground station and there would be a direct connection to the Regional Connector Station in the Little Tokyo community. The alignment would proceed underground directly from LAUS to the Arts/Industrial District Station primarily beneath Alameda Street.

2.3.7 Maintenance and Storage Facility

MSFs accommodate daily servicing and cleaning, inspection and repairs, and storage of light rail vehicles (LRV). Activities may take place in the MSF throughout the day and night depending upon train schedules, workload, and the maintenance requirements.

Two MSF options are evaluated; however, only one MSF would be constructed as part of the Project. The MSF would have storage tracks, each with sufficient length to store three-car train sets and a maintenance-of-way vehicle storage. The facility would include a main shop building with administrative offices, a cleaning platform, a traction power substation (TPSS), employee parking, a vehicle wash facility, a paint and body shop, and other facilities as needed. The east and west yard leads (i.e., the tracks leading from the mainline to the facility) would have sufficient length for a three-car train set. In total, the MSF would need to accommodate approximately 80 LRVs to serve the Project's operations plan.

Two potential locations for the MSF have been identified—one in the City of Bellflower and one in the City of Paramount. These options are described further in the following sections.

2.3.8 Bellflower MSF Option

The Bellflower MSF site option is bounded by industrial facilities to the west, Somerset Boulevard and apartment complexes to the north, residential homes to the east, and the PEROW and Bellflower Bike Trail to the south. The site is approximately 21 acres in area and can accommodate up to 80 vehicles (Figure 2-7).

2.3.9 Paramount MSF Option

The Paramount MSF site option is bounded by the San Pedro Subdivision ROW on the west, Somerset Boulevard to the south, industrial and commercial uses on the east, and All American City Way to the north. The site is 22 acres and could accommodate up to 80 vehicles (Figure 2-7).

Figure 2-7. Maintenance and Storage Facility Options

Source: WSP 2020.

3 REGULATORY FRAMEWORK

No specific laws or executive orders regulate the topic of economic impacts. Preparation of the economics analysis included federal, state, and local guidance.

3.1 Federal

The following federal documents provided guidance for conducting the economic and fiscal impact analysis:

- **Federal Highway Administration Technical Advisory 6640.8A (Federal Highway Administration 1987):** This guidance document states that the economic impact analysis should include a discussion of the local and regional impacts of each alternative related to economic development, tax revenue impacts, and employment opportunities. The analysis should also discuss the impacts to local businesses and business districts and the opportunity to minimize or reduce potential impacts.
- **Federal Transit Administration (FTA), Social and Economic Impacts (FTA 2016):** Transit projects may have economic impacts that should be included in the environmental documentation process. Impacts discussed may include business displacements, disruptions to business activities, and impacts to the regional economy.
- **Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970:** The Uniform Relocation Act (Public Law 91-646) provides important protections and assistance for people affected by federally funded projects. This law was enacted by Congress to ensure that people whose real property is acquired, or who move as a result of projects receiving federal funds, will be treated fairly and equitably and will receive assistance in moving from the property they occupy.

3.2 State

- **CEQA:** According to CEQA, economic effects of a project will not be treated as significant effects on the environment. However, economic effects of the Project may be considered to determine the significance of the physical changes caused by the Project (see CEQA Guidelines, § 15064(e)).
- **California Relocation Assistance Act:** The California Relocation Assistance Act (Government Code Section 7260 et seq.) establishes uniform policies to provide for the fair and equitable treatment of people displaced from their homes or businesses as a direct result of state and/or local government projects or programs. This Act requires that comparable replacement housing be made available to displaced persons within a reasonable period of time prior to the displacement.

3.3 Regional and Local

SCAG defines the regional planning principles for the corridor, while local municipalities define economic policies for specific areas within their jurisdictional boundaries. Section 4.2 provides examples of regional and local economic policies in the Affected Area.

4 AFFECTED ENVIRONMENT/EXISTING CONDITIONS

4.1 General Corridor-wide Conditions

The Project is located in one of the country's largest metropolitan areas and passes through or is close to 20 different cities, including the City of Los Angeles. Specifically, the project alignment traverses 12 local jurisdictions, including the Cities of Los Angeles, Vernon, Huntington Park, Bell, Cudahy, South Gate, Downey, Paramount, Bellflower, Artesia, and Cerritos, as well as the unincorporated Florence-Firestone community of LA County. For economics, the Affected Area is defined as the 0.25-mile area on both sides of the proposed alignment and a 0.5-mile area around the proposed station areas.

Economic impacts from construction and operation would likely be experienced in areas both inside and outside (indirect) the defined Affected Area. When possible, data are presented for the Affected Area, but some economic or fiscal data are presented at the city or regional level when data for the smaller Affected Area were not available or are not appropriate.

4.1.1 Population, Housing, and Employment

Table 4.1 shows population, housing, and employment data for the Affected Area in the Base Year (2017) and Forecast Year (2042). As shown in the table, population, households, and employment are largest for the longer alignments (Alternatives 1 and 2) and smallest for the shortest alignment (Alternative 4). Densely populated neighborhoods, major employment centers, and other key regional destinations where future growth is forecasted to occur are located in the northern sections of Alternatives 1 and 2. Neighborhoods in Central City Los Angeles, Central City North Los Angeles, and Southeast Los Angeles are expected to experience some of the greatest percentage growth in population and households along the corridor over the analysis period. The higher end of the range in employment reflects the employment centers that would be served in the financial district by Alternative 2. Section 4.1 of the Communities and Neighborhoods Impact Analysis Report (Metro 2021a) provides additional information and the *West Santa Ana Branch Transit Corridor Project Final Environmental Justice Impact Analysis Report* (Metro 2021h) provides a summary of the demographic and socioeconomic characteristics of the Affected Area.

Table 4.1. Study Area Population, Housing, and Employment, 2017 and 2042

Item	Alternative 1: LAUS to Pioneer Station	Alternative 2: 7th Street/Metro Center to Pioneer Station	Alternative 3: Slauson/A (Blue) Line to Pioneer Station	Alternative 4: I-105/C (Green) Line to Pioneer Station
Length (miles)	19.3	19.3	14.8	6.6
Population				
Year 2017	181,981	185,152	151,111	63,905
Year 2042	290,901	323,795	240,580	103,624
Average Annual Growth	1.9%	2.3%	1.9%	2.0%
Households				
Year 2017	49,830	59,399	39,338	18,084
Year 2042	82,933	109,578	63,721	30,006
Average Annual Growth	2.1%	2.5%	1.9%	2.0%

Item	Alternative 1: LAUS to Pioneer Station	Alternative 2: 7th Street/Metro Center to Pioneer Station	Alternative 3: Slauson/A (Blue) Line to Pioneer Station	Alternative 4: I-105/C (Green) Line to Pioneer Station
Employment				
Year 2017	95,225	154,207	37,937	18,842
Year 2042	126,067	192,285	46,430	22,586
Average Annual Growth	1.1%	0.9%	0.8%	0.7%

Source: Metro 2021n
Note: % = percent; I- = Interstate; LAUS = Los Angeles Union Station

4.1.2 Employment Trends

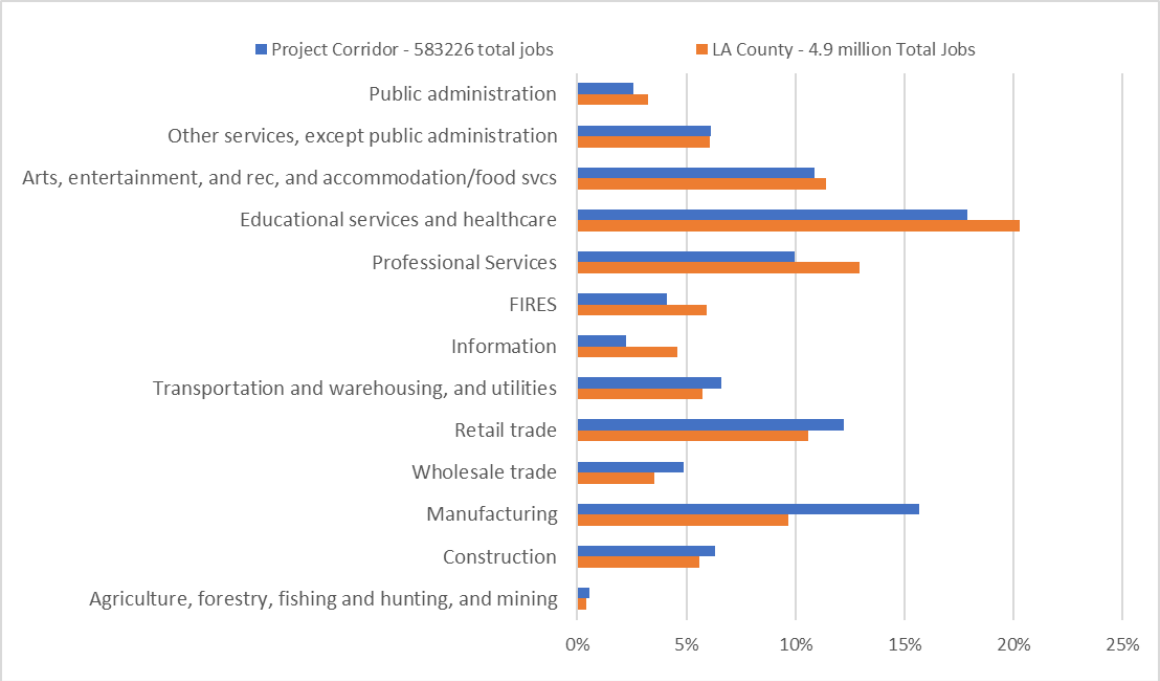
The Affected Area includes a section of the City of Los Angeles, the largest city in LA County and one of the largest economies in the country. The Project would achieve the following:

- Provide reliable fixed-guideway transit service that would increase mobility and connectivity for historically underserved, transit-dependent, and environmental justice communities to the area's job centers.
- Reduce travel times on local and regional transportation networks.
- Accommodate substantial future employment and population growth.

Figure 4-1 displays average employment by industry for communities located along the project alignment. Figure 4-1 reports census tract employment data from the U.S. Census Bureau and includes a different geographic area from the area represented by the data presented in Table 4.1. Employment in the Affected Area is concentrated in the education, health care, and manufacturing sectors, representing 34 percent of all jobs. Other large employers in the area include the retail trade (12 percent); arts, entertainment, recreation, accommodation, and food service (11 percent); and professional services (10 percent). These sectors are strong sources of employment in LA County as a whole, which has a slightly higher percentage of jobs in the education and health care sector and a lower percentage of jobs in manufacturing when compared to the Affected Area.

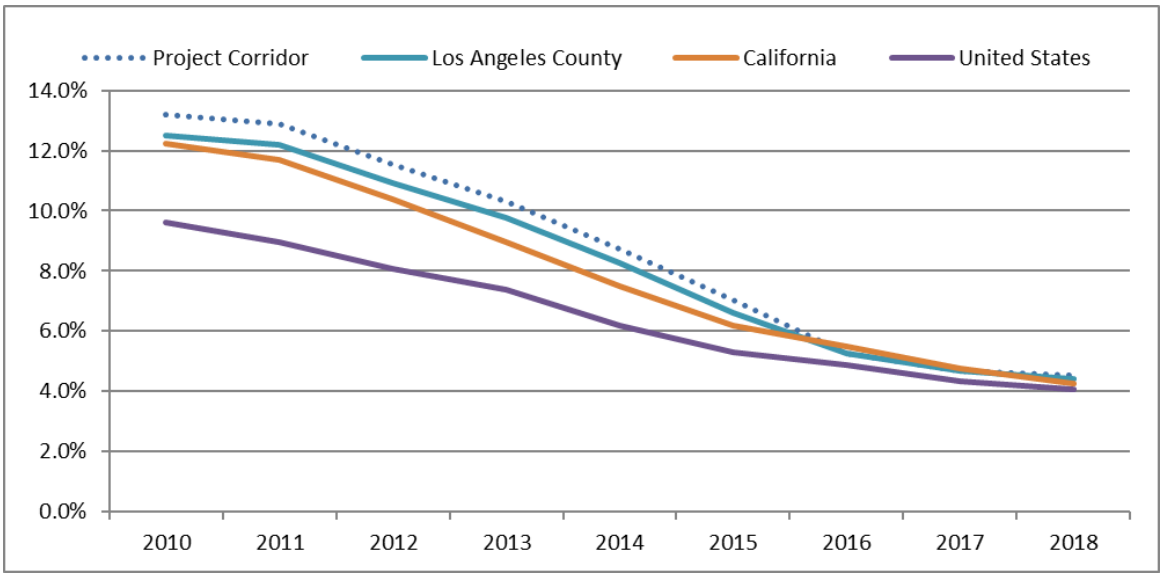
Figure 4-2 shows unemployment rate data from the Bureau of Labor Statistics and the California Department of Employment Development for the project corridor, LA County, the State of California, and the United States from 2010 through 2018. The corridor includes the unemployment data for each city within the project alignment and represents a larger geographic area than the Affected Area. The corridor data are dominated by the employment data for the City of Los Angeles. While the unemployment trends generally mirror the movement of the national unemployment rate, the Affected Area, LA County, and the state had a higher rate than the nation as a whole. The high unemployment rates in 2010 are a reflection of the slowdown in the regional and national economies. The unemployment rate improved as job growth continued through 2018, and in that year, the rates for the Study Area, LA County, and the state were near the national average.

Figure 4-1. 2016 Employment by Industry along Project Alignment



Source: U.S. Census Bureau 2018

Figure 4-2. Unemployment Trends in Project Corridor, 2010 to 2018



Source: State of California Employment Development Department 2018; U.S. Bureau of Labor Statistics 2018

4.1.3 Local Government Tax Revenues

City and county governments rely on tax revenues to fund general services to their respective communities. The Project could affect property tax and retail sales revenues for jurisdictions in the Affected Area. For the State of California, voter-approved Proposition 13 set the property tax rate at 1 percent of assessed value. The 1 percent is shared by all taxing agencies whose districts include the property location, such as cities, school districts, fire departments/districts, and LA County. All cities in the Affected Area, except Cudahy, receive a portion of the basic levy to fund government services. The rate varies for each city.

Table 4.2 shows tax revenues and the percent of total general fund tax revenues represented by property tax revenues for each city within the proposed corridor in the most recent year available. Property taxes represented 7 to 46 percent of total tax revenue. Approximately 41 percent of all taxes are included as "Other Taxes" in Table 4.2. "Other Taxes" may include transient occupancy taxes, utility taxes, business license taxes, and other taxes for which the source is not specified.

Table 4.2. Local Government Tax Revenues

City	Property Taxes	Sales Tax	Other Taxes	Total General Fund Tax Revenue	Property Tax as Percent of Total Tax Revenue
Los Angeles	$2,058,761,000	$557,990,000	$1,891,958,000	$4,508,709,000	46%
Vernon	$17,270,355	$7,177,884	$23,974,390	$48,422,629	36%
Huntington Park	$1,069,127	$11,686,353	$6,134,065	$18,889,545	6
Bell	$4,411,848	$2,360,400	$4,311,800	$11,084,048	40%
Cudahy	$265,030	$1,270,000	$1,097,000	$2,632,030	10%
South Gate	$12,314,651	$21,126,054	$4,928,819	$38,369,524	32%
Downey	$25,996,994	$25,796,994	$12,218,000	$64,011,988	41%
Paramount	$2,265,000	$7,800,000	$6,649,250	$16,714,250	14%
Bellflower	$11,032,000	$6,172,000	$7,659,500	$24,863,500	44%
Artesia	$2,444,466	$2,695,000	$1,153,381	$6,292,847	39%
Cerritos	$3,125,000	$34,577,500	$5,188,900	$42,891,400	7%
Total	$2,139,056,655	$674,109,538	$1,965,289,040	$4,778,455,233	45%

Sources: City of Artesia 2018; City of Bell 2018; City of Bellflower 2018; City of Cerritos 2018; City of Cudahy 2018; City of Downey 2018; City of Huntington Park 2018; City of Los Angeles 2018; City of Paramount 2018; City of South Gate 2018; City of Vernon 2018
Note: Revenues reported do not include revenue sources such as license fees, fees for service, interest income, or other miscellaneous non-tax revenues.

4.2 Existing Land Use

The improved mobility and connectivity provided by stations could be one of many factors that influences new development or redevelopment of vacant or under-utilized properties near the proposed stations. Transportation investment may provide opportunities for transit -oriented development (TOD). This development may also serve as a catalyst for public

and private economic revitalization that could provide economic benefits and enhanced quality of life to communities.

One of the critical components of TOD is supportive policies, including land use policy that encourages economic development around transit stations. The policies could incentivize revitalization of under-utilized or vacant parcels, encourage new housing near transit centers, support pedestrian and bike facilities, and preserve or expand access to open spaces and recreation. SCAG reports that "all jurisdictions within the project study area have one or more plans guiding future development around proposed stations" (SCAG 2012b).

The following list provides examples of existing transit-related policies for various jurisdictions in the Affected Area that support the success of the Project:

- SCAG has developed a regional transportation plan update that defines policies that support regional transportation objectives. One of the policies in the Sustainable Communities Strategy section states that SCAG will "pursue joint development opportunities to encourage the development of housing and mixed-use projects around existing and planned rail stations or along high-frequency bus corridors, in transit-oriented development areas, and in neighborhood-serving commercial areas" (SCAG 2012a).
- Metro's TOD Planning Grant Program is designed to spur the adoption of local land use regulations that are supportive of TOD in LA County. Objectives of the TOD Planning Grant Program are to increase access to transit by assisting local governments to accelerate the adoption of TOD regulatory frameworks; improve the transit network and increase use of public transit by reducing the number of modes of transportation necessary to access regional and local transit lines; further the reduction of greenhouse gases through encouraging in-fill development along public transportation corridors and transit use; and support and implement sustainable development principles. Under this grant program, cities within the WSAB corridor, including the Cities of Artesia, Bellflower, Downey, and Huntington Park were awarded for the preparation and adoption of the TOD-related plans.
- Metro has broadened the vision from TOD to TOCs. In its document, *Supporting Transit Oriented Communities: A Metro Demonstration Program*, Metro describes its vision of TOCs as "a comprehensive approach to creating compact, walkable and bikeable places in a community context, rather than concentrating on a single development site. For Metro, creating TOCs means expanding the boundaries to consider the impact of our system in a 1.0- to 1.5-mile corridor around a transit station" (Metro 2015a).
- LA County discusses a number of TOD-focused polices in its *Los Angeles County General Plan* (LA County 2015) and has defined specific transit-oriented districts to "encourage(s) infill development, pedestrian-friendly and community-serving uses near transit stops. The goal is to encourage walking, bicycling, and transit use" (LA County 2017). In the General Plan, LA County Policy Land Use 4.3 states that the County will "encourage transit-oriented development in urban and suburban areas with the appropriate residential density along transit corridors and within station areas" (LA County 2015).
- In its *Mobility Plan 2035*, the City of Los Angeles discusses TOD in Policy 3.3, Land Use Access and Mix. The policy's goal is to "promote equitable land use decisions that result in fewer vehicle trips by providing greater proximity and access to jobs,

destinations, and other neighborhood services" (City of Los Angeles 2016). The City defines TOD as encompassing a broader corridor and not just the area surrounding the station: "Corridors linked to transit have the capacity to accommodate greater densities of residential and commercial uses, while increasing access to transit connections" (City of Los Angeles 2016).

- The Cities of Huntington Park and South Gate are currently updating their respective General Plans. One of the areas of focus in the updates is to develop TOD policies to guide each City's planning around transit stations (City of Huntington Park 2017).

Additional information on land use policies is provided in the Communities and Neighborhoods Impact Analysis Report (Metro 2021a).

4.2.1 Alternative 1: Los Angeles Union Station to Pioneer Station

Several proposed station areas are located within the limits of the City of Los Angeles. The northern terminus for Alternative 1 is proposed at LAUS, which is a major transportation hub for a number of transit agencies. The area is surrounded by industrial, commercial, residential, and civic uses as well as culturally important neighborhoods, such as Chinatown and Little Tokyo.

A station proposed near the City of Vernon would be located in its dense manufacturing and industrial center. The Slauson/A Line Station would serve as a transfer point to the Metro A (Blue) Line via the existing aerial Slauson Station. The employment center is home to a number of industries that support the apparel, steel, plastics, logistics, and food sectors.

Proposed stations in the City of Huntington Park would be adjacent to commercial and industrial centers, as well as long-established residential communities and open spaces. The proposed Pacific/Randolph Station would be a key transit hub and would include a vibrant mixed-used corridor with commercial, entertainment, and retail activities.

A proposed station near the intersection of Florence Avenue and Salt Lake Avenue in the City of Huntington Park would be adjacent to commercial and long-established residential communities, as well as open spaces.

The Firestone Station in the City of South Gate is proposed near Firestone Boulevard, which is adjacent to a major industrial district and residential neighborhoods. The area also includes a large recreational complex that has baseball fields, soccer fields, and a nine-hole golf course.

The proposed Gardendale Station located in the City of Downey would be in an area experiencing redevelopment with the creation of a mixed-use regional employment and destination center. The proposed station area would also be surrounded by industrial and residential uses.

The proposed I-105/C Line Station, also located in the City of South Gate, would serve neighboring residential needs and as a transit hub for customers transferring to or from the Metro C (Green) Line to the Project. It would also provide residents with additional transit access to commercial areas for employment opportunities.

Current uses around the proposed Paramount/Rosecrans Station in the City of Paramount consist of commercial, institutional, and residential uses.

The proposed Bellflower Station on Bellflower Boulevard in the City of Bellflower would be located on the City's main street that consists of mixed commercial properties along an existing pedestrian corridor. The proposed Bellflower Station area has a variety of land uses, including institutional, residential, and commercial.

The proposed Pioneer Station located in the City of Artesia would represent the corridor's southern terminus. This station would be located along the main commercial corridor that is surrounded by a variety of retail, cultural, commercial, and residential uses.

Table 4.3 provides additional station location information, including the surrounding land uses currently in place.

Table 4.3. Alternative 1 Stations

City	Proposed Station	Current Station Area Land Use
Los Angeles	LAUS Forecourt Arts/Industrial District	Industrial, commercial, and manufacturing; civic; transit hub; residential; tourist destinations
LA County	Slauson/A Line (adjacent to existing Metro A [Blue] Line Slauson Station)	Industrial, commercial, and residential; civic; open space
Huntington Park	Pacific/Randolph Florence/Salt Lake	Industrial, commercial, and low-scale residential; civic; open spaces
South Gate	Firestone I-105/C Line (adjacent to the proposed Metro C [Green] Line Station)	Industrial; commercial; Azalea Shopping Center; residential; high-traffic and train movements
Downey	Gardendale	Health care (Rancho Los Amigos); commercial; residential
Paramount	Paramount/Rosecrans	Residential; adjacent to commercial and civic uses
Bellflower	Bellflower	Neighborhoods; residential; commercial and mixed use
Artesia	Pioneer	Industrial; mixed commercial; residential

Source: SCAG 2012b; Metro 2015b
Note: I- = Interstate; LA = Los Angeles; LAUS = Los Angeles Union Station; MWD = Metropolitan Water District

4.2.2 Alternative 2: 7th Street/Metro Center to Pioneer Station

Alternative 2 would provide service to the Downtown Transit Core of the City of Los Angeles. The connectivity to the other transit lines would provide LA residents and visitors with light rail connection to other parts of the city for employment, tourism, and recreation opportunities. A South Park/Fashion District Station would provide transit service for the residents in the growing neighborhood. The Fashion District has transitioned from a hub for the apparel and floral industries to a downtown neighborhood with residents, restaurants, hotels, and other amenities. A proposed station located in the Arts District would serve a diverse area that supports residential, light industrial, and the arts communities.

Proposed stations for Alternative 2 are presented in Table 4.4. South of the Arts/Industrial District Station, Alternative 2 and Alternative 1 would serve the same stations as those described in Table 4.3 for Alternative 1.

Table 4.4. Alternative 2 Stations

City	Proposed Station	Current Station Area Land Use
Los Angeles	7th Street/Metro Center South Park/Fashion District Arts/Industrial District	Industrial, commercial, and manufacturing; civic; transit hub; residential; tourist destinations

Source: Prepared by Jacobs in 2020

4.2.3 Alternative 3: Slauson/A (Blue) Line to Pioneer Station

Proposed stations and the existing land use for Alternative 3 would be similar to those described for Alternative 1 in Table 4.3 and would be limited to the corridor between Slauson/A Line Station to the north and Pioneer Station to the south.

4.2.4 Alternative 4: I-105/C (Green) Line to Pioneer Station

Proposed stations and the existing land use for Alternative 4 would be similar to those described for Alternative 1 in Table 4.3 and would be limited to the corridor between the I-105/C Line Station to the north and Pioneer Station to the south.

4.2.5 Design Options

4.2.5.1 Design Option 1: Los Angeles Union Station at Metropolitan Water District

The LAUS MWD design option station box would be located behind the MWD building and east of LAUS as opposed to the LAUS Forecourt.

4.2.5.2 Design Option 2: Add Little Tokyo Station

An optional station in the Little Tokyo neighborhood would provide service to a densely populated area with connection to the Regional Connector.

Table 4.5 presents the design option stations in Los Angeles.

Table 4.5. Design Option Stations

City	Proposed Station	Current Station Area Land Use
Los Angeles	Alternative 1: LAUS MWD (Design Option 1) Alternative 1: Little Tokyo (Design Option 2)	Industrial, commercial, and manufacturing; civic; transit hub; residential; tourist destinations

Source: Prepared by Jacobs in 2020

5 ENVIRONMENTAL IMPACTS/ENVIRONMENTAL CONSEQUENCES

This section describes the environmental impacts and consequences of the No Build and Build Alternatives as they relate to economics. The Northern Section's alignment consists of at-grade, aerial, and subterranean elements. The Southern Section consists of at-grade and aerial light rail alignments. The following discussions are based on the existing conditions described in Section 4.

5.1 No Build Alternative

The No Build Alternative includes existing transportation networks and transportation improvements that have been identified in constrained plans of the LRTP (Metro 2009) and the RTP/SCS (SCAG 2016). The service features include transit, freeway, and arterial operations within and around the Affected Area. As such, the No Build Alternative includes existing, under-construction, and planned rail, bus, and highway projects. Planned projects could be subject to separate environmental analysis to evaluate economic and fiscal impacts. Implementation of these projects, including O&M, would be subject to regulatory standards, conditions, and permitting requirements discussed in Section 3. Compliance with these standards would minimize economic impacts. Residual impacts are expected to be minor; therefore, no adverse economic and fiscal effects are anticipated from the No Build Alternative.

Under the No Build Alternative, economic benefits associated with construction spending for the Project would not be realized. Residents, employees, and visitors in the Affected Area would not have the benefit of the interconnected transportation network provided by the Project. The additional employment and income associated with new jobs created by the operation of the Project would not be realized. The proposed station areas would lose a major driver for the development or redevelopment of vacant or under-utilized properties near the proposed stations.

5.2 Build Alternatives

The potential economic impacts of project operation are discussed at the corridor level except in the Regional Mobility and Connectivity subsection (Section 5.2.2.1), where impacts are discussed by design option.

This section describes the potential impacts of the Build Alternatives, including the project alignment, design options, and MSF site options, with corridor-wide application. The approach to analyzing the impacts of the Build Alternatives on the different topics discussed in this section are similar for each alternative, and the potential impacts are summarized together. The following economic and fiscal elements are evaluated in the following sections:

- Operational Impacts on Employment (Section 5.2.1)
- Long-term Impacts on Property Values (Section 5.2.2)
- Regional Mobility and Connectivity (Section 5.2.2.1)
- Impacts on Local Tax Bases (Section 5.2.3)
- Direct Employment Impacts from Displacements (Section 5.2.4)

The Build Alternatives would include transit stations, pedestrian walkways, trains, TPSSs, and the guideway.

5.2.1 Operational Impacts on Employment

Estimated impacts of operational employment are discussed for the entire corridor. The Build Alternatives would create long-term jobs and additional earnings as a result of O&M expenditures. The benefits of operating and maintaining the light rail system include supporting a diverse employee base and providing living-wage jobs. The additional household earnings would result in an increase in economic activity in the local economy, both through direct hiring to fill transit jobs and indirectly as the transit workers spend earnings, thus creating additional consumer demand and jobs to meet that demand.

Annual costs for each alignment were estimated in the *West Santa Ana Branch Transit Corridor Operating and Maintenance Costs* report (Metro 2021w). Total O&M costs are expected to be nearly the same for Alternatives 1 and 2 at $88 million per year. Additional estimates were developed for Alternative 2 that include costs associated with operating short-line service during peak travel times to Slauson/A Line Station that added $5 to $13 million per year. Total wages and benefits are estimated to be 44 to 48 percent of total operating expenses. Wages and benefits from operation of the new alignment would range between $42 and $45 million annually in 2020 dollars, depending on the alternative selected.

Alternatives 3 and 4 have shorter alignments with fewer stations. Annual operating expenses are estimated to be $67 million for Alternative 3 and $41 million for Alternative 4.

The overall impact of the additional O&M jobs on the regional economy would depend on the source of funding for the workers. If funds are from local taxes or fares, the impact would be small because the local funding source would be considered an economic transfer of monies that would have likely been spent in the economy on other things. If a portion of the funding is from federal sources, then the impact would be greater because the federal funding would represent "new" money circulating into the regional economy.

In 2016, Metro received assistance from the federal government in the form of grants to fund 10 percent of total operations (Metro 2017). More specifically, in 2016, Metro received nearly $200 million in federal grants as nonoperating revenue to help offset the $1.6 billion operating loss. Passenger fares and other operating revenue only generated $443 milllion towards the $2 billion required for total system operating expenses. It is assumed that Metro would continue to receive similar levels of federal assistance to fund operations of the Build Alternatives; thus, the additional jobs created through operational activities would have a net benefit on regional economic activity, and no adverse effects on operational employment are anticipated.

In order to estimate the regional impacts associated with the Project, Regional Input-Output Modeling System (RIMS) II final demand multipliers from the Bureau of Economic Analysis (BEA) for the transit and ground transportation industry were applied to the amount of new funding that would be used for operating expenses. Multipliers for the greater Los Angeles area were used. The results of this analysis are summarized in Table 5.1.

Table 5.1. Summary of Economic Impacts during Project Operation

Item	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Operating Expenditure (2020 dollars):	$87,605,512	$100,903,752	$67,482,952	$40,526,831
Percent of New Money[1]	10%	10%	10%	10%
Additional Operating Expenditure within Region funded by New Federal Money	$8,760,551	$10,090,375	$6,748,295	$4,052,683
Final-demand Multiplier:				
Output	2.3162	2.3162	2.3162	2.3162
Earnings	0.7502	0.7502	0.7502	0.7502
Jobs per $1 Million Spent	27.9529	27.9529	27.9529	27.9529
Regional Impacts:				
Output	$20,291,189	$23,371,327	$15,630,401	$9,386,825
Earnings	$6,572,166	$7,569,799	$5,062,571	$3,040,323
Employment (person-year jobs)[a]	245	282	189	113

Source: BEA 2017; Metro 2021f
Notes:
[1] Percent of new money is the percent of total operation and maintenance expenses funded through federal funding sources that otherwise would not have been introduced into the regional economy.
[2] A job is defined as one job for one person for one year.
Alternative 2 costs includes costs associated with operating short-line service during peak travel times to Slauson/A Line

The additional operational spending effects associated with the Project would result in an estimated $9.4 to $23.4 million in overall economic activity per year. The new economic activity includes direct and indirect activity. Direct impacts include employment and income resulting from operation of the Project. Indirect effects would include indirect employment resulting from the purchase of goods and services by Metro employees, and induced employment resulting from Metro workers spending their income within the region. It is estimated that operation-related spending would provide regional economic benefits by generating $3.0 to $7.6 million in additional wages and salaries for households and by creating 113 to 282 person-year jobs for all industries in the region per year. A person-year job is defined as one job for one person for one year. Based on the predicted regional economic benefits from both direct and indirect sources, the potential impacts would be beneficial, and no adverse effects would occur.

5.2.2 Long-term Impacts on Property Values

Long-term impacts on property values are discussed for the entire project corridor. The Build Alternatives are expected to indirectly lead to new development and/or redevelopment of land surrounding some of the proposed light rail stations, which would likely have the effect of increasing property tax revenues for the affected local jurisdictions. While development is regulated by the affected jurisdictions and is driven by regional and local economic conditions, light rail lines can advance the timing and increase the intensity of development within the limits allowed by local zoning, particularly surrounding proposed station areas.

Research on the impacts associated with light rail systems indicates that light rail is one of many factors that can influence development. The U.S. Government Accountability Office (Wise 2014) reviewed six federally funded transit projects and found a wide range in the amount of TOD near transit stations after transit operations began in those locations. The six communities studied were Baltimore, Maryland; Charlotte, North Carolina; Houston, Texas; San Francisco, California; Santa Clara County, California; and Washington, D.C. The study identified the following key conditions that support TOD:

- **Market demand for real estate:** A strong local and regional economy is more likely to support development; market demand is a major factor for developers when considering TOD.
- **Large parcels of land available for development**: Vacant or underused sites present an opportunity for development and promotion of transit-supportive land uses.
- **Resident support for TOD**: Younger residents support TOD and want to live in neighborhoods close to public transit and amenities (e.g., retail, restaurants, and offices).
- **Efficient access to jobs and centers of activity**: Connecting people to employment and activity centers provides the potential for development; transit's ability to connect potential riders to central business districts, local social or historical institutions, major employment centers, and mixed-use neighborhoods increases potential for TOD.
- **Local government support of TOD**: Local governments can encourage development with supportive zoning regulations, tax incentives, station area planning, targeted infrastructure investments, and tax incentives; the policies and planning efforts need to be responsive to local residents' needs and to the market demand.

These findings are consistent with a study conducted by the Center for Transit-Oriented Development (2011) that reviewed the development patterns along three LRT projects in the United States: the Hiawatha Line in Minneapolis-St. Paul, the Southeast Corridor in Denver, and the Blue Line in Charlotte. According to the study, all three lines experienced new development. The study found that the major drivers for the development were proximity to downtown, proximity to employment centers, and the availability of vacant or under-utilized property. Other factors that helped support TOD included station planning efforts and proactive efforts to invest in neighborhood infrastructure and amenities that support transit and transit connectivity.

Research conducted by the Center for Transportation Studies at the University of Minnesota (Goetz et al. 2010; Ko and Cao 2010) on the impacts that the Metro A Line (Hiawatha Line LRT) has had on residential, commercial, and industrial properties suggests that light rail has an overall positive effect on property values. Proximity to station areas was a major factor in the positive effect on residential and multifamily properties. The overall strength of the economy, local government policies, and land availability are also critical factors in determining the value of the property.

Many communities along the Build Alternatives corridor are subject to local municipal policies that are or will be in place to support TOD. Policies that encourage TOD, such as general plan updates for the Cities of Huntington Park and South Gate, will encourage development near station areas that should increase the property tax base for communities along the corridor. The Build Alternatives will serve residents in a densely populated area located in economic and cultural activity centers, which is expected to attract continued investment in the area. The added investment would likely result in increased property values for businesses and residences near station areas.

The Build Alternatives also have the potential to cause environmental impacts (nuisance effects) that could reduce the value of an area for some existing or planned uses or lower the revenue of local businesses over the long term. These potential nuisance effects could include disruptive noise levels, visual impacts, and reductions in vehicular access and parking. The rate, timing, and potential for an adverse determination of such impacts are influenced by several factors: the location of the business or residence relative to new stations, changes in business activity during construction and operation of the system, business visibility, and local land use plans and development standards. While these potential impacts could occur, Mitigation Measure COM-1 (Construction Outreach Plan) (Communities and Neighborhoods Impact Analysis Report, Section 6 [Metro 2021a]) for visual quality, noise, vibration, and parking impacts would minimize the potential for any adverse effects.

Some properties located next to the Build Alternatives would likely experience an impact on their values because of nuisance effects associated with the Build Alternatives. The Noise and Vibrations Impact Analysis Report (Metro 2021d) identifies properties that would experience noise impacts. Design features such as noise walls would help minimize and mitigate some of the impacts. However, the potential for increased property values and new development near station areas would likely provide greater benefits to businesses and residences in the Affected Area, and increased property tax revenues would benefit the local jurisdictions in the Affected Area. The overall net impact would likely be beneficial for the region, and no adverse effects are anticipated.

5.2.2.1 Regional Mobility and Connectivity

The operation of the Build Alternatives would provide a number of economic benefits to businesses, employees, and residents in the area. Each of the Build Alternatives would have the following beneficial impacts to the regional economy:

- Businesses would benefit from the increased access to a broader labor market, with individuals possessing diverse sets of skills who would be served by the Build Alternatives.
- Potential employees who are transit-dependent would have access to a larger labor market, which may provide greater economic opportunities.
- Businesses located near stations may experience an increase in retail sales as riders travel to and from the station area.
- Some public transportation passengers may experience a reduction in vehicle ownership costs as they switch from driving to public transportation.
- Some areas may experience a reduction in traffic congestion, which could lead to travel time savings for businesses and individuals.
- The transit network would have improved connectivity with more connections to LAUS and the existing Metro A (Blue), B (Red), C (Green), D (Purple), E (Expo), and L (Gold) Lines.
- Future travel demand would be accommodated, including the high number of transit trips made by Study Area residents.
- The densely populated neighborhoods, major employment centers, and other key regional destinations where future growth is forecasted to occur within the Study Area would have improved access to public transportation.

The Build Alternatives would have impacts on local businesses as local traffic patterns change, patronage to new stations is introduced, and the off-street and on-street parking in the corridor changes because of reductions from construction and operations, along with focused increases at the five new station parking facilities: Firestone Station, I-105/C Line Station, Paramount/Rosecrans Station, Bellflower Station, and Pioneer Station. Even with the new station parking facilities, these changes introduced by the Build Alternatives could result in a loss of overall parking for some businesses (Metro 2021e). According to the Transportation Impact Analysis Report (Metro 2021e), parking impacts to station areas in the Northern Section are expected to be low. Some on-street parking along Randolph Street between Albany and Regent Streets will be reduced. However, implementation of TRA-22 (Loss of Parking [Permanent]) (Transportation Impact Analysis Report, Section 8 [Metro 2021e]) is expected to reclaim some of the lost parking, which would potentially reduce adverse effects.

Some businesses may experience a loss in revenue if potential customers are discouraged from patronizing the businesses because of both real and perceived inconvenience factors. Other factors may also positively affect business revenues, including increased exposure to customers in and around the station area, higher visibility along the light rail alignment, or changes to local and global economic conditions.

5.2.2.2 Alternative 1: Los Angeles Union Station to Pioneer Station

The northern terminus for Alternative 1 would be located underground at LAUS. This station would connect to the regional transit network and provide riders access to a larger labor market. Alternative 1 would consist of aerial, underground, and at-grade rail structures. Alternative 1 would be underground from LAUS to Olympic Boulevard. The underground portion of Alternative 1 would avoid visual, noise, and vibration effects on businesses and residences as well as potential conflicts with vehicles and pedestrians.

The Arts/Industrial District Station would provide needed transit service for the residents in that growing neighborhood. The Arts District is expected to continue to transition from an industrial area to a residential district, and the station would also have the potential for TOD. Any future TOD would be consistent with adopted plans and policies.

Alternative 1 would continue underground under Alameda Street until 8th Street, curving to the west under the Alameda Tower property between 8th Street and Olympic Boulevard. The alignment would transition to an aerial structure, crossing over the I-10 freeway south. The aerial structure would result in noise, visual, and vibration impacts to the businesses along the alignment, which could cause some patrons to avoid the area and elect to shop elsewhere. However, the impacts are expected to be minimal because of implemented mitigation measures (Metro 2021d), and most of these businesses do not rely on drive-by traffic for retail sales.

The aerial alignment would follow Long Beach Avenue and shift into the existing Wilmington Branch ROW that parallels Long Beach Avenue. Alternative 1 would add an aerial station with connection to the existing Metro A (Blue) Line at Slauson/A Line Station. The pedestrian connectivity with the Metro A (Blue) Line would provide mobility benefits to passengers. Both the City and the County of Los Angeles have identified the area surrounding the existing Metro A (Blue) Line in the vicinity of the existing Slauson Station as a potential TOD (LA County 2017). Alternative 1 would improve the opportunity for new development or redevelopment in the area, which would likely lead to increased property values and property tax revenue for local jurisdictions.

After departing the Slauson/A Line Station, the Alternative 1 alignment would descend to an at-grade alignment in the La Habra Branch ROW along Randolph Street. The alignment would follow Randolph Street and cross Pacific Boulevard to the Pacific/Randolph at-grade station. The operation of the light rail train would have an impact on vehicle traffic because some left turns would be restricted, and trains would cause traffic delays when the train is in the area. As LRVs pass through at-grade crossings, vehicular traffic would be stopped (e.g., on Pacific Boulevard and Randolph Street) by means of signals. The frequency of train service would range from one train every 5 minutes during AM/PM peak hours to one train every 20 minutes during weeknights.

According to Section 8.1.2.4 of the Transportation Impact Analysis Report (Metro 2021e), mitigation measures will not reduce impacts to many of the intersections along Randolph Street, and delays would be increased when compared to the No Build Alternative. Increased traffic congestion, delays, and temporarily decreased access could cause some motorists to avoid the area, which could affect industrial and retail sales at businesses. However, motorists would likely adapt to the traffic revisions, and transit riders may frequent businesses near the station, reducing overall impacts on retail sales to negligible levels.

The Pacific/Randolph Station would be located along Randolph Street in a busy retail district. The at-grade station would be located within the La Habra Branch ROW in the middle of Randolph Street. The station would also provide potential shoppers with access to the retail district, which could have a positive impact on retail sales. Conversely, the Build Alternatives would restrict some left turns to and from Randolph Street. These restrictions along Randolph Street would reduce access to industrial and commercial uses, which could affect sales. Some residential areas would also have access restrictions. Motorists would be required to find available alternate pathways between both sides of Randolph Street. Operation of the alignment is not expected to generate any permanent access disruptions to businesses or residences on either side of Randolph Street. Although access alterations are proposed along some at-grade portions of the proposed alignment, access would be available from adjoining or parallel streets. Therefore, no adverse effects from access restrictions are expected.

With the widening of the freight alignment, five parcels have historic or active spurs to the existing freight corridor. Spurs at two of the parcels have been abandoned, and they are no longer active. Entities at two other parcels do not actively use their spurs but wish to maintain access to the spurs for future use. The spur at one parcel is actively being used for shipments of scrap metal. Access to this spur will be severed with the re-alignment of the freight corridor and the addition of the light rail line. This business is expected to be displaced by the project.

Train service would increase delays at some of the at-grade intersections and street crossings along Randolph Street, which would lead to increased traffic delays and congestion along the alignment. Some properties near the alignment would experience noise, vibration, and visual impacts. Some potential customers may be discouraged from patronizing businesses in congested areas as the result of both real and perceived inconvenience factors. According to Section 8 of the Transportation Impact Analysis Report (Metro 2021e), some potential delays at intersections can be mitigated so that the impacts would not result in adverse effects. The impact is expected to be negligible to retail sales, and no adverse effects would occur.

Many of the jurisdictions have plans guiding future development around proposed stations. Proposed stations at Florence/Salt Lake, Gardendale, and Firestone could lead to new or redeveloped TOD with commercial, retail, and high-density housing located near the station

area. The proposed Paramount/Rosecrans, Bellflower, and Pioneer Stations are all located in areas with existing retail and commercial centers within their respective communities. The potential for TOD would increase with the operation of the light rail line, which could have overall positive impacts on assessed values and retail sales. No adverse effects would occur.

Five of the stations in the southern section of the corridor would add parking facilities near station areas for park-and-ride opportunities. The parking facilities near the stations might increase traffic and congestion near the stations at peak travel times as passengers travel to and from the area. Parking impacts near the Firestone, I-105/C Line, Paramount/Rosecrans, Bellflower, and Pioneer Stations are expected to be high at certain times because of the increased demand in ridership (Metro 2021e). Side streets and nearby parking facilities might experience increased demand for parking if the station area parking facilities are full. In addition, parking facilities located at shopping centers or malls may experience spillover parking by riders unable to find parking elsewhere. It is assumed that current parking enforcement practices at shopping centers will be employed to minimize the potential parking impacts for businesses located at the shopping centers. Some riders will shift to other modes because the demand for parking is high, which could alleviate some of the impacts. The Build Alternative would not result in adverse effects.

5.2.2.3 Alternative 2: 7th Street/Metro Center to Pioneer Station

Alternative 2 extends 19.3 miles between the Downtown Transit Core area and the City of Artesia. The alignment for Alternative 2 would be entirely underground from the Downtown Transit Core area in the Financial District of the City of Los Angeles to Olympic Boulevard. The tunnel would avoid visual, noise, and vibration effects on businesses and residences, as well as potential conflicts with vehicles and pedestrians. The 7th St/Metro Center Station would be located beneath 8th and Flower Streets. An underground pedestrian connection to the existing 7th Street/Metro Center Station would provide riders with connectivity to the A (Blue), B (Red), D (Purple), and E (Expo) Lines. The connectivity to the other transit lines provides LA residents and visitors with light rail connection to other parts of the city for employment, tourism, and recreation opportunities.

The alignment would continue southeast beneath 8th Street and connect to an underground South Park/Fashion District Station below 8th Street between Los Angeles and Santee Streets. A station in the Fashion District would provide transit service for the residents in the growing neighborhood. The Fashion District is expected to continue to transition from a hub for the apparel and floral industries to a downtown neighborhood with residents, restaurants, hotels, and other amenities. The station would also have potential for TOD.

From the South Park/Fashion District Station, the alignment would continue underground to the Arts/Industrial District Station located beneath Alameda Street between 7th and 8th Streets. The Arts/Industrial District Station would provide needed transit service for the residents in that growing neighborhood. The Arts District is expected to continue to transition from an industrial area to a residential district, and the station would also have potential for TOD.

After the Arts/Industrial District Station, Alternative 2 impacts would be the same as those described in Alternative 1, and no adverse effects related to access would occur.

5.2.2.4 Alternative 3: Slauson/A (Blue) Line to Pioneer Station

Within its geographic limits, Alternative 3 would have benefits for regional mobility and connectivity; however, the benefits to the region would be fewer than the benefits under Alternatives 1 and 2 because Alternative 3 would not include as many stations (nine stations) and would not provide additional transit options to densely populated areas in northern LA neighborhoods, such as the Arts District or Little Tokyo. The exclusion of the downtown LA stations would result in less access to the regional labor market for those dependent on transit. However, Alternative 3 would still have a net benefit to regional connectivity, and no adverse effects would occur.

5.2.2.5 Alternative 4: I-105/C (Green) Line to Pioneer Station

The benefits to the region would be fewer under Alternative 4 than the benefits under the other Build Alternatives. Alternative 4 would not include as many stations (four stations) and would not provide additional transit options to densely populated areas in LA and other cities to the north of I-105, resulting in less access to the regional labor market for those dependent on transit. However, Alternative 4 would still have a net benefit to regional connectivity, and no adverse effects would occur.

5.2.3 Impacts on Local Tax Bases

For the Build Alternatives, Metro would need to acquire residential and commercial properties as well as property owned by cities and other government agencies within the corridor. More details about the affected properties can be found in the Displacement and Acquisition Impact Analysis Report (Metro 2021b).

When referring to the property tax impacts of acquisitions, the term "initial property tax impacts" is used because the extent of the long-term fiscal impact of the system is uncertain. Initially, property taxes would no longer be collected from full or partial acquisitions along the route. As a result, the rates charged to remaining taxpayers would increase slightly to recover budgeted funds, or budgets for essential government services would be reduced accordingly.

Table 5.2 presents the initial property tax impact estimates by jurisdiction for the Build Alternatives. The property tax impact presented in this section focuses on the impact to each city's general fund collections. Property tax records for each property (or portion of a property) within a local jurisdiction were used to estimate the amount of property tax revenue that could be affected by the Build Alternatives. For partial acquisitions, potential property tax impacts were estimated by prorating the city's share of property taxes collected by the percentage of total property affected by the Build Alternatives. For example, if 10 percent of a property is acquired for the Build Alternatives, then 10 percent of the property tax collection was assumed to be affected. The tax effects of the Build Alternatives are estimated to be between 0.0 and 0.5 percent of the budgeted general fund property tax collections in 2018 for affected cities.

Table 5.2. Initial Property Tax Impact by City

City	2018 Property Tax Revenue	Initial Property Tax Impacts				Potential Impact to General Fund Revenues			
		Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 1	Alternative 2	Alternative 3	Alternative 4
Los Angeles	$2,058,761,000	$151,134	$190,672	$9,250	$0	0.01%	0.01%	0.00%	0.00%
Vernon	$17,270,355	$26	$26	$26	$0	0.00%	0.00%	0.00%	0.00%
Huntington Park	$1,170,311	$6,642	$6,642	$6,642	$0	0.57%	0.57%	0.57%	0.00%
Bell	$4,411,848	$0	$0	$0	$0	0.00%	0.00%	0.00%	0.00%
Cudahy	$265,030	$0	$0	$0	$0	0.00%	0.00%	0.00%	0.00%
South Gate	$12,314,651	$11,345	$11,345	$11,345	$4,550	0.09%	0.09%	0.09%	0.04%
Downey	$25,996,994	$0	$0	$0	$0	0.00%	0.00%	0.00%	0.00%
Paramount	$2,265,000	$9,289	$9,289	$9,289	$9,289	0.41%	0.41%	0.41%	0.41%
Bellflower	$11,032,000	$2,866	$2,866	$2,866	$2,866	0.03%	0.03%	0.03%	0.03%
Artesia	$2,444,466	$5,364	$5,364	$5,364	$5,364	0.22%	0.22%	0.22%	0.22%
Cerritos	$3,125,000	$0	$0	$0	$0	0.00%	0.00%	0.00%	0.00%

Source: Metro 2021b

As shown in Section 4.1.3, 7 to 46 percent of the tax revenues collected by affected cities are from property taxes. The remaining revenues come from other sources, such as sales and use taxes, business and occupation taxes, utility taxes, and other taxes. Similar to property tax impacts, the long-run tax impacts to local jurisdictions from these other taxes are uncertain and depend on whether displaced businesses relocate within the same community or not. Businesses unable or unwilling to relocate within the same community would represent a loss of revenues to the local jurisdiction. These types of losses would be offset to the extent that business activity increases and/or new businesses are attracted to the area. Local jurisdictions are likely to receive substantial sales tax revenues from purchases related to project construction. In addition to funding local jurisdiction programs, total property tax levies include funds collected for consolidated county taxes, fire prevention, libraries, schools, and other services. Based on the Build Alternatives' conceptual designs, the initial property tax impacts from acquisitions are, in all cases, less than 0.6 percent of the total general fund property tax revenues collected by cities in the project alignment.

As discussed in Section 5.2.2, Long-Term Impacts on Property Values, TOD is likely to occur near the light rail stations. This would result in new construction, which is added to the jurisdiction's tax base, thus increasing the revenue available to a jurisdiction for essential government services. Thus, the long-term property tax impacts are uncertain but are likely to be lower than the initial property tax impacts. No adverse effects related to general fund property tax revenues are anticipated.

5.2.4 Direct Employment Impacts from Displacements

Table 5.3 provides estimates of the numbers of businesses and employees located at properties that would be acquired for the four Build Alternatives. The numbers presented do not include the potential impact of the selected MSF site option, which will be presented separately. The estimates were prepared based on field verification of addresses and business names obtained from the Displacement and Acquisition Impact Analysis Report (Metro 2021b). For a small number of parcels for which information from the other sources was not available, employment was estimated using employee-per-square-foot ratios. Alternative 1 is estimated to displace 90 businesses and 614 employees. Alternative 2 is estimated to displace a higher number of businesses and employees when compared to Alternative 1, with its location in the financial district. Approximately 108 businesses and 677 employees would be displaced by Alternative 2. Alternative 3 would affect an estimated 39 businesses while Alternative 4 would affect the least number of businesses and employees because it affects a smaller geographic area.

Table 5.3. Business and Employee Displacement

Alternative	Number of Businesses	Estimated Number of Employees
Alternative 1	89	601
Alternative 2	113	690
Alternative 3	65	352
Alternative 4	18	115

Source: Metro 2021b

The magnitude of the business displacement impact is described by comparing the number of employees displaced to total employment in the areas surrounding the proposed light rail line (Table 5.4) The second and third columns in Table 5.4 provide a comparison of 2017 and 2042 employment forecasts for neighborhoods surrounding the Affected Area. The estimates are based on SCAG regional projections. Data for the segments are defined as a collection of traffic analysis zones (TAZ) located within 0.25 mile of the rail line and 0.5 mile of proposed stations. The fourth and fifth columns in Table 5.4. provide the cumulative annual average growth rate for each alternative and the implied number of employees added from 2017 to 2018, which is an estimate of one year's worth of underlying growth in employment in the project area. The far-right column provides estimates of the number of employees at businesses that would be displaced by the Build Alternatives. With the exception of Alternative 3, the projected employment growth from 2017 to 2018 in the Affected Area is expected to be greater than the jobs displaced by the Project.

Table 5.4. Relative Impact of Displaced Employees

Alternative	2017 Employment	2042 Employment	Cumulative Annual Growth		Employees (Jobs) Displaced
			Percent	Jobs	
Alternative 1	95,225	126,067	1.1	1,075	601
Alternative 2	154,207	192,285	0.9	1,367	690
Alternative 3	37,937	46,430	0.8	308	352
Alternative 4	18,842	22,586	0.7	137	115

Source: Metro 2021b

Employees in a variety of industrial businesses represent approximately 40 percent of potentially impacted employment across the Build Alternatives. Other industries that are affected by the Build Alternatives include retail and automotive services. Metro would provide relocation assistance to impacted employers; therefore, it is likely that the displaced jobs would be relocated, not lost.

Some of the displaced businesses may relocate within the same area of the current business; therefore, the estimated employment impact may be less than shown. The analysis demonstrates that the changes in employment patterns resulting from the business displacements associated with this project are expected to be negligible, and no adverse effects are anticipated.

According to the Displacements and Acquisition Impact Analysis Report (Metro 2021b) prepared for the Build Alternatives, the supply of currently available replacement sites within a 6-mile radius is sufficient to relocate nearly all displaced businesses. Because the Project would provide relocation assistance to displaced businesses and employees, it is likely that some of the displaced jobs would be relocated, not lost. However, some businesses may find it difficult to relocate to a new neighborhood within the project area and may decide to close or move further away, resulting in the loss of jobs in the immediate area. Additionally, some employees may find commuting to a relocated business expensive or inconvenient and decide not to relocate with their place of employment. Some displaced employees may be able to find new jobs through the relocation effort. Overall, the potential employment impacts from business displacements are not expected to be substantial. The potential for direct and induced employment associated with the project are also expected to add employment opportunities to

the local and regional economy. Therefore, the impact on displaced businesses as a result of the project would not result in an adverse effect on the economy.

5.3 Design Options

The design options are substantially similar to the Build Alternatives with regard to property values, potential impacts, and effect determinations.

5.3.1.1 Design Option 1: Los Angeles Union Station at Metropolitan Water District

The LAUS MWD design option station box would be located behind the MWD building and east of LAUS as opposed to the LAUS Forecourt. This design option would have impacts to regional connectivity, property tax revenues, and displacements similar to those under Alternative 1.

5.3.1.2 Design Option 2: Add Little Tokyo Station

Under this design option, the Little Tokyo underground station for Alternative 1 would be constructed. The construction of the station would increase connectivity to the regional transportation system because the alignment would have direct access to the Regional Connector. The potential new development that may occur with TOD would also be realized. Potential impacts to displaced businesses or employees would be similar because the optional station displaces one additional business and no residences. If Little Tokyo Station were constructed, the Build Alternatives would have a slightly larger fiscal impact to the City of Los Angeles. The conclusions and effect determinations on property values provided for the Build Alternatives would also be applicable to the design option.

5.4 Maintenance and Storage Facility

The MSF site options would be located in either the City of Paramount or the City of Bellflower. The facility would be designed and built to meet the maintenance needs of the LRT vehicles required to operate the Build Alternatives. The MSF would consist of outdoor storage for LRT vehicles, a guideway to connect to the main line and allow the movement of LRT vehicles from the main line track to and within the MSF area, a main yard shop building with office and vehicle repair areas, parking for employees, and other facilities. The operation of the facility would create noise and generate trips for employees commuting to and from the site for work, which could affect property values.

5.4.1 Paramount MSF Site Option

The Paramount MSF site option is bounded by the San Pedro Subdivision ROW to the west, Somerset Boulevard to the south, industrial and commercial uses to the east, and All American City Way to the north. The Paramount MSF site option would require acquisition of a large parcel that is home to the Paramount Swap Meet and the Paramount Drive In Theatre. A cell phone provider also has a retail store on the site. Table 5.5 presents the initial property tax impact for the Paramount MSF site option. The tax effects of building the Paramount MSF are estimated to be 0.6 percent of the general fund property tax collections in 2018 for the City of Paramount. Businesses unable or unwilling to relocate within the same community would represent a loss of revenue to the local jurisdiction. These types of losses would be offset to the extent that business activity increases and/or new businesses are attracted to the area as a result of the Build Alternatives. The initial property tax impacts from the Paramount MSF site option are not expected to result in adverse effects on the local cities' property tax revenues.

Table 5.5. Initial Property Tax Impact by Jurisdiction – Paramount MSF Site Option

Jurisdiction	2018 Property Tax Revenue	Initial Property Tax Impacts	Potential Impact to General Fund Revenues
Paramount	$2,265,000	$13,069	0.6%

Source: Metro 2021b

Table 5.6 provides estimates of the numbers of businesses and employees located at properties that would be acquired by the Paramount MSF site option. The Paramount MSF site option would displace 5 businesses and 113 employees. Businesses displaced include the Paramount Swap Meet and the Paramount Drive In Theater.

Table 5.6. Business and Employee Displacement – Paramount MSF Site Option

Alternative	Number of Businesses	Estimated Number of Employees
Paramount MSF site option	5	113

Source: Metro 2021b
Note: MSF = maintenance and storage facility

Some perspective on the relative magnitude of the business displacement impacts can be gained by comparing the number of employees displaced to total employment in the areas surrounding the proposed Build Alternatives. For this comparison, the employment numbers for Alternative 4 were used. As shown in Table 5.7, the Paramount MSF site option is estimated to displace fewer employees than are projected to be added in the first year surrounding the light rail line in Alternative 4. The number of employees displaced is 0.4 percent of total employment in the project area based on 2017 estimates.

Table 5.7. Relative Impact of Displaced Employees – Paramount MSF Site Option

Alternative	2017 Employment	2042 Employment	Cumulative Annual Growth		Employees Displaced by MSF Site Option
			Percent	Jobs	
Paramount MSF site option	18,842	22,586	0.7	137	113

Source: Metro 2021b
Note: MSF = maintenance and storage facility

Because the Project would provide relocation assistance to displaced businesses and employees, it is likely that some of the displaced jobs would be relocated, not lost. However, some businesses such as the swap meet and the drive-in may find it difficult to relocate to a new neighborhood and may decide to close, therefore resulting in the loss of jobs in the immediate area. Overall, the potential employment impacts from business displacements would not be substantial and would not result in an adverse effect on the economy in the region.

The Paramount MSF site option would generate lower noise levels than existing conditions (see Table 5.7 in the Noise and Vibrations Impact Analysis Report [Metro 2021d]). These potential impacts to surrounding properties would not result in an adverse effect, based on the land use types and proximity because nuisance effects that could impact property values are expected to be minimal.

5.4.2 Bellflower MSF Site Option

The Bellflower MSF site option is located on a property owned by the City of Bellflower and leased to the Hollywood Sports Paintball & Airsoft Park and Bellflower BMX.

Table 5.8 presents the initial property tax impact for the Bellflower MSF site option. The tax effects of the Build Alternatives are estimated to be 0.0 percent of the general fund property tax collections in 2018 for affected jurisdictions. Because the majority of the property is owned by the City of Bellflower, it is exempt from property taxes. The initial property tax impacts from the Bellflower MSF site option are not expected to result in adverse effects to the City's tax-based revenues.

Table 5.8. Initial Property Tax Impact by Jurisdiction – Bellflower MSF Site Option

Jurisdiction	2018 Property Tax Revenue	Initial Property Tax Impacts	Potential Impact to General Fund Revenues
Bellflower	$11,032,000	$0	0.0%

Source: Metro 2021b
Note: MSF = maintenance and storage facility

Table 5.9 provides estimates of the numbers of businesses and employees located at properties that would be acquired for the Bellflower MSF site option. The Bellflower MSF site option would displace 1 business (Hollywood Sports Paintball & Airsoft Park) and approximately 60 employees.

Table 5.9. Business and Employee Displacement – Bellflower MSF Site Option

Alternative	Number of Businesses	Estimated Number of Employees
Bellflower MSF site option	2	75

Source: Metro 2021b
Note: MSF = maintenance and storage facility

Some perspective on the relative magnitude of the business displacement impacts can be gained by comparing the number of employees displaced to total employment in the areas surrounding the proposed project alignment. For this comparison, the employment numbers for Alternative 4 were used. The Bellflower MSF site option is estimated to displace fewer employees than are projected to be added in the first year in the project area (Table 5.10). The number of employees displaced is about 0.4 percent of total employment in the Study Area based on 2017 estimates.

Table 5.10. Relative Impact of Displaced Employees – Bellflower MSF Site Option

Alternative	2017 Employment	2042 Employment	Cumulative Annual Growth		Employees Displaced
			Percent	Jobs	By MSF Site Option
Bellflower MSF site option	18,842	22,586	0.7	137	75

Source: Metro 2021b
Note: MSF = maintenance and storage facility

Because the Project would provide relocation assistance to displaced businesses and employees, it is likely that some of the displaced jobs would be relocated, not lost. However, some businesses such as the sports park may find it difficult to relocate to a new neighborhood and may decide to close, resulting in the loss of jobs in the immediate area. Overall, the potential employment impacts from business displacements would not be substantial and would not result in an adverse effect on the regional economy.

Land uses surrounding the site include single-family and multifamily residential uses, industrial and commercial uses, and recreational uses. The Bellflower MSF site option would not involve any roadway/intersection closures or turning restrictions that would restrict access to nearby residential communities. Nuisance impacts related to access restrictions or noise are not expected to result in adverse effects on property values. There are no anticipated noise impacts associated with the Bellflower MSF site option (Metro 2021d).

6 CALIFORNIA ENVIRONMENTAL QUALITY ACT DETERMINATION

The CEQA determination presented in this section is based on a comparison of the existing conditions described in Section 4 (Affected Environment/Existing Conditions) and the environmental impacts analysis presented in Sections 5.1 and 5.2 (No Build and Build Alternatives) and Section 1.1 (Construction Impacts). The following sections are applicable to the Northern and Southern Sections of the Affected Area, including the Build Alternatives, MSF site options, and Design Options 1 and 2 for Alternative 1.

Under CEQA, economic changes resulting from a project will not be treated as significant effects on the environment unless the economic changes are used to determine that the physical change is a significant effect on the environment. If the physical change causes adverse economic effects on people, those adverse effects may be used as a factor in determining whether the physical change is significant (CEQA Section 15064(e)).

While the Appendix G checklist in the CEQA Guidelines does not specify economic thresholds to be analyzed, the following questions are presented as relevant economic issues to be considered under CEQA Guidelines and to determine whether significant impacts would result from implementation of the No Project and Build Alternatives.

6.1 Would the project result in substantial impacts to regional mobility and connectivity?

As discussed in Section 5.2, operation of the Project would have beneficial economic and fiscal impacts by improving transit accessibility and mobility, enhancing regional connectivity, and reducing travel time and costs in the region. These improvements would likely encourage greater economic activity and would benefit businesses and commuting employees. The Project would also result in an increase in employment and tax revenue, which would benefit local and regional economies. No impacts to regional mobility or connectivity are anticipated.

6.1.1 No Project Alternative

6.1.1.1 Operation

Under the No Project Alternative, no design features of the Build Alternatives would be introduced, thereby resulting in no changes to the Affected Area regarding regional mobility and connectivity. Residents, employees, and visitors in the Affected Area would not have the benefit of the interconnected transportation network provided by the Build Alternatives. The additional employment and income associated with new jobs created by the operation of the Project would also not be realized. The proposed station areas would lose an economic driver for the development or redevelopment of vacant or under-utilized properties near the proposed stations. However, the absence of these potential benefits does not rise to the level of nor constitute a significant impact. Therefore, operation-related impacts would be less than significant, and no mitigation measures are required.

Mitigation Measures

No mitigation measures required.

Impacts Remaining after Mitigation

Less than significant.

6.1.2 Build Alternatives

6.1.2.1 Operation

Operation of the Build Alternatives would result in the projected beneficial economic and fiscal impacts by improving transit accessibility and mobility, enhancing regional connectivity, and reducing travel time and transportation costs in the region. These improvements would likely encourage greater economic activity and would benefit businesses and commuting employees. The Build Alternatives would also result in an increase in employment and tax revenue, which would benefit local and regional economies. Therefore, operation-related impacts would be beneficial, resulting in less-than-significant impacts, and no mitigation measures are required.

Mitigation Measures

No mitigation measures required.

Impacts Remaining after Mitigation

Impacts remaining after mitigation would be less than significant.

7 CONSTRUCTION IMPACTS

7.1 Construction Activities

The construction of the Project would generate economic activity in the Study Area and the greater LA metropolitan region. The construction of the Project would create jobs and income for those employed by the Project. Also, the construction of the Project would temporarily increase congestion and noise and would change access for businesses and residents in the area, as discussed in the Noise and Vibrations Impact Analysis Report (Metro 2021d) and Transportation Impact Analysis Report (Metro 2021e).

The Build Alternatives would require extensive infrastructure improvements to construct supports for the aerial portions of the alignments and stations, and to construct tunnels, underground portions of the alignment, and underground stations. Other infrastructure improvements would include overhead catenary systems, TPSSs, and MSF site options.

7.2 Methodology

To satisfy NEPA requirements, the analysis of construction effects includes the following: identification of anticipated construction activities, comparison of economic conditions between the No Build and Build Alternatives, and a discussion of potential impacts.

7.2.1 Spending Effects on the Regional Economy

Large infrastructure projects can increase output, income, and employment from construction spending that would not otherwise have occurred in the region. Construction of the Project could have a beneficial effect on the regional and local economies as a result of new direct and indirect employment. Direct employment is construction-related employment in industries whose jobs and services are purchased to build the Project. Indirect economic 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. The number of direct and indirect jobs generated by the Project as a result of capital construction expenditures was estimated using employment multipliers provided by the BEA RIMS II model (BEA 2017).

How much a project affects a region's economy depends on the source of project funding. Funds from local or regional sources, such as Measure M, are transfers that could have been spent by residents and businesses on other economic activities. Typically, only "new money" to a region from an outside or alternate source has a measurable net economic effect on employment and income gains resulting from project construction. Federal funding is an example of "new money." Final funding amounts and sources for the Project are not certain at this time. The economic impact for project spending would likely be different from the amounts described in Section 5 depending on the amount of federal funding secured for the project. However, the increased economic activity would still be beneficial to the economy.

7.2.2 Localized Project Impacts

Construction could have temporary negative economic impacts on some commercial and industrial businesses, particularly those near or adjacent to construction sites. A review of proposed construction techniques, site visits to the Affected Area, and a review of information provided in other impact analysis reports (such as Communities and

Neighborhoods Impact Analysis Report [Metro 2021a], Displacement and Acquisition Impact Analysis Report [Metro 2021b], Noise and Vibration Impact Analysis Report [Metro 2021d], Land Use Impact Analysis Report [Metro 2021c], and Transportation Impact Analysis Report [Metro 2021e]) were used to assess the impacts on local businesses. Potential impacts may include traffic disruption; increased noise, vibration, and dust; modified vehicular and pedestrian traffic patterns and access; impacts to residents or businesses engaged in sound- or vibration-sensitive work; and utility disruptions. Business impacts could also include reduced visibility of commercial signs and businesses. These construction impacts could in turn result in a loss of sales and/or increased operating costs for commercial establishments.

7.2.3 Impact Criteria and Thresholds

No specific laws or executive orders specify the impact criteria and thresholds of economic impacts. NEPA requires a discussion of economic and fiscal effects but does not specifically define threshold criteria. CEQA includes a discussion of economic effects at the discretion of the lead agency. Section 7, CEQA Determination, provides additional information. The most recent CEQA Guideline updates (December 2018, Appendix G of the CEQA Guidelines [14 California Code of Regulations, Section 15000 et seq.]) define the significance of environmental effects from an economic or fiscal perspective and caused by a project. Specifically, economic changes resulting from a project will not be treated as significant effects on the environment, but the economic changes may be used to determine the significance of physical changes on the environment. If the physical change causes adverse economic effects on people, those adverse effects may be used as a factor in determining whether the physical change is significant (CEQA Section 15064).

Social and land use impacts, which are often combined with economics, are discussed separately in the Communities and Neighborhoods Impact Analysis Report (Metro 2021a) and the Land Use Impact Analysis Report (Metro 2021c). The methodologies and impact definitions provided in Sections 7.2.1 through 7.2.3 were used to determine whether potential adverse effects according to NEPA or potential significant impacts according to CEQA would occur as a result of project construction.

7.3 Construction Impacts

7.3.1 No Build Alternative

The No Build Alternative includes existing transportation networks and transportation improvements that have been identified in constrained plans of the LRTP (Metro 2009), the RTP/SCS (SCAG 2016), and projects funded by Measure M. The service features include transit, freeway, and arterial operations within and around the Affected Area. As such, the No Build Alternative includes existing, under-construction, and planned rail, bus, and highway projects. Table 2.1 lists the projects anticipated by 2042. The Affected Area would likely experience some construction-related effects associated with construction spending as well as temporary nuisance impacts (modified access, noise, physical barriers) that often accompany a construction project. However, planned projects would be subject to separate environmental analysis that could include the evaluation of temporary (construction) and operational fiscal and economic impacts if their inclusion is required by the Lead Agency. Implementation of these projects, including O&M, could be subject to regulatory standards discussed in Section 3. Compliance with these standards would minimize impacts to the regional economy.

Under the No Build Alternative, the Affected Area would likely experience some economic benefits associated with construction spending related to planned improvements presented in Table 2.1 but would not have the opportunity of the additional economic benefits related to construction spending associated with the Build Alternatives. Conversely, businesses located near the corridor would not experience additional construction-related nuisances such as noise, dust, construction traffic, and vibrations from building the Project, which could have a negative impact on sales revenues. Overall, construction-related impacts are expected to be minor, and no adverse effects on the economy are anticipated from the No Build Alternative.

7.3.2 Build Alternatives

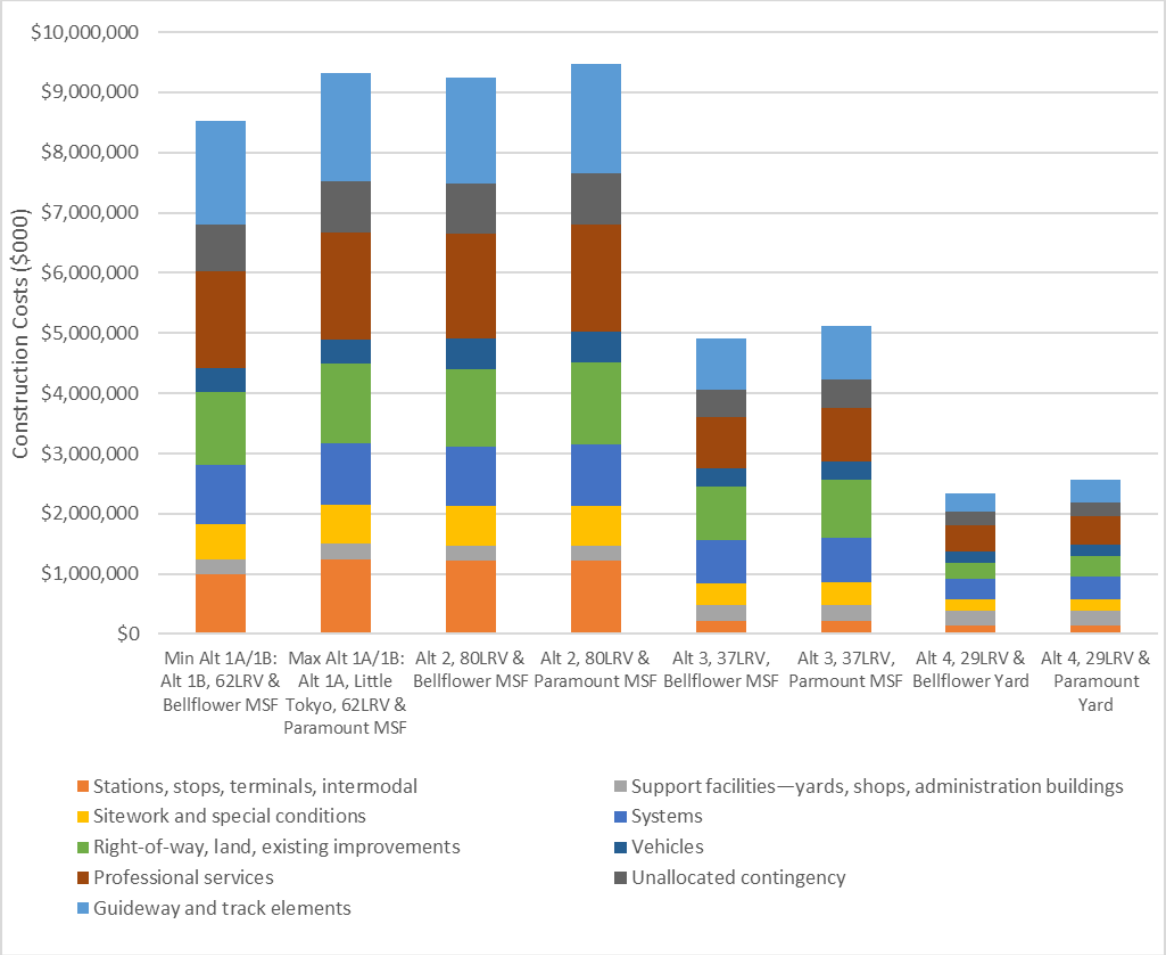
7.3.2.1 Regional Economic Construction Impacts

Construction of the Build Alternatives would represent a substantial capital investment in the regional economy that would increase employment, earnings, and economic output during the construction period. Figure 7-1 presents the construction costs for each of the Build Alternatives. Construction cost estimates for Alternative 1A and 1B are similar (Figure 7-1). Minimum and maximum cost options were developed for Alternatives 1A and 1B. The minimum option includes Alternative 1B with Union Station being located at the MWD and the Bellflower MSF site option. The maximum option is represented by Alternative 1A and includes the construction of the Little Tokyo Station and the Paramount MSF site option. Construction cost estimates for Alternatives 1 and 2 range from $8.5 to $9.5 billion (2020 dollars). Alternative 3 is estimated to cost $4.9 to $5.1 billion while Alternative 4 is estimated to cost $2.3 to $2.6 billion. The higher cost estimates for each option include the Paramount MSF site option as it is expected to cost more than the Bellflower MSF site option.

The degree to which the construction of the Build Alternatives would provide an economic stimulus to the region depends on the source of project funding. Only those economic effects that are attributable to funds that are made available for this specific project (new or federal money) would be considered project-related. Funds from local sources, such as sales tax revenue from Measures M and R, are economic transfers that would have been spent in the regional economy with or without the construction of the Build Alternatives. The amount of new or federal funding sources are not known at this time, thus the economic impacts associated with construction spending are estimated using the total project cost.

In order to estimate the regional impacts associated with the Project, RIMS II final demand multipliers from the BEA for the construction and professional services industry were applied to the amount of new funding that would be used for capital expenditures. Multipliers for the greater LA area were used. Light rail vehicle costs are not included because vehicles would likely be purchased from outside the region. Right-of-way costs are also not included because these costs are for real estate acquisition and relocation as well as "loss of business" compensation, and the acquisition of land does not generate jobs or income result in minimal economic output or employment impacts. Finance and real estate costs associated with the purchase of right-of-way are included in professional services costs. The results of this analysis, as summarized in Table 7.1, are expressed as jobs that would span the duration of construction (approximately six years).

Figure 7-1. Construction Cost Estimate by Alternative



Source: Metro 2021g

Table 7.1. Summary of Economic Impacts during Project Construction

Impact Category	Alternatives 1A/1B	Alternative 2	Alternative 3	Alternative 4
Total Capital (2025$, Billion)[1, 2, 3]	$7.1 - $7.8	$7.6 - $7.8	$3.8 - $4.0	$1.9 - $2.1
Regional Impacts				
Output ($Billion)	$14.3 - $15.7	$15.4 - $15.7	$7.7 - $8.0	$3.9 - $4.2
Earnings ($Billion)	$4.4 - $4.9	$4.8 - $4.9	$2.4 - $2.5	$1.2 - $1.3
Employment (jobs)[4]	81,700 - 89,800	88,100 - 89,800	44,000 - 45,700	22,400 - 24,000

Source: BEA 2017; Metro 2021g
Notes: [1] Inflated to mid-point of construction (2025) using historical California Construction Cost Index.
[2] Assumed 90 percent of total construction costs occurred within LA County. It is assumed the greater LA economy would support the majority of the labor and materials needed for the Project.
[3] Excludes ROW and vehicle costs.
[4] Compared to the No Build Alternative; a job is defined as one job for one person for one year.
LA = Los Angeles

Construction-related economic impacts are positively correlated to the size of the Project. The project alternative with the highest cost generally produces the greatest economic impact. The cost estimates for Alternatives 1A and 1B are similar, thus they are expected to have similar economic impacts. Alternative 2 is expected to have similar impacts as Alternatives 1A and 1B. The region would also experience net beneficial economic impacts associated with the construction spending for Alternative 3. However, because construction spending impacts are directly related to the cost of the Project, the beneficial impacts associated with Alternative 3 would be less than those related to Alternatives 1 and 2. The impacts associated with the construction of Alternative 4 would have the smallest economic impact of the alternatives considered but would still generate net beneficial economic.

Alternative 1: Los Angeles Union Station to Pioneer Station

The construction spending effects associated with Alternative 1 would result in an increase in estimated $14.4 to $15.7 billion in overall economic activity (year of expenditure dollars) for the Los Angeles-Long Beach-Anaheim Metropolitan Statistical Area over the six-year construction period. The higher end of the range includes the cost to construct the Little Tokyo Station. The economic activity would include direct, indirect, and induced activity. Direct impacts include employment and income resulting from construction of the Project. Indirect effects would include indirect employment resulting from the purchase of goods and services by firms involved with construction, and induced employment resulting from construction workers spending their income within the region. It is estimated that construction-related spending would provide regional economic benefits by generating up to approximately $4.4 to $4.9 billion in additional wages and salaries for households and by creating up to approximately 82,000 to 90,000 person-year jobs for all industries in the region during the construction phase of the Project. A person-year job is defined as one job for one person for one year. If a job employs a single person for three years, it would equal three person-year jobs. Based on the predicted regional economic benefits, from both direct and indirect sources, along with the creation of person-year jobs, the potential impacts from construction spending would be beneficial, and no adverse effects would occur.

Alternative 2: 7th Street/Metro Center to Pioneer Station

Localized construction impacts for Alternative 2 would be similar to those described for Alternative 1.

Alternative 3: Slauson/A (Blue) Line to Pioneer Station

Localized construction impacts for Alternative 3 would be similar to those described for Alternatives 1 and 2 and would be limited to the corridor between Slauson/A Line Station to the north and Pioneer Station.

The region would experience net beneficial economic impacts associated with the construction spending for Alternative 3. However, because construction spending impacts are directly related to the cost of the Project, the beneficial impacts associated with Alternative 3 would be less than those related to Alternatives 1 and 2. A small portion of construction spending on labor and materials would occur outside the greater LA area and would not contribute to positive economic impacts in the region.

Alternative 4: I-105/C (Green) Line to Pioneer Station

Localized construction impacts for Alternative 4 would be similar to those described for Alternatives 1 and 2 and would be limited to the corridor between the I-105/C Line Station to the north and Pioneer Station to the south.

The region would experience net beneficial economic impacts associated with the construction spending for Alternative 4. However, because construction spending impacts are directly related to the cost of the Project, the impacts associated with Alternative 4 would be less than the construction impacts related to Alternatives 1 and 2. A portion of the construction costs on labor and materials would occur outside the greater LA area and would not contribute to positive economic impacts there.

It is possible that Metro may pursue a public-private partnership to fund and operate the Project. Under the public-private partnership scenario, the project impacts are expected to be similar; however, the construction and operation schedule would likely be accelerated.

7.3.2.2 Localized Project Impacts

For all project options, construction may result in lost revenues for businesses, and result in short-term property value reductions. Those effects would be caused by construction-related activities, such as the following:

- Temporary or permanent elimination of parking
- Traffic congestion, changes in access, and reduced visibility from the street (e.g., establishing a detour that requires customers to take longer or less familiar routes to a business, removing a left-hand turn lane into a shopping center, or eliminating the "street appeal" from a business that depends on drive-by or walk-up sales)
- Increased noise and dust, and perceived changes in visual quality (e.g., glare from nighttime construction lighting)

Retail and personal services businesses that depend on good access and an aesthetically pleasing experience for customers are most likely to experience short-term adverse impacts during construction. Implementation of Mitigation Measures COM-1 (Communities and Neighborhoods Impact Analysis Report, Section 8 [Metro 2021a]) and TRA-23 (Loss of Parking [Construction]) (Transportation Impact Analysis Report, Section 8 [Metro 2021e]) would reduce these potential impacts, and no adverse effects would result.

All Build Alternatives would need to acquire additional right-of-way for the project alignment, construction staging, new stations, tunnel portals, and the placement of support columns. Metro will provide relocation assistance and compensation to all affected property owners and renters in accordance with state and federal law.

Alternative 1: Los Angeles Union Station to Pioneer Station

The construction of Alternative 1 would include aerial, underground, and at-grade features that would have impacts on residences and businesses near proposed stations, construction staging areas, and the project alignment. The alternative would traverse portions of the Wilmington Branch ROW, La Habra Branch ROW, San Pedro Subdivision ROW, and the PEROW.

The construction of aerial and at-grade features along Alameda Street, Long Beach Avenue, Santa Fe Avenue, Pacific Boulevard, and Randolph Street would result in temporary or intermittent street closures during the construction period. Businesses, customers, and

residents would also experience modified access; increased noise, vibration and dust; and general construction-related inconveniences that would likely affect sales. Businesses along Pacific Boulevard and Randolph Street near the proposed at-grade Pacific/Randolph Station are likely to experience the most disruptions. Some businesses that rely on drive-by customers would be negatively affected if drivers avoid the area. Conversely, some businesses would benefit from spending by construction workers at local retail establishments. Implementation of Mitigation Measure COM-1 would minimize the impacts to the regional economy so that they would not be adverse.

With the widening of the freight alignment, five parcels have historic or active spurs to the existing freight corridor. Spurs at two of the parcels have been abandoned, and they are no longer active. Entities at two other parcels do not actively use their spurs but wish to maintain access to the spurs for future use. The spur at one parcel is actively being used for shipments of scrap metal. The construction of the Project may temporarily interrupt access for some businesses. The implementation of COM-1 would minimize impacts to these businesses. One of the businesses is actively using the spur on their property and will have access severed with the re-alignment of the freight corridor and the addition of the light rail line. This business is expected to be displaced by the project.

South of Florence Avenue, the alignment is primarily at-grade with some aerial features. The alignment is within an existing ROW in the San Pedro Subdivision (owned by the Ports of Los Angeles and Long Beach) and the PEROW (owned by Metro). Most of the construction would occur within an existing right-of-way. Construction would increase delays at at-grade intersections and street crossings, which would lead to increased traffic delays and congestion near the intersections. Construction of aerial crossings at Firestone/Atlantic and Rosecrans/Paramount would also cause delays. Properties near the alignment would experience a temporary increase in noise, vibration, and visual impacts related to construction activities. These potential changes would affect some local businesses economically because potential customers may be discouraged from patronizing businesses in congested areas as a result of both real and perceived inconvenience factors. Industrial businesses may experience increased transportation costs because of construction-related delays or detours. While some individual businesses would have negative construction-related impacts, these businesses represent a relatively small portion of the overall regional economy. Therefore, the overall impact to the region is expected to be negligible. Implementation of Mitigation Measure COM-1 would further reduce the potential impacts, and no adverse effects would occur.

Construction of parking facilities near proposed stations would also result in displacements of businesses and residences. Some additional residential and commercial displacements would likely occur because additional right-of-way would be needed for track alignment.

Table 7.2 presents the proposed stations for Alternative 1 and the construction-related impacts anticipated around each station. While some individual businesses would likely experience adverse impacts associated with construction activities, the implementation of Mitigation Measure COM-1 (Communities and Neighborhoods Impact Analysis Report, Section 8 [Metro 2021a]) to each construction area would minimize the impacts to the overall economy so that impacts would not be adverse.

Table 7.2. Alternative 1 Station Construction Related Economic Impacts

Station	Type of Proposed Station	Impacts
LAUS Forecourt	Underground	Construction impacts near station access points at LAUS. Construction would have minimal impacts on Metro operations. Impacts are anticipated to be minor.
Arts/Industrial District	Underground	Nearby businesses would likely experience delays and access issues because of construction activities, and would experience noise, dust, and vibration nuisances. Some businesses could experience an increase in sales as construction workers spend at local stores. Implementation of Mitigation Measure COM-1 would minimize the potential impacts.
Slauson/A Line	Aerial	Construction would occur parallel to the existing Metro A (Blue) Line. Construction-related traffic and temporary road closures would cause traffic delays on Slauson Avenue, Long Beach Avenue, Randolph Street, and adjacent streets. Noise, dust, and vibration nuisances would also be present and may cause potential nuisances to customers. Some businesses could experience an increase in sales as construction workers spend at local stores. Implementation of Mitigation Measure COM-1 would minimize the potential impacts.
Pacific/ Randolph	At-grade	Construction would occur between the eastern and western lanes of Randolph Street. Construction would increase delays and congestion along Randolph and adjacent streets. Many retail businesses in this area rely on drive-by traffic for sales. Potential customers may avoid the construction area, which could affect sales at some businesses. Conversely, some businesses would likely experience an increase in sales as construction workers spend at local stores. Construction-related nuisances such as noise, dust, and vibration could also deter customers from visiting the area. Implementation of Mitigation Measure COM-1 would minimize the potential impacts.
Florence/Salt Lake	At-grade	Noise, dust, and vibration could have impacts on some nearby businesses and residences. Some businesses could experience an increase in sales as construction workers spend at local stores. Impacts to retail sales are expected to be negligible with implementation of Mitigation Measure COM-1.
Firestone	Aerial	Construction would result in property displacements for a proposed parking area. Construction would increase delays and congestion along Atlantic Avenue, Firestone Boulevard, and adjacent streets because roads may be temporarily closed, or access may be temporarily altered. Noise, dust, and vibration nuisances could also affect businesses near the construction area. Most businesses near the construction area are commercial and industrial uses that do not rely as much on drive-by traffic to generate sales revenue. Some businesses could experience an increase in sales as construction workers spend at local stores. Impacts to sales are expected to be negligible with implementation of Mitigation Measure COM-1.

Station	Type of Proposed Station	Impacts
Gardendale	At-grade	Construction would increase delays and congestion along Gardendale Street and adjacent streets because roads may be temporarily closed, or access may be temporarily altered. Converting Dakota Avenue to one-way and installing signalized intersections may also cause delays. Noise, dust, and vibration nuisances could also have impacts on businesses near the construction area. Some businesses could experience an increase in sales as construction workers spend at local stores. Overall impacts to retail sales are expected to be negligible because businesses are commercial/industrial uses that do not rely heavily on drive-by traffic.
I-105/C Line	At-grade	Construction would result in property displacement for parking and rail alignment. Construction would likely cause delays and congestion along I-105 and adjacent streets because lanes may be temporarily closed, or access may be temporarily altered. Noise, dust, and vibration nuisances could also have short-term impacts on property values of nearby residences.
Paramount/ Rosecrans	Aerial	Construction would increase truck traffic and may cause delays and congestion along Rosecrans Avenue, Paramount Boulevard, and adjacent streets. Construction-related nuisances (noise, dust, and vibration) could also have impacts on businesses near the construction area. Some businesses could experience an increase in sales as construction workers spend at local stores. Implementation of Mitigation Measure COM-1 would minimize potential impacts.
Bellflower	At-grade	Construction would result in property displacement for parking. Construction would increase delays and congestion along Bellflower Boulevard, Pacific Avenue, and adjacent streets because roads may be temporarily closed, or access may be temporarily altered. Noise, dust, and vibration nuisances could also have impacts on residents and businesses near the construction area. Some businesses could experience an increase in sales as construction workers spend at local stores. Implementation of Mitigation Measure COM-1 would minimize potential construction-related impacts.
Pioneer	At-grade	Construction would result in property displacement for parking. Construction would increase delays and congestion along Pioneer Boulevard, 187th Street, and adjacent streets because roads may be temporarily closed, or access may be temporarily altered. Noise, dust, and vibration nuisances could also have impacts on businesses and residences near the construction area. Some businesses could experience an increase in sales as construction workers spend at local stores. Implementation of Mitigation Measure COM-1 would minimize potential construction-related impacts.

Source: Prepared by Jacobs in 2020
Note: I- = Interstate; LAUS = Los Angeles Union Station

Alternative 2: 7th Street/Metro Center to Pioneer Station

Similar to Alternative 1, Alternative 2 shares portions of the Wilmington Branch, La Habra Branch, and San Pedro Subdivision ROW. The construction impacts described for Alternative 1 would be similar to those described for Alternative 2, except Alternative 2 would begin in the Downtown Transit Core instead of at LAUS. Businesses located along South Flower Street would experience construction-related impacts, such as temporary street closures, modified access, and construction-related nuisances (noise, dust, and vibration).

Table 7.3 presents the station area construction impacts for Alternative 2 that differ from Alternative 1.

Table 7.3. Alternative 2 Station Construction Related Economic Impacts

Station	Type of Proposed Station	Impacts
7th St/Metro Center	Underground	Construction would be focused at station access points. Businesses would experience delays in the movement of goods and services and access issues resulting from construction activities. Noise, dust, and vibration nuisances would also be present. Businesses located in the area that rely on walk-up customers would likely experience impacts to sales if customers avoid the area. Conversely, some businesses could experience an increase in sales as construction workers spend at local stores. Implementation of Mitigation Measure COM-1 would result in negligible construction-related impacts.
South Park/ Fashion District	Underground	Construction would be focused at station access points. Businesses located along 8th Street near Los Angeles and Santee Streets would experience delays in the movement of goods and services and access issues resulting from construction activities. Noise, dust, and vibration nuisances would also be present. Businesses that rely on walk-up customers and outside retail/restaurant space would likely experience impacts to sales if customers avoid the area. Conversely, some businesses could experience an increase in sales as construction workers spend at local stores. Implementation of Mitigation Measure COM-1 would minimize construction-related impacts.

Source: Prepared by Jacobs in 2020

Alternative 3: Slauson/A (Blue) Line to Pioneer Station

The localized economic project impacts for Alternative 3 are substantially similar to the economic impacts under Alternative 1, as described in Section 7.3.2.2. The conclusions and effect determinations provided for Alternative 1 would also be applicable to Alternative 3. Implementation of Mitigation Measure COM-1 would minimize construction-related impacts.

Alternative 4: I-105/C Green Line to Pioneer Station

The localized economic project impacts for Alternative 4 are substantially similar to the economic impacts under Alternative 1, as described in Section 7.3.2.2 The conclusions and effect determinations provided for Alternative 1 would also be applicable to Alternative 4. Implementation of Mitigation Measure COM-1 would minimize construction-related impacts.

Design Options

Design Option 1: Los Angeles Union Station at Metropolitan Water District

Design Option 1 (MWD) would place an underground station at LAUS that would be located behind the MWD building and on the eastern side of LAUS. This design option would be located primarily underground and would not displace residential properties or community assets. Construction impacts would be similar to those described for Alternative 1, LAUS Forecourt.

Design Option 2: Add Little Tokyo Station

Under this design option, the underground Little Tokyo Station would be constructed. Construction would be focused at station access points. Businesses located in the area would experience delays in the movement of goods and services and access issues as a result of construction activities. Noise, dust, and vibration nuisances would also be present. Construction would likely increase delays and congestion along Alameda Street and adjacent streets because roads may be temporarily closed or access may be temporarily altered. Proximity impacts related to construction activities (noise, dust, and vibration) could also deter customers from visiting the area and would have impacts on residences (i.e., Savoy Community Association) near the proposed station. Some businesses would likely experience an increase in sales as construction workers spend at local stores. Implementation of Mitigation Measure COM-1 would result in negligible construction-related impacts.

Maintenance and Storage Facilities

Paramount

The Paramount MSF site option is in an area with commercial and residential land uses. The proposed site is located on properties that are used for commercial purposes. The construction of the proposed MSF site option would displace the existing businesses, and the construction of the yard leads would create intermittent traffic delays along Rosecrans Avenue. Construction of the Paramount MSF site option would create noise, dust, and construction-related truck trips. Potential impacts to the property values of surrounding businesses and residences are expected to be negligible.

Displaced property owners in the City of Paramount would be eligible for compensation as provided by federal and state law for the acquired property based on the land's highest and best use. Displaced tenants may also be eligible for relocation assistance, depending on the terms of their lease agreements with the property owner. Barring any exclusions, the tenants would be eligible for relocation assistance in accordance with state and federal law.

Bellflower

The Bellflower MSF site option is on a city-owned property currently leased to the Hollywood Sports Paintball & Airsoft Park. Construction of the Bellflower MSF site option would displace this business. Land uses surrounding the property include single-family and multifamily residential uses, mobile home communities, and industrial and commercial uses. Construction of the Bellflower MSF site option would create noise, dust, and

construction-related truck trips. Impacts to the surrounding land uses are expected to be minimal.

Affected property owners in the City of Bellflower would be eligible for compensation as provided by federal and state law for the acquired property based on the land's highest and best use. Displaced tenants may also be eligible for relocation assistance depending on the terms of their lease agreements with the property owner. Barring any exclusions, the tenants would be eligible for relocation assistance in accordance with state and federal law.

7.4 California Environmental Quality Act Determination

While the Appendix G checklist in the CEQA Guidelines does not specify economic thresholds to be analyzed, the following questions are presented as relevant economic issues to be considered under CEQA Guidelines and to determine whether significant impacts would result from implementation of the No Project and Build Alternatives.

7.5 Would the project result in substantial impacts to regional mobility and connectivity?

As discussed in Section 5.2, operation of the Project would have beneficial economic and fiscal impacts by improving transit accessibility and mobility, enhancing regional connectivity, and reducing travel time and costs in the region. These improvements would likely encourage greater economic activity and would benefit businesses and commuting employees. The Project would also result in an increase in employment and tax revenue, which would benefit local and regional economies. No impacts to regional mobility or connectivity are anticipated.

7.5.1 No Project Alternative

Under the No Project Alternative, access modifications and potential delays related to construction activities that could affect mobility and access would not take place. Therefore, construction-related impacts would not occur, and no mitigation measures are required.

7.5.1.1 Mitigation Measures

No mitigation measures required.

7.5.1.2 Impacts Remaining after Mitigation

Impacts remaining after mitigation would be less than significant.

7.5.2 Build Alternatives

Construction activities for the Build Alternatives would likely result in access modifications, and potential transportation delays that would result in temporary significant impacts to the surrounding communities; therefore, the following mitigation measures will be implemented: COM-1 (Communities and Neighborhoods Impact Analysis Report, Section 8 [Metro 2021a]) and TRA-23 (Loss of Parking [Construction])(Transportation Impact Analysis Report, Section 8 [Metro 2021e]). Implementation of these two measures during construction activities will minimize temporary effects. Therefore, construction activities of the Build Alternatives would result in impacts that would be less than significant.

7.5.2.1 Mitigation Measure

To address the potential construction impacts to businesses and residences located near construction areas associated with the Build Alternatives, Mitigation Measures COM-1 and TRA-23 (Loss of Parking [Construction]) will be implemented and impacts reduced to a less-than-significant level.

7.5.2.2 Impacts Remaining after Mitigation

Impacts remaining after mitigation would be less than significant.

7.5.3 Design Options

7.5.3.1 Design Option 1: Los Angeles Union Station at Metropolitan Water District

The construction activities for Design Option 1 (MWD) would mostly be underground and outside the public right-of-way and would likely not result in access modifications and transportation delays that would result in temporary impacts to the surrounding communities. Therefore, no construction-related impacts for Design Option 1 (MWD) would occur beyond those identified for Alternative 1.

Mitigation Measures

No mitigation measures required.

Impacts Remaining after Mitigation

No impact from Design Option 1 (MWD). Less than significant for the overall project, including Design Option 1 (MWD).

7.5.3.2 Design Option 2: Add Little Tokyo Station

The construction activities for Design Option 2 would likely increase delays and congestion along Alameda Street and adjacent streets because roads may be temporarily closed, or access may be temporarily altered. Proximity impacts related to construction activities (noise, dust, and vibration) could also deter customers from visiting the area and would have short-term impacts on residences near the proposed station.

Mitigation Measures

Implementation of Mitigation Measure COM-1 would result in negligible construction-related impacts.

Impacts Remaining after Mitigation

Less than significant for the overall project, including Design Option 2.

7.5.4 Maintenance Storage Facility

7.5.4.1 Paramount MSF Site Option

The construction activities for the Paramount MSF site option would create intermittent traffic delays along Rosecrans Avenue. Construction of the Paramount MSF site option would create noise, dust, and construction-related truck trips. Potential short-term impacts to property values of he surrounding land uses are expected to be negligible. Therefore, no construction-related impacts for the Paramount MSF site option would occur.

Mitigation Measures

No mitigation measures required.

Impacts Remaining after Mitigation

No impact from the Paramount MSF site option. Less than significant for the overall project, including the Paramount MSF site option.

7.5.4.2 Bellflower MSF Site Option

The construction activities for the Bellflower MSF site option would create noise, dust, and construction-related truck trips. Impacts to the surrounding land uses are expected to be minimal. Therefore, no construction-related impacts for the Bellflower MSF site option would occur.

Mitigation Measures

No mitigation measures required.

Impacts Remaining after Mitigation

No impact from the Bellflower MSF site option. Less than significant for the overall project, including the Bellflower MSF site option.

7.6 Would the project result in substantial construction-related impacts to businesses and residences that would result in physical deterioration of the existing environment?

Construction of the Build Alternatives would have beneficial economic and fiscal impacts related to direct and indirect effects from construction spending. While the construction spending effects would be a positive for the overall regional economy, construction of the Build Alternatives would have potential impacts on businesses and residences near active construction areas. The Build Alternatives would require additional right-of-way for project alignments, construction staging areas, tunnel portals, and parking areas, resulting in displacements of businesses and residences. The extent to which changes to the area caused by the construction of the Project result in the physical deterioration of properties or structures that would impair their proper use in the surrounding communities will be assessed.

7.6.1 No Project Alternative

Under the No Project Alternative, the Build Alternatives would not be constructed, and no construction-related impacts would occur within the Affected Area to businesses and residences. Therefore, construction-related impacts would not occur, and no mitigation measures are required.

7.6.1.1 Mitigation Measure

No mitigation measures required.

7.6.1.2 Impacts Remaining after Mitigation

No impacts would occur.

7.6.2 Build Alternatives

Construction of the Build Alternatives would have beneficial economic and fiscal impacts related to direct and indirect effects from construction spending. While the construction spending effects would be a positive for the overall regional economy, construction of the Project would have potential impacts on businesses and residences near active construction areas. The Build Alternatives would require additional right-of-way for project alignments, construction staging areas, tunnel portals, and parking areas, resulting in displacements of businesses and residences. Affected property owners and tenants would be eligible for compensation or relocation assistance in accordance with state and federal law. Property owners would be compensated based on the highest and best use of the property.

Construction activities would also cause temporary road closures, modified access, and construction-related nuisances (i.e., noise, dust, and vibration) that may deter potential customers from visiting the area while the Project is under construction. The temporary construction-related impacts would not lead to physical deterioration of the existing environment, or "urban decay." Implementation of Mitigation Measures COM-1 (Communities and Neighborhoods Impact Analysis Report, Section 8 [Metro 2021a]) and TRA-23 (Loss of Parking [Construction]) (Transportation Impact Analysis Report, Section 8 [Metro 2021e) would minimize economic impacts.

7.6.2.1 Mitigation Measures

To address the potential impacts to businesses and residences as a result of the construction of the Project, Mitigation Measures COM-1 and TRA-23 (Loss of Parking [Construction]) will be implemented, and impacts would be reduced to a less-than-significant level.

7.6.2.2 Impacts Remaining after Mitigation

Impacts will be temporary and less than significant with the implementation of mitigation measures. Impacts remaining after mitigation would be less than significant.

7.6.3 Design Options

7.6.3.1 Design Option 1: Los Angeles Union Station at Metropolitan Water District

The construction activities for Design Option 1 (MWD) would mostly be underground and outside the public right-of-way and would likely not result in access modifications and transportation delays that would result in temporary impacts to the surrounding communities. Therefore, no construction-related impacts for Design Option 1 would occur beyond those identified for Alternative 1.

Mitigation Measures

No mitigation measures required.

Impacts Remaining after Mitigation

No impact from Design Option 1 (MWD). Less than significant for the overall project, including Design Option 1 (MWD).

7.6.3.2 Design Option 2: Add Little Tokyo Station

The construction activities for Design Option 2 would likely increase delays and congestion along Alameda Street and adjacent streets because roads may be temporarily closed, or access may be temporarily altered. Proximity impacts related to construction activities (noise, dust,

and vibration) could also deter customers from visiting the area and would have impacts on residences (i.e., Savoy Community Association) near the proposed station.

Mitigation Measures

Implementation of Mitigation Measure COM-1 would result in negligible construction-related impacts.

Impacts Remaining after Mitigation

Less than significant for the overall project, including Design Option 2.

7.6.4 Maintenance Storage Facility

7.6.4.1 Paramount MSF Site Option

The construction activities for the Paramount MSF site option would create intermittent traffic delays along Rosecrans Avenue. Construction of the Paramount MSF site option would create noise, dust, and construction-related truck trips. Potential short-term impacts to property values of the surrounding land uses are expected to be negligible. Therefore, no construction-related impacts for the Paramount MSF site option would occur.

Mitigation Measures

Implementation of Mitigation Measure COM-1 would result in negligible construction-related impacts.

Remaining after Mitigation

No impact from the Paramount MSF site option. Less than significant for the overall project, including the Paramount MSF site option.

7.6.4.2 Bellflower MSF Site Option

The construction activities for the Bellflower MSF site option would create noise, dust, and construction-related truck trips. Potential short-term impacts to property values to the surrounding land uses are expected to be minimal.

Mitigation Measures

Implementation of Mitigation Measure COM-1 would result in negligible construction-related impacts.

Impacts Remaining after Mitigation

No impact from the Bellflower MSF site option. Less than significant for the overall project, including the Bellflower MSF site option.

8 PROJECT MEASURES AND MITIGATION MEASURES

8.1 Project Measures

No project measures related to economics were included in the design of the Build Alternatives.

8.2 Mitigation Measures

To minimize the potential impacts of the Project during construction and operation, Metro will implement Mitigation Measures COM-1 (Communities and Neighborhoods Impact Analysis Report, Section 8 [Metro 2021a]), TRA-22 (Loss of Parking [Permanent]), and TRA-23 (Loss of Parking [Construction]) (Transportation Impact Analysis Report, Section 8 [Metro 2021e]).

8.2.1 Operation

The following mitigation measures would be implemented during project operation to avoid, minimize, or reduce the potential for economic impacts:

TRA-22 Loss of Parking (Permanent): Metro would coordinate with local jurisdictions to address the physical loss of public parking spaces resulting from implementation of the Project. This could include, but not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, and adjusting the time limits for on-street parking.

8.2.2 Construction

The following mitigation measures would be implemented during project construction to avoid, minimize, or reduce the potential for economic impacts:

- TRA-23 Loss of Parking (Construction): Metro would coordinate with local jurisdictions to address the loss of public parking spaces during construction. This could include, but not be limited to, restriping the existing street to allow for diagonal parking, reducing the number of restricted parking areas, phasing construction activities in a way that minimizes parking disruption, and adjusting the time limits for on-street parking.
- COM-1 Construction Outreach Plan: Metro would develop a Construction Outreach Plan as part of Metro's Construction Relation & Mitigation Programs in Community Relations in coordination with affected communities and businesses that would be implemented by Metro and its contractors during construction of the Project. The Construction Outreach Plan would include, but not be limited to, the following elements:
  - Maintain access to community assets (including, but not limited to bike trails) and neighborhoods during construction as practicable
  - Maintain access to businesses during the operating hours of the businesses as practicable
  - Provide signage to direct pedestrians and motorists around construction areas; around sidewalk, street, and lane closures; to entrances of businesses and

community assets; and to maintain the flow of traffic around the construction area

- Provide appropriate signage, barriers and fencing for pedestrian and bicycle detour routes to prevent pedestrians and bicyclists from entering the construction zones
- Provide signage alerting potential customers that businesses are open during construction and clearly mark detours as appropriate
- Provide the public with construction updates, alerts, and schedules through informational meetings, the project website, and other forms of communication such as, but not limited to, mailings and flyers to businesses and residences with 0.25-mile of the construction zone
- Develop a marketing plan to help reduce impacts to businesses during construction
- Coordinate construction activities with other capital improvement projects being carried out nearby to minimize construction impacts and competing needs for detour routes.

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