

## 3.18 Cumulative Impacts

### 3.18.1 Introduction

This section analyzes the Project's cumulative impacts. It describes existing conditions, current regulatory setting, and evaluates potential cumulative impacts from construction and operation of the Project in connection with the effects of past, present, and probable future projects. Information in this section is based on the Eastside Transit Corridor Cumulative Impacts Report (Appendix Q).

### 3.18.2 Regulatory Framework

#### 3.18.2.1 Federal

There are no federal regulations, guidelines, etc., that apply to assessment of cumulative impacts under CEQA.

#### 3.18.2.2 State

State CEQA Guidelines mandate that an EIR discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable (Section 15130). "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects (Section 15064(h)(1)). In essence, the lead agency must consider whether a cumulative impact is significant and, if so, whether the project's incremental contribution to that impact is cumulatively considerable. When the project's incremental effect is not cumulatively considerable, the effect need not be considered significant, however the basis for concluding that the incremental effects is not cumulatively considerable must be briefly described.

CEQA Guidelines Sections 15130(b)(1)(A) and (B) identify the following two methodologies for assessing cumulative impacts: (1) a list of past, present, and probable future projects producing related or cumulative impacts; or (2) a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect. Such plans may include a general plan, regional transportation plan, or plans for reducing greenhouse gas emissions.

#### 3.18.2.3 Local

There are no local regulations or guidelines that apply to assessment of cumulative impacts under CEQA.

### 3.18.3 Methodology

Cumulative impacts refer to two or more individual impacts that, when considered together, are considerable or that compound or increase other environmental impacts. As previously discussed, the cumulative impact of a project is the change in the environment that results from the incremental impact of the project when added to other, closely related past, present, or reasonably foreseeable probable future projects.

The tentative year of opening for the Project is 2035. Due to the long-term nature of Project implementation, the list of projects analyzed in assessing cumulative impacts is speculative. For the purposes of this analysis, a good faith attempt has been made to identify relevant probable public works and private projects. However, it was necessary to rely considerably on long-term plans and to make some assumptions about future development.

The existing conditions baseline year of 2019 generally constitutes the physical conditions by which potential cumulative impacts are evaluated. However, for several resource areas, a “projected future conditions baseline” is considered. In the 2013 *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* case (57 Cal.4th 439), the California Supreme Court upheld that a lead agency has the discretion to exclusively use a future conditions baseline for the purposes of determination of significance under CEQA in instances where showing an existing conditions analysis would be misleading or without informational value. Further, Section 15125(a)(1)(2) of the State CEQA Guidelines provides for the use of a projected future conditions (beyond the date of project operations) baseline. For the Project, this “projected future conditions baseline” is the 2042 without Project conditions. The horizon year (2042) of the regional travel demand Corridor Based Model 2018 (CMB18), which incorporates Metro Measure M projects identified in the Measure M Expenditure Plan, roadway improvements, and other transit improvements anticipated to occur throughout the transit corridor, was selected as the Project design year. Use of this 2042 design year represents a characterization of the holistic, long-term benefits of the Project as transit-oriented development expands within the GSA and throughout the region.

Specifically relative to air quality, greenhouse gas (GHG) emissions, and transportation and traffic impacts, use of an existing conditions baseline would not be appropriate for the Project because it would ignore the regional background growth in population, traffic, and transportation infrastructure that would occur between the existing conditions baseline year of 2019 and the future conditions (i.e., the 2019 existing conditions will be substantially altered by regional growth that will occur independent of the Project, which, in turn, would mask the impacts that are attributable to the Project and would not provide the reader with an accurate and meaningful delineation of Project-related impacts). Considering such growth is critical when determining future mitigation for transit projects designed to reduce traffic congestion and associated air quality and GHG impacts.

The approach to the cumulative impacts analysis varies by discipline. Subjects for which cumulative impacts would accrue on a regional basis, such as regional traffic and air quality, are based on applicable planning documents designed to evaluate regional and area-wide conditions and rely on regional projections prepared and adopted by Southern California Association of Governments (SCAG). For those disciplines where cumulative impacts are more localized (e.g., visual and aesthetic impacts), the analysis also considers specific development projects, which may also have localized impacts, at or adjacent to the Build Alternatives that may contribute to cumulative impacts either during construction or operations.

A cumulative impact assessment has been conducted for each environmental topic evaluated in the EIR. This section summarizes the cumulative impact assessment conducted for those topics. Refer to the separate EIR environmental sections (Section 3.1 through Section 3.17) and impacts reports (Appendix B through Appendix R) for additional Project information specific to a particular topic.

To accomplish the evaluation, a list of probable future projects with the potential to produce related or cumulative impacts has been identified and is presented in **Section 3.18.5** of this section to supplement the information already available regarding past and present projects. Future projects were identified through a review of existing plans including municipal (within the area of potential impact) and regional long-term plans for economic/land use and transportation development, the region's and the California Department of Transportation (Caltrans) Transportation Improvement Program (TIP), and specific development proposals along or near the alignment. This list is subject to the limitations described above due to the long-term build out of the proposed Build Alternatives.

This evaluation summarizes expected cumulative impacts produced by these projects and references any additional information that may be used to help determine the impacts. The methodology used for this analysis follows State CEQA Guidelines (Section 15130), which state that the cumulative impacts can be based on a "summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect."

If the Project's incremental contribution to a significant adverse cumulative impact is cumulatively considerable, then feasible options for mitigating or avoiding the Project's contribution are identified. In some cases, it may be determined that there would be a significant cumulative impact, but the Project's contribution is less than cumulatively considerable because the Project is required to implement or fund its fair share of a mitigation measure(s) that would alleviate the cumulative impact. In other cases, the only feasible mitigation may involve adoption of ordinances or regulations that are outside the jurisdiction of Metro. In cases where the Project will comply with the requirements in a previously approved plan, regulation, or mitigation program that apply within the Project's geographic area but are under another agency's jurisdiction, the impact discussion explains how implementing those particular requirements ensure that the project's incremental contribution to the cumulative impact would not be cumulatively considerable. Note that the State CEQA Guidelines indicate that the mere existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the Project's incremental effects are cumulatively considerable.

A lead agency may also determine that a project's incremental contribution to a cumulative impact is not cumulatively considerable if the project complies with requirements in a previously approved plan or mitigation program (including, but not limited to, water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, plans or regulations for the reduction of GHG emissions that provides specific requirements that would avoid or substantially lessen the cumulative problem. For these cases, the lead agency should explain how implementing the particular requirements in the plan, regulation, or program ensure that the project's incremental contribution to the cumulative impact is not cumulatively considerable.

For those environmental topics where the combined cumulative impact associated with the Build Alternatives and the other listed projects is not significant, the impact discussion briefly indicates why the cumulative impact is not significant and is not discussed in further detail.

## 3.18.4 Thresholds of Significance

As prescribed in the CEQA Guidelines, a cumulative impact may be considered significant if the project's incremental effect is cumulatively considerable as previously defined in **Section 3.18.2.2**. When considering whether the project's incremental impact is cumulatively considerable, mitigation measures that would be implemented by the project sponsor may be considered. If the mitigation measures alleviate the project's incremental contribution to the cumulatively significant impact, then the project does not result in a significant impact that is cumulatively considerable.

It should be noted that the limited details available about other projects may also limit the extent of the evaluation possible for some cumulative impacts/effects as compared to that for the evaluation of direct and indirect impacts/effects.

## 3.18.5 Plans and Projects

This section identifies transportation, land use, and land development plans within the general study area (GSA) and transportation, land use, and land development projects within the detailed study area (DSA). These plans and projects are used as the basis for the cumulative analysis. Literature reviews and website searches were conducted to identify the list of related plans and projects; sources include county and city noticing and planning websites and CEQA net. In addition, Metro obtained information directly from the local jurisdictions within the DSA.

### 3.18.5.1 Transportation Plans

#### 3.18.5.1.1 Southern California Associations of Governments Regional Transportation Plan

In September 2020, SCAG adopted the *Connect SoCal 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020 RTP/SCS). The plan is an update to the previous 2016 RTP/SCS plan and outlines more than \$638 billion in transportation system investments through 2045. SCAG's vision for 2045 encompasses compact and connected communities located near public transit to encourage people to live closer to work, school, shopping and other destinations. The 2020 RTP/SCS plan supports implementing and expanding transit signal priority, regional and inter-county fare agreements and media, increased bicycle carrying capacity on transit and rail vehicles, real-time passenger information systems, and implementing first/last mile amenities within a half-mile of existing and future LRT stations.

#### 3.18.5.1.2 Metro's Long-Range Transportation Plan

Metro's most recent update to its Long Range Transportation Plan (LRTP) was adopted in September 2020. The plan consists of over \$400 billion in planned transportation improvements through 2050 and serves as a blueprint for transportation infrastructure and planning throughout the metropolitan region. The plan is funded by voter-approved sales tax measures including the most recent Measure M. Within the 40-year planning period of the LRTP, new technological innovations are expected to transform transportation in Los Angeles. The LRTP plan is a blueprint for how Metro will spend anticipated revenues in the coming decades, including operating and maintaining the current and

planned system, continuing to deliver on commitments outlined in the 2009 LRTP, and identifying new projects, programs, or initiatives.

### **3.18.5.1.3 Metro Vision 2028 Strategic Plan**

The Metro Vision Strategic Plan is a 10-year plan to transform mobility throughout Los Angeles County. Metro has adopted performance outcomes and goals to deliver a mobility system that enables people to travel swiftly and easily throughout Los Angeles County. Metro's vision is operations-based and includes quantifiable metrics. Mobility standards aim to ensure that all Los Angeles County residents will have a 10-minute access shed to a high-quality transit stop, headways will be reduced to 15-minutes during any time of the day, and travel speeds will increase by 30 percent, and reliable options will be available to bypass congestion. Goals focus on the user experience and community building, including but not limited to enhancing communities and lives through mobility and access to opportunity, delivering outstanding trip experience for all users of the transportation system, and transforming Los Angeles County through regional collaboration and national leadership.

### **3.18.5.1.4 NextGen Bus Plan**

In October 2020, the Metro Board approved and adopted the NextGen Bus Plan, an effort to identify and address the needs of current and future riders throughout the region. The study elicited feedback from over 20,000 residents of Los Angeles County as well as local governments and stakeholder groups. The plan would update the aging bus system to a competitive world-class bus system that meets the needs of Los Angeles County residents. The primary focus of the NextGen Bus Plan improvements will be to create a system that is fast, frequent, reliable and accessible. According to Metro's 2020 LRTP, over the next decade, Metro will continue to work to implement the recommendations in the NextGen Bus Plan.

### **3.18.5.1.5 Bus Rapid Transit Vision and Principles Study**

In October 2018, the Metro Board approved initiation of the Bus Rapid Transit (BRT) Vision and Principles Study as a part of the Twenty-Eight by 2028 Plan. In November 2020, the Metro visioning BRT report summarized the study findings, which evaluated potential BRT corridors that would serve Los Angeles County. All 34 corridors initially evaluated in Metro's 2013 BRT and Street Design Improvement Study and 39 additional corridors identified through a Technical Advisory Committee consisting of Metro staff, local governments, and municipal transit operators were evaluated to determine the corridors with optimal characteristics for BRT integration. Three corridors from the 2013 study, which are currently in the planning implementation stages of BRT, were not studied in further depth. Five candidate corridors were identified as top candidates eligible for Measure M Countywide BRT program funds. An additional 30 high-performing corridors were identified to develop a "core" network of BRT, to which expansion would continue after investment in the top five corridors has completed. A further countywide network was developed from those 30 core corridors in development of a long-term Strategic BRT network vision.

### 3.18.5.1.6 First/Last Mile Planning

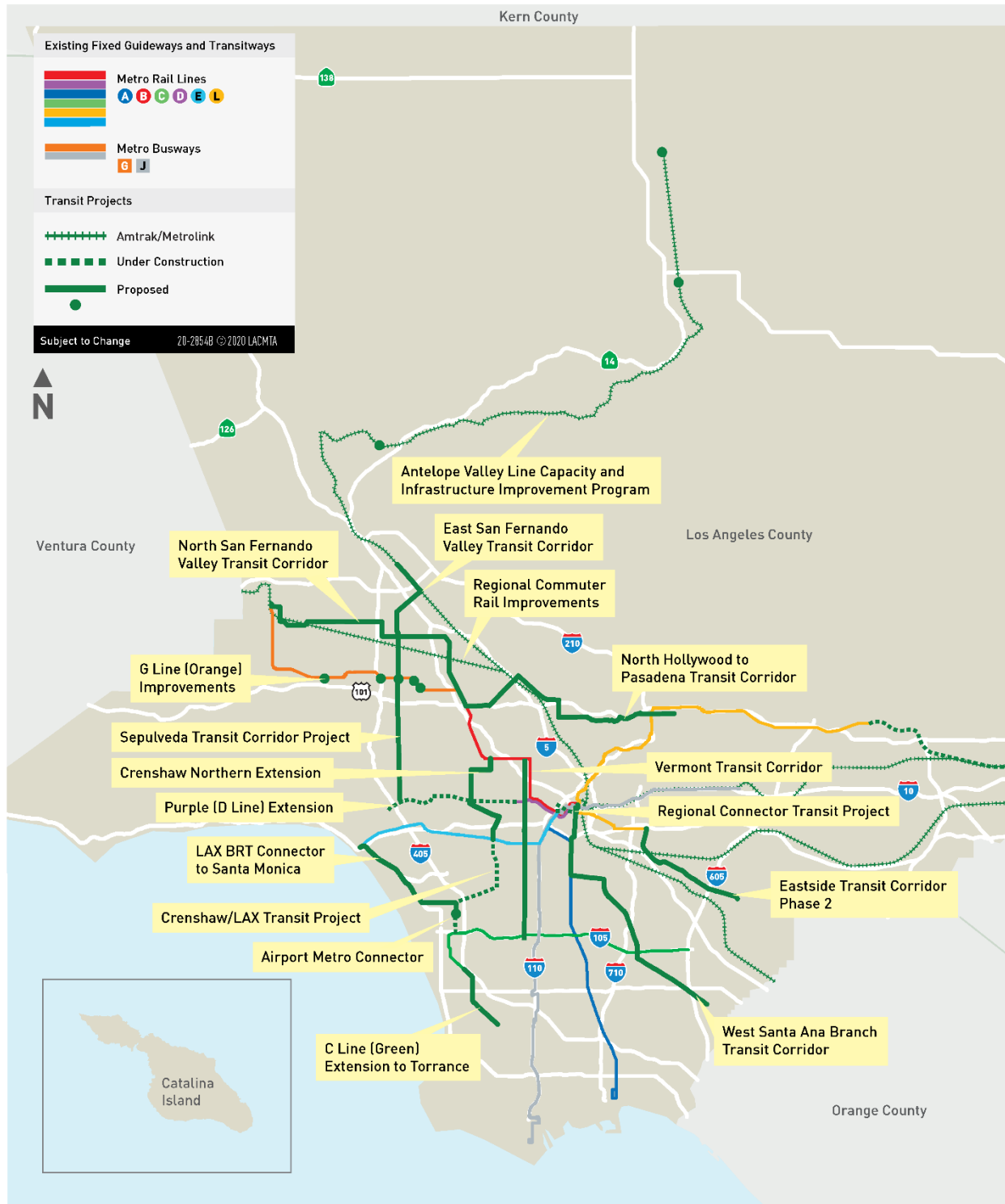
A Metro Board motion filed on May 18, 2016, calls for all future transit projects to include first/last mile (FLM) components that improve access, safety, and user experience in the areas surrounding stations extending the reach of transit and increasing ridership in the long term. Prior to the Metro Board motion, Metro prepared a First/Last Mile Strategic Plan and Planning Guidelines in March 2014. In 2021, Metro updated the First/Last Mile Guidelines to facilitate further integration of FLM planning into future project delivery. The First/Last Mile Guidelines are used to provide local jurisdictions planning guidelines that outline specific infrastructure improvement strategies that are designed to facilitate easy, safe, and efficient access to the Metro transit network and to ensure comprehensive integration of FLM improvements into future capital projects.

### 3.18.5.2 Transportation Projects

#### 3.18.5.2.1 Measure M Expenditure Plan

In November 2016, Los Angeles County voters approved a sales tax measure, Measure M, which is expected to bring up to \$120 Billion (2015) for use in transportation infrastructure capital, operations, and maintenance over a 40-year time frame. The Measure M Expenditure Plan includes delivering approximately 40 major infrastructure projects between 2018 and 2057. The regional transportation network shown on **Figure 3.18.1** represents the full build-out of Measure M in 2057, and **Figure 3.18.2** shows the rail and busway network with Measure M transit projects.





Source: Los Angeles County Metropolitan Transportation Authority, 2017.

**Figure 3.18.2. Metro Rail and Busway with Measure M Transit Projects**

The No Project Alternative includes the planned regional projects in operation in the horizon year (2042). In addition to the Regional Connector, the planned regional projects from Measure M, including their estimated completion dates, are listed below:<sup>1</sup>

- Metro L (Gold) Line Foothill Extension to Claremont (Glendora to Pomona: 2025, Pomona to Montclair: 2028)
- West Santa Ana Branch Transit Corridor LRT from Artesia to Downtown Los Angeles (2041)
- Airport Metro Connector Aviation Boulevard/96th Street Station to Los Angeles International Airport (LAX) (2024)
- Metro C (Green) Line Extension to Crenshaw Boulevard in Torrance – Redondo Beach to Torrance Transit Center (2030-2033)
- Metro K Line(Crenshaw/LAX) (2022)
- Vermont Transit Corridor BRT – Hollywood Boulevard to 120th (2028-2030)
- Metro Westside D (Purple) Line Extension (Section 1: 2024, Section 2: 2025, Section 3: 2027)
- East San Fernando Valley Transit Corridor Project connecting Orange Line Van Nuys station to the Sylmar/San Fernando Metrolink Station (2028)
- Metro G (Orange) Line BRT Improvements (2026)
- North Hollywood (G Line/B Line) to Pasadena (L Line) BRT Connector (2024)
- Sepulveda Pass Transit Corridor from Expo Line to East San Fernando Valley Line (Phase 1 and 2) (2033-2035)

### 3.18.5.2.2 MicroTransit

In 2019 Metro initiated a MicroTransit Pilot (MTP) project, called Mobility on Demand (MOD) which included preschedule rideshare trips on 10-passenger vehicles within designated service areas. In 2021, MOD was superseded by the Metro Micro Program, which focused on improving the micro transit design with a new demand-responsive service to improve the user experience for transit users. The new service provides passengers with an on-call service, using a ride hailing application on smartphone devices. The service is used for short trips under approximately 20 minutes in duration in defined service zones and utilizes vehicles that are smaller than traditional transit vehicles. This three-year pilot program will help to evaluate the viability of micro transit in supporting larger transit capital programs in the region.

### 3.18.5.2.3 Local Transportation Plans and Projects

Table 3.18-1 lists the various local transportation plans and projects within the DSA, including roadway and signal improvements. Some local jurisdictions also have planned active transportation projects.

<sup>1</sup> Measure M also includes The Eastside Transit Corridor Phase 2 project (the Project); however, the Project would not be implemented under the No Project Alternative.

**Table 3.18-1. Local Transportation Plans and Projects within the DSA**

Name	Type	Jurisdiction	Description
California High-Speed Rail	Transit	State	The California High-Speed Rail Authority, a state agency, is responsible for planning, designing, building and operation of the first high-speed rail system in the nation. By 2029, the system will run from San Francisco to the Los Angeles basin and eventually extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations (anticipated to be complete by 2029)
Caltrans - Pomona Freeway (SR-60) Pavement Rehabilitation	Roadway Improvements	State	Restore the roadway and improve the ride quality by rehabilitating the existing lanes with pavement that will extend the life of the roadway a minimum of 40 years
Vision Zero Enhancements for East Los Angeles	Active Transportation	Los Angeles County	Bicycle facility improvements (anticipated to be complete by 2032)
East Los Angeles Pedestrian Accessibility Improvements	Active Transportation	Los Angeles County	Whittier Boulevard from Indiana to Saybrook Avenue and 3rd Street from Indiana Street to Atlantic Boulevard
Olympic Multi-Modal Transportation Improvements	Traffic Signal Improvements	Los Angeles County	Olympic Boulevard between Indiana and Concourse
Whittier Multi-Modal Transportation Improvements	Traffic Signal Improvements	Los Angeles County	Signal phase and timing (SPaT) deployment on Whittier Boulevard from Indiana Street to Saybrook Avenue and 3rd Street from Indiana to Atlantic Boulevard
East Los Angeles Traffic Signal Enhancements	Traffic Signal Improvements	Los Angeles County	Intelligent Transportation System (ITS) and SPaT deployment between 3rd Street and Telegraph
Atlantic Multi-Modal Transportation Improvements	Traffic Signal Improvements	Los Angeles County	SPaT Improvements on Whittier Boulevard from Indiana to Saybrook Avenue and 3rd Street from Indiana to Atlantic Boulevard
Atlantic Safety, Beautification, and Pavement Rehabilitation Project	Roadway Improvements	Commerce	Roadway improvement for truck mobility and pedestrian enhancements
Washington/Garfield and Garfield/Yates Intersection Improvements	Roadway Improvements	Commerce	Roadway improvements
Garfield/Slauson Intersection Improvements	Roadway Improvements	Commerce	Roadway improvements
Garfield/Washington Boulevard Multi-Modal Project	Roadway Improvements	Commerce	Enhance roadway capacity and pedestrian crosswalks

Name	Type	Jurisdiction	Description
Los Angeles County-City Joint Road Project	Roadway Improvements	Commerce	Roadway Improvements
Mixmaster Traffic Study	Traffic Study	Commerce	Traffic study for Atlantic Boulevard, Telegraph Road, Ferguson Drive, and Goodrich Boulevard intersection
Washington Widening and Reconstruction Project	Roadway Improvements	Commerce	Roadway improvements and enhance roadway capacity
Citywide Pedestrian Bike Connectivity Commerce Active Transportation and Safe Routes to School	Active Transportation	Commerce	Safe Routes to School
Montebello Active Transportation Project	Active Transportation	Montebello	Bicycle and Pedestrian improvements between Lincoln Boulevard to Paramount Boulevard
Via Campo and Wilcox Concrete Pavement Intersection	Roadway Improvement	Montebello	Concrete Pavement Project
Beverly Boulevard Traffic Signal Enhancements	Traffic Signal Improvements	Montebello	Beverly signal synchronization from Pomona Street to Painter Avenue
Pico Rivera Regional Bikeway	Active Transportation	Pico Rivera	Construction of the Pico Rivera Regional Bikeway on Mines Avenue from Paramount Boulevard to the San Gabriel River, across the San Gabriel River, and along Dunlap Crossing Road from the San Gabriel River to Norwalk Boulevard (anticipated to be complete by 2024)
ACE - Durfee Avenue Grade Separation Project	Roadway Improvements	Pico Rivera	Roadway and the railroad tracks separation on Durfee Avenue between Beverly Road and Whittier Boulevard (anticipated to be complete by June 2022)
Mines Avenue Concept Plan	Roadway Improvements	Pico Rivera	Enhance pedestrian safety, traffic calming, and parking
Washington I-605 Arterial Concept Plan	Roadway Improvement	Santa Fe Springs	Enhance roadway capacity and signal improvements
Norwalk/Washington Intersection Improvements	Roadway Improvements	Santa Fe Springs	Enhance Roadway Capacity
West Whittier-Los Nietos Norwalk Boulevard/Reichling Lane Intersection Improvements	Traffic Signal Improvements	West Whittier-Los Nietos	Install left-turn phasing for northbound and southbound traffic, upgrade existing traffic signal poles, mast arms, crosswalks and curb ramps, upgrade existing and install additional vehicle and

Name	Type	Jurisdiction	Description
			pedestrian heads, upgrade existing pedestrian push buttons and recut advance loop detectors for northbound and southbound traffic for the intersection (anticipated to be complete by spring 2023)
West Whittier- Los Nietos Roadway Resurfacing	Active Transportation	West Whittier-Los Nietos	Resurfacing of 3.0 miles of major roadway with an included 2.46 miles of bike facilities. Routes include Broadway from Mines Boulevard to Norwalk Boulevard, Broadway from Whittier Boulevard to Mines Boulevard, Mines Boulevard from Broadway to Sorensen Avenue, and Mines Boulevard from Norwalk Boulevard to Broadway (anticipated to be complete by summer 2024)

Source: CDM Smith/AECOM JV, 2022.

### 3.18.5.3 Land Use Plans and Projects

#### 3.18.5.3.1 Metro's Transit-Oriented Communities Policy

The Metro Board adopted the Transit Oriented Communities (TOC) Policy in June 2018. The purpose of the policy is to define the concept of TOCs for Metro and to establish a set of criteria to determine which TOC activities Metro will fund and implement directly as part of a separate process. Specific TOC goals and principles include:

- Increase transportation ridership and choice through the promotion of non-motorized modes of transportation. Land use and urban design elements shall enhance FLM elements and create safe, active transportation environments that are inclusive to all ages and protected statuses.
- Stabilize and enhance communities surrounding transit with affordable housing. TOCs shall protect residents from displacement and promote sustained economic vitality for small businesses.
- Engage organizations, jurisdictions, and the public by performing outreach to the community and fostering partnerships with business and labor.
- Distribute transit benefits to all by ensuring investments positively impact disadvantaged and underrepresented communities. Improve the outcomes related to communities' safety, health, social, and economic well-being.
- Capture value created by transit. TOCs shall increase the value of properties surrounding Metro's transit investments.

#### 3.18.5.3.2 Related Projects

Table 3.18-2 contains the land use development projects that are considered in the cumulative impact analysis that may occur in the same vicinity and timeframe of the Project. Related projects include past, present, and reasonably foreseeable future projects located within the DSA. These are shown on Figure 3.18.3.

**Table 3.18-2. Related Projects within the DSA by Jurisdiction**

Fig. #	Name	Type	Jurisdiction	Description
1	Third and Dangler	Affordable Housing	East Los Angeles (Unincorporated Los Angeles County)	4-story, 78-unit affordable/permanent supportive housing project on a 0.59 acres lot, with a projected completion date in 2023.
2	Utility Corridor Park Development	Recreation/Open Space	East Los Angeles (Unincorporated Los Angeles County)	Proposed 8.4-acre public park on a utility corridor. Project pending approval for Proposition 68 grant funding and negotiations with SCE regarding use of the corridor. Located at 6254 Hubbard Street.
3	Rosewood Village	Residential	Commerce	133-unit townhome development on a 5.7-acre site at 5550 Harbor Street. The project would replace existing industrial facilities and construction is expected to conclude in late 2023.
4	2113 W. Whittier Boulevard	Residential	Montebello	Five story, 67-unit project approved in 2015 as a Planned Development District. Construction has not begun on the site.
5	605 Warehouse Project	Industrial	Pico Rivera	New industrial warehouse, distribution and office facility totaling 357,903 square feet and a 2,500 square-foot print shop facility; both facilities include surface parking, landscaping, and other ancillary improvements. Located at the southwest corner of Beverly Boulevard and Interstate 60. Project is not yet approved.
6	The Mercury 8825 Washington Boulevard	Mixed Use	Pico Rivera	Development of a 255 unit mixed-use development on a 2.85 acre site located at 8825 Washington Boulevard with 255 units and approximately 5,420 square feet of commercial space. Project is not yet approved.
7	6605 Rosemead Boulevard	Industrial	Pico Rivera	Development of a self-storage facility located at 6605 Rosemead Boulevard. The project consists of new construction of 63,066 square feet, four story (52 feet), self-storage facility on a 28,208 square foot site. Project is not yet approved.
8	Beverly Crossing Commercial Project- 9036 Beverly Boulevard	Commercial	Pico Rivera	Commercial retail space with that includes approximately 53,960 square feet of neighborhood retail and restaurants. Approved in 2020. Construction timeline is uncertain.
9	Sorensen XC, LLC	Industrial	Santa Fe Springs	Development of a 233,779 square foot concrete tilt-up industrial buildings, which is located at 8201 Sorensen Avenue.

Fig. #	Name	Type	Jurisdiction	Description
10	Florence Homes Residential Project	Residential	Whittier	A 1.23-acre single lot map for residential condominium purposes at 8315, 8319, and 8335 Greenleaf Avenue in the City of Whittier, CA
11	Trinity Lutheran Church Campus Modification and Brandywine Homes New 25-Unit Detached Single-Family Condominium Project	Residential	Whittier	Modifications to the existing church facility and subdividing of a 3.59-acre parcel of land located at 11716 Floral Drive for the church and residential development.
12	The Groves (former Fred C. Nelles Youth Correctional Facility)	Mixed Use	Whittier	75.6-acre residential, commercial and open space uses. 189 rental units, 561 for sale. Currently under construction/partially open.
13	10727 Orange Grove Avenue	Residential	Whittier	R-3 Medium Multiple Residential; R-4 Heavy Multiple Residential. 5-unit townhouse project approved in 2017. Construction timeline uncertain.
14	12428 Washington Boulevard	Residential	Whittier	13-unit townhouse development approved. Construction timeline uncertain.
15	8016 Santa Fe Springs Road	Residential	Whittier	2.79-acre site into two parcels; 60-unit apartment complex approved in 2018. Under construction.
16	Whittier Aquatic Center	Recreational	Whittier	Olympic-size swimming pool, practice pool, and 12,000 square foot building with offices, restrooms, and classrooms. Under construction. Expected opening fall 2022.



Source: Metro; CDM Smith/AECOM JV, 2022.

Figure 3.18.3. Land Use Development Projects within the DSA

## 3.18.6 Impact Evaluation

The following sections analyze the cumulative impacts identified for each resource area relative to the Build Alternatives and transportation plans identified in **Section 3.18.5.1** and the list of related projects within the DSA as identified in **Table 3.18-1** and **Table 3.18-2**. The cumulative impacts analysis considers all Build Alternatives and the design option(s) with the applicable MSF site option(s) or MSF design option. Unless otherwise discussed, the cumulative impacts of each Build Alternative (without or with the design option[s]) and MSF site option applicable to each Build Alternative would be the same.

### 3.18.6.1 Aesthetics

As discussed in Section 3.1, Aesthetics, and Appendix B, the Eastside Transit Corridor Phase 2 Visual Aesthetics Impacts Report, the DSA, which is the study area for this analysis, is a highly urbanized area. The Project and the related land development projects identified in **Table 3.18-2** are typical of the urbanized environment and, cumulatively, would not substantially change the existing visual character. Further, it is anticipated that the related land use development projects would comply with zoning and design requirements of the applicable jurisdiction, including undergoing mandated design review where applicable. Scenic vistas are not substantially present within the DSA. The Build Alternatives and related land development projects would not cumulatively affect scenic vistas. Several of the related land development projects identified in **Table 3.18-2** are sufficiently substantial in massing and visual presence that they could affect views; however, none of these projects are physically located such that, in combination with the Build Alternatives, a significant cumulative impact to a scenic vista would occur. There are no scenic highways within the DSA; the Build Alternatives would have no impact on a scenic highway, nor would it contribute to an incremental impact that could be compounded or increased when considered together with similar effects from other land development projects identified in **Table 3.18-2**. The existing urbanized environment within the DSA experiences a wide range of existing light and glare sources, including industrial and commercial uses, vehicular light, streetlights, and parking facilities. Related land development projects identified in **Table 3.18-2** are consistent with the light and glare profile within the DSA, and the Build Alternatives would not contribute light and glare such that there would result a significant impact. Although the Project and the projects identified in **Table 3.18-2** could create temporary visual changes and introduce new visual elements from construction staging, equipment, lighting, and spoils, these changes would be temporary and would occur in highly urbanized environments. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact.

### 3.18.6.2 Air Quality

As discussed in Section 3.2, Air Quality, and Appendix C, the Eastside Transit Corridor Phase 2 Air Quality Impacts Report, the air quality analysis for the Build Alternatives is inherently cumulative in nature, being based on a given project's net contributions or reductions to airborne pollutants and using thresholds established based on a regional characterization of air quality conditions. Thus, the potential air quality impacts of the related land development projects identified in **Table 3.18-2** are already accounted for in the analysis. In the year 2042, the Build Alternatives would result in a less than significant net increase of emissions of volatile organic compounds (VOC), and a net reduction in operational regional emissions of carbon monoxide (CO), nitrogen oxides (NOX), sulfur dioxide (SO<sub>2</sub>), inhalable particulate matter or particulate matter with an aerodynamic diameter less than or

equal to 10 micrometers (PM<sub>10</sub>), fine particulate matter or particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers (PM<sub>2.5</sub>). In addition, the Build Alternatives would not expose sensitive receptors to toxic air contaminants (TAC) that would be likely to cause a substantial increase in human health risks.

The Build Alternatives were considered regionally in the South Coast Air Quality Management District (SCAQMD) 2016 Air Quality Management Plan (AQMP) for the South Coast Air Basin, which was prepared in support of the state implementation plan and approved by California Air Resources Board and submitted to the U.S. Environmental Protection Agency for its final approval on April 27, 2017. Project consistency was determined based on a finding that the Project does not result in an increase to the frequency or severity of an existing air quality violation, the Project does not cause or contribute to new air quality violations, the Project does not delay the timely attainment of the air quality standards or the interim emission reductions specified in the AQMP, the Project is consistent with the population and employment growth projections upon which the AQMP forecasted emission levels are based, Project development is consistent with AQMP land use policies, and the Project is consistent with the applicable mitigation measures assumed in preparation of the AQMP. Additionally, in 2003, SCAQMD published a white paper on cumulative impacts and potential control strategies which considers the cumulative implications of air quality impacts under CEQA and indicates that projects which would not exceed the project-specific thresholds established by SCAQMD would generally not be considered to have a cumulatively considerable contribution to the respective air quality impact (SCAQMD 2003). The Build Alternatives would reduce VMT and associated emissions of criteria air pollutants and TAC during operation, and would not exceed SCAQMD's established construction thresholds for regional or localized impacts. Therefore, considered cumulatively, the Build Alternatives' incremental effect would not be cumulatively considerable.

### 3.18.6.3 Biological Resources

Impacts on biological resources are discussed in Section 3.3, Biological Resources, and Appendix D, the Eastside Transit Corridor Phase 2 Biological Resources Impacts Report. The biological resources specialized study area, known as the biological resources study area (BRSA), for each of the Build Alternatives is the area within a 500-foot buffer of the LRT guideway and includes the station, TPSSs, and MSF site option footprints, which is the area analyzed in field surveys. Alternative 1 would have a significant Project-level impact on bats from construction of replacement bridges over the Rio Hondo and San Gabriel River. Alternatives 2 and 3 would not require replacement of the bridges across the Rio Hondo and San Gabriel River, and would therefore have less than significant impacts on bats. The impact on bats would result from bridge modification; the related land development projects identified in **Table 3.18-2** would not result in continued modification of bridges, and therefore the significant impact on bats resulting from bridge replacement would not be cumulatively affected by the related plans and projects. With incorporation of MM BIO-1 through MM BIO-3, as shown in **Table 3.18-3**, impacts on bats from Alternative 1 would be reduced to less than significant. Therefore, there would not be a significant cumulative impact relative to bats.

As discussed in Section 3.3, Biological Resources, and Appendix D, the Build Alternatives would have a significant Project-level impact on migratory birds from nesting habitat destruction during construction or tree trimming during operation. Related land development projects identified in **Table 3.18-2** could likewise impact migratory birds and therefore result in a cumulatively significant impact. Project-level MM BIO-4 would ensure that construction and tree-trimming would not occur in the vicinity of active nests. Considered cumulatively with the plans and projects identified in **Section 3.18.5**,

and with implementation of MM BIO-4, as shown in **Table 3.18-3**, the Build Alternatives' incremental effect would not be considerable relative to migratory birds.

Construction of related land development projects within the DSA, which encompasses the BRSA, and Build Alternatives would have the potential to spread invasive species. Considered cumulatively, the potential to spread invasive species from construction of the Build Alternatives and related projects would result in a cumulatively significant impact. However, with incorporation of mitigation measures, all Project-related impacts under Impact BIO-2 would be reduced to less than significant. The significant impact from the spread of invasive species would not be cumulatively affected by the related plans and projects because it would be reduced by mitigation measures to clean construction equipment and avoid the spread of soil and plant material (MM BIO-5 and MM BIO-6); therefore, the Project would not contribute any incremental impact. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, and with implementation of MM BIO-5 and MM BIO-6, as shown in **Table 3.18-3**, the Build Alternatives' incremental effect would not be cumulatively considerable relative to invasive species.

The BRSA is an urbanized area which does not support sensitive species, sensitive vegetation communities, wetlands, or terrestrial wildlife corridors. The Rio Hondo and spreading grounds and San Gabriel River provide a corridor for the movement of aquatic species. If Alternative 1 construction work occurs when water is present in the Rio Hondo and spreading grounds or the San Gabriel River, common aquatic species present in the water bodies would be able to readily move away from the in-water work. Therefore, there would be less than significant impacts on the movement of fish and wildlife species from construction of Alternative 1. The aquatic corridors would not be impacted by Alternatives 2 or 3 as they do not cross the rivers. The related land development projects and the Build Alternatives would be subject to local policies or ordinances protecting biological resources, and there would not be a cumulatively significant impact. There is no potential for the Project to contribute any incremental impact under Impact BIO-4 (conflicts with local policies or ordinances protecting biological resources) as the Project would be conducted in accordance with local tree protection policies. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact relative to wetlands, wildlife corridors, sensitive vegetation communities, and consistency with local policies and ordinances.

### 3.18.6.4 Cultural Resources

Cultural Resource impacts from the Project are discussed in more detail in Section 3.4, Cultural Resources, and Appendix E, the Eastside Transit Corridor Phase 2 Transportation Cultural Resources Impacts Report. The specialized study area for Cultural Resources is referred to as the area of potential effect (APE). For archaeological resources, the area of direct impact (ADI) includes the right-of-way (ROW) and any areas of direct ground disturbance during project construction, including staging areas. For built environment/architectural resources, the APE includes all proposed ROW and acquisition and construction areas, and all parcels adjacent to permanent site improvements and facilities. For elevated alignments, the APE includes any additional parcels where the elevated structure may alter the character, use, or setting of a potential historical resource.

The DSA, which encompasses the APE and ADI is heavily urbanized and historic structures and districts exist throughout the area. Impacts to historic structures are evaluated in terms of direct impacts (modification or demolition) or indirect impacts (affecting the setting in a manner that impacts the historic significance of a structure). Development of the related land development projects identified in **Table 3.18-2** could cumulatively impact historic resources within the DSA. At a

Project-level, the Build Alternatives would result in a significant Project-level impact; construction of the Build Alternatives could result in temporary noise, vibration, and ground-settlement impacts, and construction of the Building Alternatives with the Commerce MSF site option would require acquisition and demolition of certain historic resources. Project-level mitigation measures would reduce Project-level impacts on historic resources; however, acquisition and demolition of historic resources associated with construction of the Build Alternatives if the Commerce MSF site option is selected would remain significant and unavoidable. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, if the Commerce MSF site option is selected, even with implementation of MM CUL-1 through MM CUL-6 for Alternative 1; MM CUL-1, MM CUL-5, and MM CUL-6 for Alternative 2; and MM CUL-1, MM CUL-2, MM CUL-3, MM CUL-5, and MM CUL-6 for Alternative 3, as shown in **Table 3.18-3**, there would be a significant cumulative impact. If the Commerce MSF site option is selected, the Build Alternatives' incremental effect would be cumulatively considerable.

If Alternative 1 or Alternative 3 with the Montebello MSF site option is selected, implementation of MM CUL-1 and MM CUL-4 for Alternative 1 and MM CUL-1 for Alternative 3, Project-level impacts on historic resources would be reduced as shown in **Table 3.18-3**. The incremental effects of Alternative 1 and Alternative 3 with the Montebello MSF site option would not be cumulatively considerable relative to historic resources.

Since significant buried archaeological resources may exist within the DSA, it is possible that materials could be unearthed during project excavation activities. Construction of the Build Alternatives has the potential to disturb or destroy a significant archaeological resource. This disturbance of significant archaeological resources in combination with other reasonably foreseeable development projects in the DSA could result in significant cumulative impacts to archaeological resources. However, Project mitigation measures would reduce the Project's cumulative contribution to archaeological resources impacts, if any such resources are found during construction, to less than significant levels. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, and with implementation of MM CUL-7 and MM CUL-8 for Alternative 1, and MM CUL-8 for Alternative 2 and Alternative 3, as shown in **Table 3.18-3**, the Build Alternatives' incremental effect would not be cumulatively considerable relative to archaeological resources.

Similarly, it is possible that human remains, including those interred outside of formal cemeteries, may exist within the DSA, and it is possible that remains could be unearthed during project excavation activities. Construction of the Build Alternatives has the potential to disturb human remains. This disturbance, in combination with other reasonably foreseeable development projects in the DSA, could result in significant cumulative impacts to human remains. However, Project mitigation measures would reduce the Project's cumulative contribution to impacts to human remains, if any are found during construction, to less than significant levels. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, and with implementation of MM CUL-9 for Alternative 1, Alternative 2, and Alternative 3, as shown in **Table 3.18-3**, the Build Alternatives' incremental effect would not be cumulatively considerable relative to human remains.

### 3.18.6.5 Energy

Energy impacts from the Project are discussed in more detail in Section 3.5, Energy, and Appendix F, the Eastside Transit Corridor Phase 2 Energy Conservation and Utilities/Service System Impacts Report. The study area for the energy analysis is the GSA to provide a regional context and DSA to for specific context. Projects within the DSA, including the Build Alternatives and the related land

development projects identified in **Table 3.18-2**, would be subject to compliance with applicable building codes and energy efficiency and management codes and regulations, including, but not limited to, the California Building Standards Code Energy Efficiency Standards (Title 24 Parts 6 and 11) and the Los Angeles County Green Building Standards Code, as well as other provisions of municipal jurisdictions. As discussed in Section 3.5, Energy, and Appendix F, the evaluation of existing energy resources and energy forecasting is inherently cumulative based on long-term regional utility and energy demand plans and projections from energy utility providers. Based on the published long term plans and projections, there is no anticipated cumulative shortfall in energy supplies or services. Thus, considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact.

### 3.18.6.6 Geology, Seismicity, Soils, and Paleontological Resources

Geology, seismicity, soils, and paleontological impacts from the Project are discussed in more detail in Section 3.6, Geology, Seismicity, Soils, and Paleontological Resources, and Appendix G, the Eastside Transit Corridor Phase 2 Geology and Soils Impacts Report. The study area for geology, soils, and paleontological resources is the GSA to provide a regional context of the geological conditions, and the DSA for specific context. The related land development projects identified in **Table 3.18-2** are all located within the DSA on similar geologic units and soil types and would all be subject to the same building codes and standard engineering practices; the Project would not affect the cumulative level of exposure to seismic shaking, liquefaction, or landslides, nor contribute incrementally to a cumulative impact. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact relative to seismic shaking, liquefaction, or landslides.

As discussed in Section 3.6, Geology, Seismicity, Soils, and Paleontological Resources, and Appendix G, the DSA is a highly urbanized area. The related land development projects involve land disturbance to varying degrees; they would be subject to applicable building codes and requirements of local jurisdictions. There is no potential for the Project to contribute an incremental impact to soil erosion or stability. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact relative to soil erosion or stability.

As discussed in Section 3.6, Geology, Seismicity, Soils, and Paleontological Resources, and Appendix G, due to the unique nature of sub-grade tunnel boring activity, there would be no feasible way to monitor or mitigate paleontological impacts from boring and impacts with respect to paleontological resources would be significant. Other construction activities, including cut-and-cover construction of underground stations and the installation of support footings along the Alternative 1 and Alternative 3 aerial guideway and the Alternative 2 aerial guideway that leads to the Commerce MSF site option would also have the potential to result in significant impacts to paleontological resources, although mitigation measures would be adopted to reduce the impact from cut-and-cover construction and aerial guideway footing construction. The significant impact from tunnel boring activities could not be reduced by mitigation measures and would remain significant and unavoidable. Several of the related land development projects identified in **Table 3.18-2** involve ground excavation and disturbance; however, none involve tunnel boring or excavation at the same depth as the Project. Project-level mitigation measures would be implemented to lessen the significant Project-level impact; however, the impact would remain significant and unavoidable for Alternative 1, Alternative 2, and Alternative 3. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, and even with implementation of MM GEO-1 through MM GEO-5, as shown in **Table 3.18-3**, there would be a

significant cumulative impact. The incremental impact from Alternative 1, Alternative 2, and Alternative 3 would be cumulatively considerable.

### 3.18.6.7 Greenhouse Gas Emissions

Greenhouse gas emission impacts are inherently cumulative in nature. The Project's potential to result in greenhouse gas emission impacts are discussed in more detail in Section 3.7, Greenhouse Gas Emissions, and Appendix H, the Eastside Transit Corridor Phase 2 Climate Change and Greenhouse Gas Impacts Report. The study area for climate change and greenhouse gas emissions is the GSA. Several of the related land development projects identified in **Table 3.18-2** provide new housing or commercial opportunities which would result in increases in local population, employment, and VMT with accompanying increases in localized GHG emissions. As described in Section 3.7 and Appendix H, Project GHG emissions are evaluated using a 2042 projected future conditions baseline. In this case, the adjusted environmental baseline is the 2042 without Project Conditions; the projected future conditions baseline applies to the cumulative analysis. The Project would result in a reduction in VMT from regional traffic, as well as an increase in GHG emissions from electricity necessary to operate the system. Overall, a small net decrease or small net increase in regional operational GHG emissions would be expected as compared to the 2042 projected future conditions baseline, depending on the Build Alternative and MSF selected. Considered cumulatively, the change in GHG emissions from the Build Alternatives and related projects would result in a cumulatively significant impact. However, as discussed in Section 3.7, Greenhouse Gas Emissions, and Appendix H, the Project is a component in the 2020 RTP/SCS Connect SoCal Program EIR analysis, which found the Project to be a contributor to cumulative reductions in regional VMT and associated reductions in cumulative GHG emissions projected in that analysis. In addition, the Project contributes to California's goal to increase mass transit under the AB 32 Scoping Plan. Implementation of Alternative 1 would enhance regional transportation systems and contribute to planning efforts to reduce VMT and GHG emissions from transportation sources. Because the Build Alternatives support the statewide AB 32 scoping plan and were contemplated in the 2020 RTP/SCS Connect SoCal Program EIR analyses and found to be a contributor to cumulative reductions in regional VMT, the Build Alternatives' incremental effect would not be cumulatively considerable.

### 3.18.6.8 Hazards and Hazardous Materials

As discussed in Section 3.8, Hazards and Hazardous Materials, and Appendix I, the Eastside Transit Corridor Phase 2 Hazards and Hazardous Materials Impacts Report, the hazards and hazardous materials specialized study area, known as the resource study area (RSA), for each of the Build Alternatives is the area within a one-mile buffer of the LRT guideway and includes a half-mile buffer of the stations, TPSSs, and MSF site option footprints. There are 30 affected properties that have documented releases in the RSA. Additionally, the eastern portion of the Project (from approximately Sorensen Avenue to Lambert Road/Santa Fe Springs Road) is situated within Operable Unit 2 (OU2) of the Omega Superfund Site. Hazards and hazardous material impacts from the Project are discussed in more detail in Section 3.8, Hazards and Hazardous Materials, and Appendix I. The potential for hazardous materials to occur is specific to each project site and is dependent on the nature of prior activities both on- and off-site; therefore, hazardous materials concerns generally do not combine to form cumulative impacts. All potential development projects in the DSA, which encompasses the RSA, including the Build Alternatives, would be required to comply with local, state, and federal regulations for transport, use, storage, and disposal of hazardous materials. Application of these regulations is mandatory; therefore, the overall cumulative impact from the routine transport,

storage, use, and disposal of hazardous materials would be less than significant. Likewise, the overall cumulative impact from the handling of hazardous materials within one-quarter mile of a school would be less than significant.

With respect to the release of hazardous materials, the cumulative effects would be limited to the combined effect of the Build Alternatives and related land development projects in the DSA with the potential to result in hazardous emission exposures to the same populations that would potentially be exposed by hazardous material use for the Project. Due to the fact that health effects from hazardous substances can result from both acute or chronic exposures, the temporal context for cumulative effects relating to hazardous materials would include any past, present, or reasonably foreseeable development projects. Other projects in the DSA that may be contaminated with hazardous materials are required to be individually evaluated and remediated, with mitigation measures recommended as needed to reduce potential impacts. As discussed in Section 3.8, Hazards and Hazardous Materials, and Appendix I, Metro would implement MM HAZ-1 through MM HAZ-5, as shown in **Table 3.18-3**, which would reduce the risk for environmental and human health hazards during construction to a less than significant level. Additionally, best management practices (BMPs) would be implemented as project measures to minimize impacts related to hazards and hazardous materials Section 3.18). Furthermore, any necessary measures related to hazardous material exposure at other project sites in the DSA would be confined to those specific project sites and would not be additive in nature. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact relative to hazardous material exposure.

As discussed above, the potential for hazardous materials to occur is specific to each project site and is dependent on the nature of prior activities both on- and off-site; therefore, hazardous materials concerns generally do not combine to form cumulative impacts. There are various sites with known soil and groundwater contamination in the vicinity of the Build Alternatives; the potential hazards from these sites do not combine with sites from the related land development projects to result in a cumulative impact. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact relative to hazardous sites.

The geographic context for cumulative impacts from impairment of emergency response plans would be limited to those cumulative projects in the immediate vicinity of the Project with the potential to result in temporary or permanent disruption to the same roadway network that the Project would temporarily impact. The temporal context for cumulative effects relating to impairment of emergency response plans would be limited to those projects which have construction periods that could overlap with those of the given Build Alternatives construction schedule. Similar to the Project, each of the projects identified in **Section 3.18.5** would be required to follow Occupational Safety and Health Administration and other safety practices and would implement standard construction and safety plans, construction transportation plans, and traffic control plans, as necessary, to minimize interference with emergency response plans. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact relative to emergency response plans.

### 3.18.6.9 Hydrology and Water Quality

As discussed in Section 3.9, Hydrology and Water Quality, and Appendix J, the Eastside Transit Corridor Phase 2 Hydrology and Water Quality Impacts Report, the DSA is a highly urbanized area. The study area for this analysis is the DSA. Projects within the DSA, including the related land development projects identified in **Table 3.18-2**, would result in modifications to local drainage

systems, may increase or decrease impervious surface area, or affect groundwater. However, projects within the DSA are subject to applicable state, regional, and local water quality regulations and, thus, would be designed and executed in compliance with these regulations. As applicable, these projects would be subject to National Pollutant Discharge Elimination System (NPDES) permits, incorporate BMPs to control pollutant discharges, incorporate erosion and siltation BMPs, and incorporate SWRCB's Construction General Permit and Los Angeles County Department of Public Works' Municipal Separate Storm Sewer System (MS4) Permit conditions. A portion of Alternative 1 intersects Federal Emergency Management Agency (FEMA) flood zones. As a project measure (Section 3.9), operation of the trains would not occur if a flood inundates the portion of tracks within the flood zone. Additionally, if a flood event occurs during construction, construction activities shall cease and equipment and materials would be moved to an area outside of floodwaters. Alternative 2 and Alternative 3 would not cross the floodplain and would thus not impact floodplains.

MM HWQ-1, MM HWQ-2, MM HAZ-2, and MM HAZ-3 for Alternative 1 and MM HAZ-2 and MM HAZ-3 for Alternative 2 and Alternative 3 would reduce Project-level impacts from contaminated groundwater and dewatering and erosion and siltation, and on stormwater drainage capacity and flood zones to a less than significant level.

Considered cumulatively with the plans and projects identified in **Section 3.18.5**, and with implementation of MM HWQ-1, MM HWQ-2, MM HAZ-2, and MM HAZ-3 for Alternative 1 and MM HAZ-2 and MM HAZ-3 for Alternative 2 and Alternative 3, as shown in **Table 3.18-3**, the Build Alternatives' incremental effect would not be cumulatively considerable.

### 3.18.6.10 Land Use and Planning

As discussed in Section 3.10, Land Use and Planning, and Appendix K, the Eastside Transit Corridor Phase 2 Land Use and Planning Impacts Report, the DSA is a highly urbanized area. The study area for this analysis is the DSA. The related land development projects identified in **Table 3.18-2** are site-specific projects and would not cumulatively result in a divided community. The Build Alternatives and related land development projects are also subject to land use regulation by the local jurisdictions in which the project is located that are updated as necessary to reflect current land use planning policies supported by State, regional, and local jurisdictions. Simultaneous construction of some related land development projects and the Build Alternatives could occur, potentially resulting in short-term and temporary construction disruptions to the existing physical environment and localized circulation through temporary street or sidewalk closures. However, the proposed street closures and turning restrictions associated with the Build Alternatives and related projects would not divide existing communities as access to streets and surrounding properties would generally be required to be maintained through the rerouting of traffic within adjacent local streets as specified in traffic management plans. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact.

### 3.18.6.11 Noise and Vibration

As discussed in Section 3.11, Noise and Vibration, and Appendix L, the Eastside Transit Corridor Phase 2 Noise and Vibration Impacts Report, the noise assessment criteria for the Build Alternatives are based on the Project's potential noise generation and the existing ambient conditions; the analysis is therefore cumulative in nature insofar as it accounts for the combined noise effects of past and present projects.

None of the future operational noise levels under the Build scenario were found to exceed the Federal Transit Administration (FTA) severe impact criterion; of the representative receptors, Mo7 (6735 Keltonview Drive) was the receptor with the predicted build noise closest to the severe impact criterion at 4 dBA below the severe impact threshold. The FTA screening distances of 350 feet (unobstructed noise screening distance) and 150 feet (unobstructed vibration screening distance) were used to develop the population of receptors included in the noise and vibration modeling analyses.

As described in Section 3.11, Noise and Vibration, and Appendix L, the Eastside Transit Corridor Phase 2 Noise and vibration Impacts Report, noise is logarithmic and it takes a doubling of sound energy (or a 100 percent increase) to produce a 3 dBA increase. Thus, a related land development project would need to produce operational noise greater than the Project itself for there to be a cumulative increase in operational noise that reached the FTA severe impact criterion for Mo7, the representative receptor closest to the severe impact criterion. However, there are no related land development projects located within the FTA screening distances of 350 feet unobstructed or 150 feet obstructed with which operational noise from the Project could combine. Further, the related land development projects identified in **Table 3.18-2** would be subject to land use regulation by the local jurisdictions and which would limit operational noise. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact relative to operational noise.

Although the construction methods of the related land development projects vary based on the structure type, height, and configuration, if construction of the Build Alternatives, including construction of staging areas, were to occur concurrently with construction of related land development projects in the same vicinity, this could result in a significant cumulative noise impact. The Build Alternatives were found to have a significant Project-level noise impact as a result of construction noise. However, with the mitigation measures presented in Section 3.11, Noise and Vibration, and Appendix L, all Project-related noise impacts would be reduced to less than significant. In addition, there are no related land development projects identified in **Table 3.18-2** within the FTA screening distances of 350 feet unobstructed or 150 feet obstructed with which construction noise from the Project could cumulatively combine. Therefore, considered cumulatively with the plans and projects identified in **Section 3.18.5**, and with implementation of MM NOI-1 through MM NOI-11, as shown in **Table 3.18-3**, the Build Alternatives' incremental effect would not be cumulatively considerable relative to construction noise.

The related land development projects identified in **Table 3.18-2** would be subject to land use regulation by the local jurisdictions and would not be expected to exceed operational or construction vibration limitations. However, the Build Alternatives were found to have a significant vibration impact if not mitigated, which would result in a significant cumulative vibration impact. MM NOI-2, MM NOI-4, MM NOI-5, MM NOI-7, MM NOI-8, MM NOI-9, MM NOI-12, MM NOI-13, NOI-14, and MM NOI-15 would mitigate the Project's potential vibration impacts to a less than significant level. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, and with implementation of mitigation as shown in **Table 3.18-3**, the Build Alternatives' incremental effect would not be cumulatively considerable relative to vibration.

### 3.18.6.12 Population and Housing

Population and housing impacts from the Project are discussed in more detail in Section 3.12, Population and Housing, and Appendix M, the Eastside Transit Corridor Phase 2 Community and Neighborhood Impacts Report. The study area for this analysis is the GSA. Several of the related land development projects identified in **Table 3.18-2** provide new housing or commercial opportunities

which would result in increases in local population and employment. However, these projects are subject to local city zoning regulations and approvals and must meet the state Regional Housing Needs Allocation; therefore, the introduction of new housing or commercial opportunities would not constitute uncontrolled growth. These projects would not result in displacement that would require construction of replacement housing elsewhere. As discussed in Section 3.12, Population and Housing, and Appendix M, the Build Alternatives would not include new housing or businesses that would directly result in population growth. An increase in transit service in the region may allow for increased development around station areas; however, such development is anticipated in the local jurisdictions' general plans and would be contingent upon local city zoning regulations and approvals. Therefore, development around station areas would not occur in an uncontrolled manner. The Build Alternatives would not result in incremental effects relative to unplanned population growth that could be compounded or increased when considered together with similar effects from other related land development projects. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact relative to population and employment growth or displacement.

### 3.18.6.13 Public Services and Recreation

Public services and recreation impacts from the Project are discussed in more detail in Section 3.13, Public Services and Recreation, and Appendix M, the Eastside Transit Corridor Phase 2 Community and Neighborhood Impacts Report. The study area for this analysis is the GSA and DSA. Several of the related land development projects would introduce new housing and commercial uses. Considered cumulatively, the increases in population and employment could require construction or expansion of new community facilities, including police facilities, fire facilities, parks, or recreational facilities, or otherwise increase the use of such facilities. Construction or expansion of these facilities could result in a cumulatively significant impact on community facilities. However, the Build Alternatives would not introduce new housing or commercial uses, directly impact such facilities, generate new users of facilities, or otherwise increase use of such facilities. The Build Alternatives would not result in incremental increases that could be compounded or increased when considered together with similar effects from other land development projects identified in **Table 3.18-2**. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, the Build Alternatives' incremental effect would not be cumulatively considerable.

### 3.18.6.14 Transportation and Traffic

Impacts on transportation and traffic are discussed in detail in Section 3.14, Transportation and Traffic, and Appendix N, the Eastside Transit Corridor Phase 2 Transportation Impacts Report. The study area is the GSA for analyses related to transit ridership and regional transportation/VMT and the DSA for other potential transportation impacts (pedestrian and bicycle impacts, and emergency access). The transportation analysis was conducted using regional growth rates which include planned growth in population and employment in Los Angeles County. As a result, the traffic volumes for the Build Alternatives represent the cumulative future condition based on the effects of regional growth on the transportation system. As described in Section 3.14 and Appendix N, future conditions are evaluated using a 2042 future conditions baseline of 2042. In this case, the projected future conditions baseline is the 2042 without Project Conditions; the projected future conditions baseline applies to the cumulative analysis. Background growth in regional population and employment is expected to continue in the future; thus, VMT is also expected to continue to grow. Increased traffic congestion would result, particularly along the major east-west and north-south arterials, such as Atlantic

Boulevard and Washington Boulevard. According to the Governor's OPR technical guidance, transit and active transportation projects, including all passenger rail, bus and BRT, and bicycle and pedestrian infrastructure projects, generally reduce VMT and are therefore anticipated to cause less than significant impacts on transportation. Accordingly, the Build Alternatives were found to reduce VMT (Table 8-17 of Section 3.14). Thus, the Build Alternatives is expected to result in reduced VMT, and the Build Alternatives' incremental effect on VMT would not be cumulatively considerable.

Operation of the Build Alternatives would not conflict with adopted regional or local policies or plans related to roadway circulation or transit. Thus, the Build Alternatives would not have a cumulative impact. The DSA consists of a dense urban environment with existing vehicle traffic; this environment produces existing concerns related to design hazards, pedestrian and bicycle safety, and fire and police protection response times. Operation of Alternative 1 and Alternative 3 with the Montebello At-Grade Option would introduce new at-grade rail and grade crossings. However, as discussed in Section 3.14 and Appendix N and identified in PM TRA-1, Metro would coordinate with fire and police protection officials when designing grade crossings to ensure that access for police and fire protection services would be maintained under Alternative 1 and Alternative 3 with the Montebello At-Grade Option. In addition, all new LRT facilities and crossings would be designed in accordance with the MRDC, including the Fire/Life Safety Criteria, to ensure safety and minimize potential hazards at all locations. Vehicular and pedestrian crossings across the at-grade portion of the alignment would be limited to intersections controlled by traffic signals. Uncontrolled mid-block vehicular crossings of tracks and mid-block left turns would not be permitted and would be physically prohibited by a curb between the roadway and at-grade guideway with a fence between the two tracks in the center of the guideway whenever feasible. Thus, Alternative 1's and Alternative 3 with the Montebello At-Grade Option's incremental effect on design hazards, pedestrian and bicycle safety, and fire and police response times would not be cumulatively considerable.

The simultaneous construction of the Build Alternatives and the related projects in the DSA, would result in a short-term significant cumulative impact to transit and traffic circulation, pedestrian and bicycle access, safety, and emergency response times during construction, related to activities in the ROW, including temporary roadway closures, lane closures, and sidewalk closures throughout the alignment. Planned roadway projects listed in **Table 3.18-2**, or other developments identified in **Section 3.18.5** directly adjacent to roadways, could require temporary lane and road closures, detours, reduction in lane widths, and reductions in speed limits, which could result in cumulative impacts on circulation patterns, pedestrian and bicycle access, safety, and limited or delayed access for emergency responders. However, similar to the Project, the related projects identified in **Section 3.18.5** would be required to undergo environmental review and implement construction management plans to reduce traffic impacts during construction. As discussed in Section 3.14, Transportation and Traffic, and Appendix N, MM TRA-1 would provide traffic control plans, designated haul routes, and a Traffic Management Plan to minimize disruption during construction of the Build Alternatives. Additionally, BMPs would be implemented as project measures to minimize impacts on transportation and traffic, safety, and emergency response times from construction (Section 3.14). Therefore, considered cumulatively with the plans and projects identified in **Section 3.18.5**, with implementation of MM TRA-1, the Build Alternatives' incremental effect on transportation and traffic circulation, pedestrian and bicycle access and safety, and emergency response times during construction would not be cumulatively considerable.

### 3.18.6.15 Tribal Cultural Resources

Tribal Cultural Resource impacts from the Project are discussed in more detail in Section 3.15, Tribal Cultural Resources, and Appendix O, the Eastside Transit Corridor Phase 2 Tribal Cultural Resources Impacts Report. For the purpose of analyzing potential impacts to TCRs, the specialized study area is the ADI, which consists of the three-dimensional limits of proposed ground disturbance, including temporary ground disturbance. Since significant buried tribal cultural resources may exist within the DSA, and it is possible that these materials could be unearthed during project excavation activities, construction of the Build Alternatives has the potential to disturb or destroy a significant tribal cultural resource. This disturbance of significant tribal cultural resources in combination with other regional development projects would result in a significant cumulative impact to tribal cultural resources. Project-level construction requires ground disturbance, including grading, excavation, and boring. Although the DSA is heavily disturbed and urbanized, some of these activities would extend into undisturbed Holocene sedimentary deposits, which have the potential to preserve buried cultural resources. However, Project mitigation measures would reduce the Project's cumulative contribution to tribal cultural resources impacts, if any such resources are found during construction, to less than significant levels. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, and with implementation of MM TCR-1 through MM TCR-3, as shown in **Table 3.18-3**, the Build Alternatives' incremental effect would not be cumulatively considerable.

### 3.18.6.16 Utilities and Service Systems

Utilities and service systems impacts from the Project are discussed in more detail in Section 3.16, Utilities and Service Systems, and Appendix F, the Eastside Transit Corridor Phase 2 Energy Conservation and Utilities/Service System Impacts Report. The study area for this analysis is the GSA and DSA. As discussed in the Section 3.16, Utilities and Service Systems, and Appendix F, the evaluation of existing utilities and service systems and future needs is inherently cumulative based on long-term regional utility demand plans and projections from utility providers. Based on the published long term plans and projections<sup>2</sup> there is no anticipated cumulative shortfall in utility service and service systems. Considered cumulatively with the plans and projects identified in **Section 3.18.5** there would not be a significant cumulative impact.

### 3.18.6.17 Growth Inducing Impacts

Growth inducing impacts from the Project are discussed in more detail in Appendix R, the Eastside Transit Corridor Phase 2 Transportation Growth Inducing Impacts Report. The study area for this analysis is the GSA and DSA. As discussed in Appendix R and also under Section 3.17, Growth Inducing Impacts, several of the related land development projects identified in **Table 3.18-2** provide new housing or commercial opportunities which would result in increases in local population and employment. However, land development projects in the DSA are subject to local city zoning regulations and approvals; therefore, the introduction of new housing or commercial opportunities would not constitute uncontrolled growth. Considered cumulatively, the Build Alternatives and the

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<sup>2</sup> Plans and projections include, but are not limited to, the Urban Water Management Plans (Metropolitan Water District, Central Basin Municipal Water District, California Water Service, Pico Water District, Suburban Water Systems, and San Gabriel Valley Water Company), the Los Angeles County Sanitation 2019 Districts Sewer System Management Plan (SSMP), the Los Angeles County Department of Public Works (LACDPW) 2018 SSMP, the LACDPW Countywide Integrated Waste Management Plan 2019 Annual Report, the California Energy Commission (CEC) 2019 Integrated Energy Policy Report, the Los Angeles Department of Water and Power (LADWP) 2016 Final Power Integrated Resource Plan, the Southern California Gas Company (SoCalGas) Aspire 2045, Sustainability and Climate Commitment to Net Zero, and the CEC 2018 California Energy Demand 2018-2030 Revised Forecast.

related land development projects would not increase development activity beyond that permitted by local jurisdictions' general plans and zoning regulations; growth inconsistent with these regulations would require discretionary approvals by local jurisdictions within the DSA. The Build Alternatives and related land development projects do not introduce new mechanisms to bypass municipal control over land development potential. Considered cumulatively with the plans and projects identified in **Section 3.18.5**, there would not be a significant cumulative impact.

## 3.18.7 Mitigation Measures

**Section 3.18.6** presents the cumulative impacts of the Project for each evaluated environmental topic and the effects of any applicable mitigation measures. Applicable mitigation measures are identified in the environmental topic's respective Eastside Transit Corridor Phase 2 Impacts Report and are listed in **Table 3.18-3**.

**Table 3.18-3. Summary of Mitigation Measure Applicability**

Mitigation Measure	Alternative 1 With Commerce MSF or Montebello MSF Site Option	Alternative 2 With Commerce MSF	Alternative 3 With Commerce MSF or Montebello MSF Site Option
<b>Aesthetics</b>			
None required	N/A	N/A	N/A
<b>Air Quality</b>			
None required	N/A	N/A	N/A
<b>Biological Resources</b>			
MM BIO-1	Applicable	N/A	N/A
MM BIO-2	Applicable	N/A	N/A
MM BIO-3	Applicable	N/A	N/A
MM BIO-4	Applicable	Applicable	Applicable
MM BIO-5	Applicable	Applicable	Applicable
MM BIO-6	Applicable	Applicable	Applicable
<b>Cultural Resources</b>			
MM CUL-1	Applicable	Applicable	Applicable
MM CUL-2	Applicable (Commerce MSF only)	N/A	Applicable (Commerce MSF only)
MM CUL-3	Applicable (Commerce MSF only)	N/A	Applicable (Commerce MSF only)
MM CUL-4	Applicable	N/A	N/A
MM CUL-5	Applicable (Commerce MSF only)	Applicable	Applicable (Commerce MSF only)
MM CUL-6	Applicable (Commerce MSF only)	Applicable	Applicable (Commerce MSF only)
MM CUL-7	Applicable	N/A	N/A

Mitigation Measure	Alternative 1 With Commerce MSF or Montebello MSF Site Option	Alternative 2 With Commerce MSF	Alternative 3 With Commerce MSF or Montebello MSF Site Option
MM CUL-8	Applicable	Applicable	Applicable
MM CUL-9	Applicable	Applicable	Applicable
<b>Energy</b>			
None required	N/A	N/A	N/A
<b>Geology, Soils, Seismicity and Paleontological Resources</b>			
MM GEO-1	Applicable	Applicable	Applicable
MM GEO-2	Applicable	Applicable	Applicable
MM GEO-3	Applicable	Applicable	Applicable
MM GEO-4	Applicable	Applicable	Applicable
<b>Greenhouse Gas Emissions</b>			
None required	N/A	N/A	N/A
<b>Hazards and Hazardous Materials</b>			
MM HAZ-1	Applicable	Applicable	Applicable
MM HAZ-2	Applicable	Applicable	Applicable
MM HAZ-3	Applicable	Applicable	Applicable
MM HAZ-4	Applicable	Applicable	Applicable
MM HAZ-5	Applicable	Applicable	Applicable
<b>Hydrology and Water Quality</b>			
MM HWQ-1	Applicable	N/A	N/A
MM HWQ-2	Applicable	N/A	N/A
MM HAZ-2	Applicable	Applicable	Applicable
MM HAZ-3	Applicable	Applicable	Applicable
<b>Land Use and Planning</b>			
None required	N/A	N/A	N/A
<b>Noise and Vibration</b>			
MM NOI-1	Applicable	Applicable	Applicable
MM NOI-2	Applicable	Applicable	Applicable
MM NOI-3	Applicable	Applicable	Applicable
MM NOI-4	Applicable	Applicable	Applicable
MM NOI-5	Applicable	Applicable	Applicable
MM NOI-6	Applicable	Applicable	Applicable
MM NOI-7	Applicable	Applicable	Applicable
MM NOI-8	Applicable	Applicable	Applicable
MM NOI-9	Applicable	Applicable	Applicable
MM NOI-10	Applicable	Applicable	Applicable

Mitigation Measure	Alternative 1 With Commerce MSF or Montebello MSF Site Option	Alternative 2 With Commerce MSF	Alternative 3 With Commerce MSF or Montebello MSF Site Option
MM NOI-11	Applicable	Applicable	Applicable
MM NOI-12	Applicable	Applicable	Applicable
MM NOI-13	Applicable	Applicable	Applicable
MM NOI-14	Applicable	Applicable	Applicable
MM NOI-15	Applicable	Applicable	Applicable
<b>Population and Housing</b>			
None required	N/A	N/A	N/A
<b>Public Services and Recreation</b>			
None required	N/A	N/A	N/A
<b>Transportation and Traffic</b>			
MM TRA-1	Applicable	Applicable	Applicable
<b>Tribal Cultural Resources</b>			
MM TCR-1	Applicable	Applicable	Applicable
MM TCR-2	Applicable	Applicable	Applicable
MM TCR-3	Applicable	Applicable	Applicable
<b>Utilities and Service and Systems</b>			
None required	N/A	N/A	N/A
<b>Growth Inducing Impacts</b>			
None required	N/A	N/A	N/A

### 3.18.8 Significance After Mitigation

Section 3.18.6 presents the cumulative impacts of the Project for each evaluated environmental topic and the effects of any applicable mitigation measures. Applicable mitigation measures are detailed in the environmental topic’s respective EIR sections and Eastside Transit Corridor Phase 2 Impacts Reports and are listed by environmental topic in **Table 3.18-3**. A summary of cumulative impacts for each Build Alternative after the implementation of applicable mitigation measures is presented in **Table 3.18-4**.

**Table 3.18-4. Summary of Cumulative Impacts Determinations With Implementation of Mitigation**

Environmental Topic	Alternative 1 With Commerce MSF or Montebello MSF Site Option	Alternative 2 With Commerce MSF	Alternative 3 With Commerce MSF or Montebello MSF Site Option
Aesthetics	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact
Air Quality	Project Contribution Not Cumulatively Considerable without Mitigation	Project Contribution Not Cumulatively Considerable without Mitigation	Project Contribution Not Cumulatively Considerable without Mitigation
Biological Resources	Project Contribution Not Cumulatively Considerable after Mitigation	Project Contribution Not Cumulatively Considerable after Mitigation	Project Contribution Not Cumulatively Considerable after Mitigation
Cultural Resources	<b>Project Contribution Cumulatively Considerable after Mitigation (Commerce MSF site option only)</b>	<b>Project Contribution Cumulatively Considerable after Mitigation</b>	<b>Project Contribution Cumulatively Considerable after Mitigation (Commerce MSF site option only)</b>
Energy	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact
Geology, Soils, Seismicity and Paleontological Resources	<b>Project Contribution Cumulatively Considerable after Mitigation</b>	<b>Project Contribution Cumulatively Considerable after Mitigation</b>	<b>Project Contribution Cumulatively Considerable after Mitigation</b>
Greenhouse Gas Emissions	Project Contribution Not Cumulatively Considerable without Mitigation	Project Contribution Not Cumulatively Considerable without Mitigation	Project Contribution Not Cumulatively Considerable without Mitigation
Hazardous Materials	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact
Hydrology and Water Quality	Project Contribution Not Cumulatively Considerable after Mitigation	Project Contribution Not Cumulatively Considerable after Mitigation	Project Contribution Not Cumulatively Considerable after Mitigation
Land Use and Planning	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact
Noise and Vibration	Project Contribution Not Cumulatively Considerable after Mitigation	Project Contribution Not Cumulatively Considerable after Mitigation	Project Contribution Not Cumulatively Considerable after Mitigation
Population and Housing	Project Contribution Not Cumulatively Considerable without Mitigation	Project Contribution Not Cumulatively Considerable without Mitigation	Project Contribution Not Cumulatively Considerable without Mitigation

Environmental Topic	Alternative 1 With Commerce MSF or Montebello MSF Site Option	Alternative 2 With Commerce MSF	Alternative 3 With Commerce MSF or Montebello MSF Site Option
Public Services and Recreation	Project Contribution Not Cumulatively Considerable without Mitigation	Project Contribution Not Cumulatively Considerable without Mitigation	Project Contribution Not Cumulatively Considerable without Mitigation
Transportation and Traffic	Project Contribution Not Cumulatively Considerable after Mitigation	Project Contribution Not Cumulatively Considerable after Mitigation	Project Contribution Not Cumulatively Considerable after Mitigation
Tribal Cultural Resources	Project Contribution Not Cumulatively Considerable after Mitigation	Project Contribution Not Cumulatively Considerable after Mitigation	Project Contribution Not Cumulatively Considerable after Mitigation
Utilities and Service Systems	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact
Growth Inducing	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact	NA - No Significant Cumulative Impact

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