

# Appendix F Air Quality Impacts Report

## EASTSIDE TRANSIT CORRIDOR PHASE 2



# Air Quality Impacts Report

**May 2026**

Prepared for:

Charlene Lee Lorenzo, Director  
Nick Hernandez, Transportation Program Specialist  
Federal Transit Administration  
Region 9 Office  
888 South Figueroa Street, Suite 440  
Los Angeles, CA 90017-5467

and

Los Angeles County Metropolitan Transportation Authority  
One Gateway Plaza  
Los Angeles, CA 90012  
Project Email: [eastsidephase2@metro.net](mailto:eastsidephase2@metro.net)  
Phone: 213-922-3012

Prepared by:  
CDM Smith/AECOM Joint Venture  
600 Wilshire Boulevard, Suite 750  
Los Angeles, CA 90017

# Table of Contents

1.0	Introduction .....	1
2.0	Project Alternatives.....	2
2.1	Project Setting.....	2
2.2	Project Description.....	2
2.2.1	Guideway Alignment .....	5
2.2.1.1	Traffic Circulation Changes.....	7
2.2.2	Proposed Stations.....	8
2.2.3	Guideway and System Facilities .....	12
2.2.4	Maintenance and Storage .....	13
2.2.4.1	Maintenance and Storage Facility (Sites 1, 2, and 3) .....	13
2.2.5	Construction .....	17
2.2.6	Operations.....	18
2.3	No Build Alternative.....	19
3.0	Regulatory Framework.....	20
3.1	Federal .....	20
3.1.1	Clean Air Act .....	20
3.1.1.1	Transportation Conformity.....	23
3.1.1.2	Mobile Source Air Toxics .....	24
3.2	State .....	24
3.3	Regional and Local .....	24
3.3.1	Southern California Association of Governments .....	25
3.3.2	South Coast Air Quality Management District .....	25
3.3.2.1	Rule 403 – Fugitive Dust.....	26
3.3.2.2	Rule 1113 – Architectural Coatings .....	27
3.3.3	Los Angeles County Metropolitan Transportation Authority.....	27
3.3.3.1	Construction Demolition Debris Recycling and Reuse Policy.....	27
3.3.4	Los Angeles County.....	27
3.3.5	City of Commerce .....	27
3.3.6	City of Montebello.....	28
4.0	Methodology.....	29
4.1	Operations .....	29
4.1.1	Project-Level Conformity Assessment.....	30
4.1.1.1	Conforming RTP and FTIP .....	31
4.1.1.2	Hot-Spots .....	31
4.1.1.3	Operational Emissions .....	31
4.2	Construction.....	32
4.2.1.1	Hot-Spots.....	34
4.2.1.2	Construction Emissions .....	34

5.0	Affected Environment .....	36
5.1	Air Quality Study Area .....	36
5.2	Existing Conditions .....	36
5.2.1	Climate and Atmospheric Conditions .....	36
5.2.2	Existing Air Quality Conditions .....	37
5.2.2.1	Monitoring Data – Criteria Pollutants .....	37
5.2.2.2	Hot-Spots .....	39
5.2.2.3	Existing Operational Emissions .....	40
6.0	Environmental Consequences .....	42
6.1	No Build Alternative .....	42
6.1.1	Operational Impacts .....	42
6.1.1.1	Conforming RTP and FTIP .....	42
6.1.1.2	Hot-Spots .....	42
6.1.1.3	Regional Emissions .....	43
6.1.2	Construction .....	44
6.2	Atlantic to Greenwood Alternative .....	44
6.2.1	Operational Impacts .....	46
6.2.1.1	Conforming RTP and FTIP .....	46
6.2.1.2	Hot-Spots .....	46
6.2.1.3	Emissions .....	47
6.2.2	Construction .....	50
6.2.2.1	Regional Emissions .....	50
6.2.2.2	Localized Impacts to Sensitive Land Uses .....	52
7.0	Project Measures and Mitigation Measures .....	54
7.1	Project Measures .....	54
7.2	Mitigation Measures .....	54
8.0	Preparers Qualifications .....	55
9.0	References Cited .....	56

## Tables

Table 3.1. National and California Ambient Air Quality Standards.....	21
Table 3.2. Characteristics and Health Effects of Criteria Pollutants .....	22
Table 3.3. Federal and State Attainment Status .....	23
Table 4.1. SCAQMD Regional Operational Air Quality Significance Thresholds .....	32
Table 4.2. SCAQMD Regional Construction Air Quality Significance Thresholds.....	35
Table 4.3. SCAQMD Localized Significance Thresholds for Construction .....	35
Table 5.1. Summary of Pollutant Monitoring Data Near the Study Area .....	37
Table 5.2. Existing Conditions – Regional Traffic Emissions.....	40
Table 5.3. Existing Conditions – Regional Total Operational Emissions .....	41
Table 6.1. No Build Alternative – Regional Total Operational Emissions (2050) .....	43
Table 6.2. Build Alternative without MSF – Total Operational Emissions .....	48
Table 6.3. Build Alternative with MSF – Total Operational Emissions.....	49
Table 6.4. Build Alternative without MSF – Regional Daily Construction Emissions .....	50
Table 6.5. Build Alternative with MSF Site 1 – Regional Daily Construction Emissions.....	51
Table 6.6. Build Alternative with MSF Site 2 – Regional Daily Construction Emissions.....	51
Table 6.7. Build Alternative with MSF Site 3 – Regional Daily Construction Emissions.....	52
Table 6.8. Build Alternative without MSF – Localized Daily Construction Emissions .....	52

## Figures

Figure 2.1. Study Area.....	3
Figure 2.2. Study Area Close-up.....	4
Figure 2.3. Maravilla Crossover Exhibit.....	6
Figure 2.4. Conceptual 3rd Street Modifications.....	6
Figure 2.5. Atlantic/Pomona Station Conceptual Site Plan.....	9
Figure 2.6. Atlantic/Whittier Station Conceptual Site Plan.....	10
Figure 2.7. Commerce/Citadel Station Conceptual Site Plan.....	11
Figure 2.8. Greenwood Station Conceptual Site Plan .....	12
Figure 2.9. MSF Site Options .....	14
Figure 2.10. MSF Site 1.....	15
Figure 2.11. MSF Site 2.....	16
Figure 2.12. MSF Site 3.....	17
Figure 5.1. Ten-Year Ozone Concentration Trends.....	39
Figure 6.1. National Mobile Source Air Toxics Projected Trends (2020 – 2060) .....	45

## Attachments

Attachment A – Construction Emissions Calculations

Attachment B – Operational Emission Calculations

Attachment C – CO Hot-Spots Data

## Acronyms

2024 RTP	Connect SoCal 2024-2050 Regional Transportation Plan
AB	Assembly Bill
ADA	Americans with Disabilities Act
am	Ante Meridiem
AQMP	Air Quality Management Plan
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emission Estimator Model
CARB	California Air Resources Board
CBM18	Corridor Based Model 2018
CCAA	California Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
COOP	Cooperative Observer Network
EA	Environmental Assessment
EMFAC	Emission Factor Model for On-road Motor Vehicles
°F	Fahrenheit
FHWA	Federal Highway Administration
FLM	First/Last Mile
FR	Federal Register
FTA	Federal Transit Administration

---

FTIP	Federal Transportation Improvement Program
LACMTA	Los Angeles County Metropolitan Transportation Authority
LRT	light rail transit
LRTP	Long Range Transportation Plan
LRV	light rail vehicle
Metro	Los Angeles County Metropolitan Transportation Authority
mg/m <sup>3</sup>	milligrams per cubic meter
MOVES3	Motor Vehicle Emissions Simulator Version 3
MOW	Maintenance of Way
MRDC	Metro Rail Design Criteria
MSAT	mobile source air toxics
MSF	maintenance and storage facility
µg/m <sup>3</sup>	micrograms per cubic meter
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NS	no standard
O <sub>3</sub>	ozone
OCS	overhead catenary system
Pb	lead
PM <sub>10</sub>	inhalable particulate matter or particulate matter with an aerodynamic diameter less than or equal to 10 micrometers
PM <sub>2.5</sub>	fine particulate matter or particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers
pm	Post Meridiem

---

ppmv	parts per million by volume
Project	Eastside Transit Corridor Phase 2 Project
ROW	right-of-way
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
SoCAB	South Coast Air Basin
SO <sub>x</sub>	sulfur oxides
TBM	tunnel boring machine
TPSS	traction power substation
tpy	tons per year
USEPA	U.S. Environmental Protection Agency
VMT	vehicle miles traveled
VOC	volatile organic compounds
WRCC	Western Regional Climate Center

## 1.0 INTRODUCTION

This impacts report discusses the Eastside Transit Corridor Phase 2 Project setting in relation to air quality. It briefly summarizes the Project (Atlantic to Greenwood Alternative [Build Alternative] and the No Build Alternative), describes the regulatory setting and affected environment, and evaluates the environmental consequences of the alternatives.

The Build Alternative consists of 4.7 miles of reconfigured and new light rail transit (LRT) guideway to extend the Los Angeles County Metropolitan Transportation Authority (LACMTA/Metro) E Line east from the current terminus at Atlantic Boulevard in East Los Angeles to an at-grade terminal station at the Greenwood station in the City of Montebello.

The area of analysis (Study Area) is in eastern Los Angeles County and includes portions of the unincorporated community of East Los Angeles and the Cities of Commerce and Montebello. It has a diverse mix of land uses, including single- and multi-family residences, commercial and retail uses, industrial development, parks and recreational, health and medical uses, educational institutions, and vacant land. The Build Alternative would traverse densely populated, low-income, and heavily transit dependent communities with major activity centers within the Gateway Cities subregion of Los Angeles County.

## 2.0 PROJECT ALTERNATIVES

### 2.1 Project Setting

This Impacts Report evaluates potential environmental effects of the Build Alternative and No Build Alternative. The Study Area for the Build Alternative generally includes the area within a 0.5-mile to 2-mile radius from the Build Alternative's guideway's centerline.<sup>1</sup> The Study Area varies in distance from the alignment to encompass the area of localized effects and also include nearby boundaries of Cities and census tracts that are considered in the evaluation of topics such as land use and growth. It primarily encompasses a portion of the communities located along the Build Alternative alignment: the Cities of Commerce and Montebello and unincorporated East Los Angeles. A small portion of Monterey Park is located on the northwestern edge. **Figure 2.1** shows the Study Area boundaries.

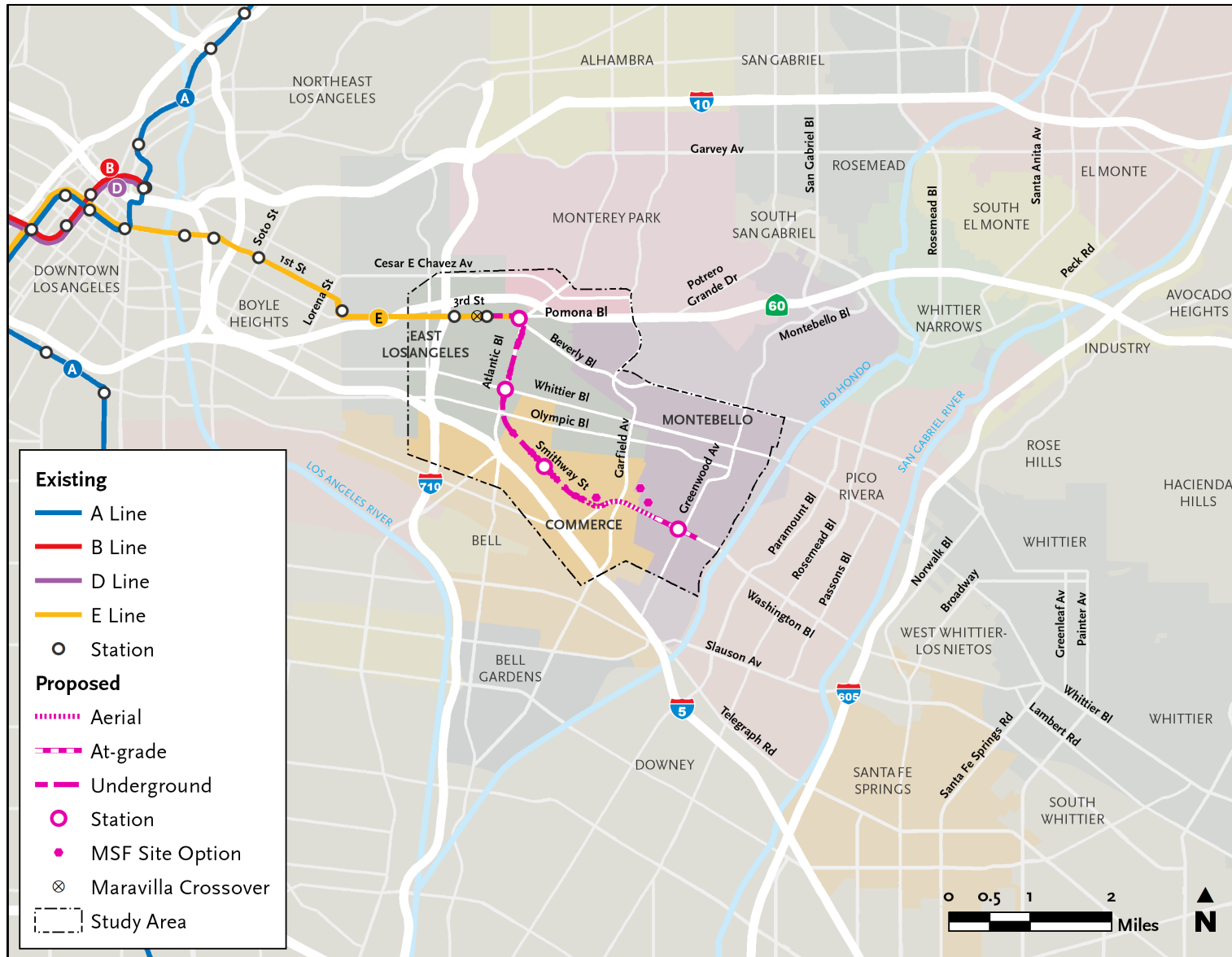
As discussed in **Section 1.0**, the Study Area and surrounding region serve a diverse mix of uses. Major activity centers include East Los Angeles Community College, recreation areas, major retail and commercial centers (e.g., Citadel Outlets and the Historic Whittier Boulevard Shopping District), and medical centers. The Study Area is densely populated with low-income and transit dependent communities. In addition, many industrial and commercial properties utilize the arterials and freeways within the region for logistical freight activities.

### 2.2 Project Description

The Build Alternative is an electric-powered LRT service extension in eastern Los Angeles County. The Build Alternative would consist of 4.7 miles of reconfigured and new LRT guideway to extend the Metro E Line east from the current terminus at Atlantic Boulevard to an at-grade terminal station at the Greenwood station in the City of Montebello. The 4.7 miles would include reconfiguration of 0.4 miles of existing track for a transition to a new 4.3-mile extension. The configuration includes an approximately 3.1-mile underground guideway, 0.9-mile aerial guideway, and 0.7-mile at-grade guideway. It also includes a relocated underground Atlantic/Pomona station and three new stations. As discussed in greater detail below, the Build Alternative also includes guideway and system facilities to support vehicle operations, such as overhead catenary systems (OCS), radio communications, and train control houses that would be constructed along the alignment, a modification to existing tracks west of the proposed alignment extension (Maravilla Crossover); and a maintenance and storage facility (MSF). Three site options for the MSF are being evaluated based on project requirements, constructability, environmental impacts, operational efficiency, and compatibility with surrounding land uses, but only one would be selected. Of the evaluated MSF sites, two are in the City of Montebello (MSF Sites 1 and 2) and one is in the City of Commerce (MSF Site 3). **Figure 2.2** shows a close-up of the Study Area and the alignment with the proposed stations and MSF site options.

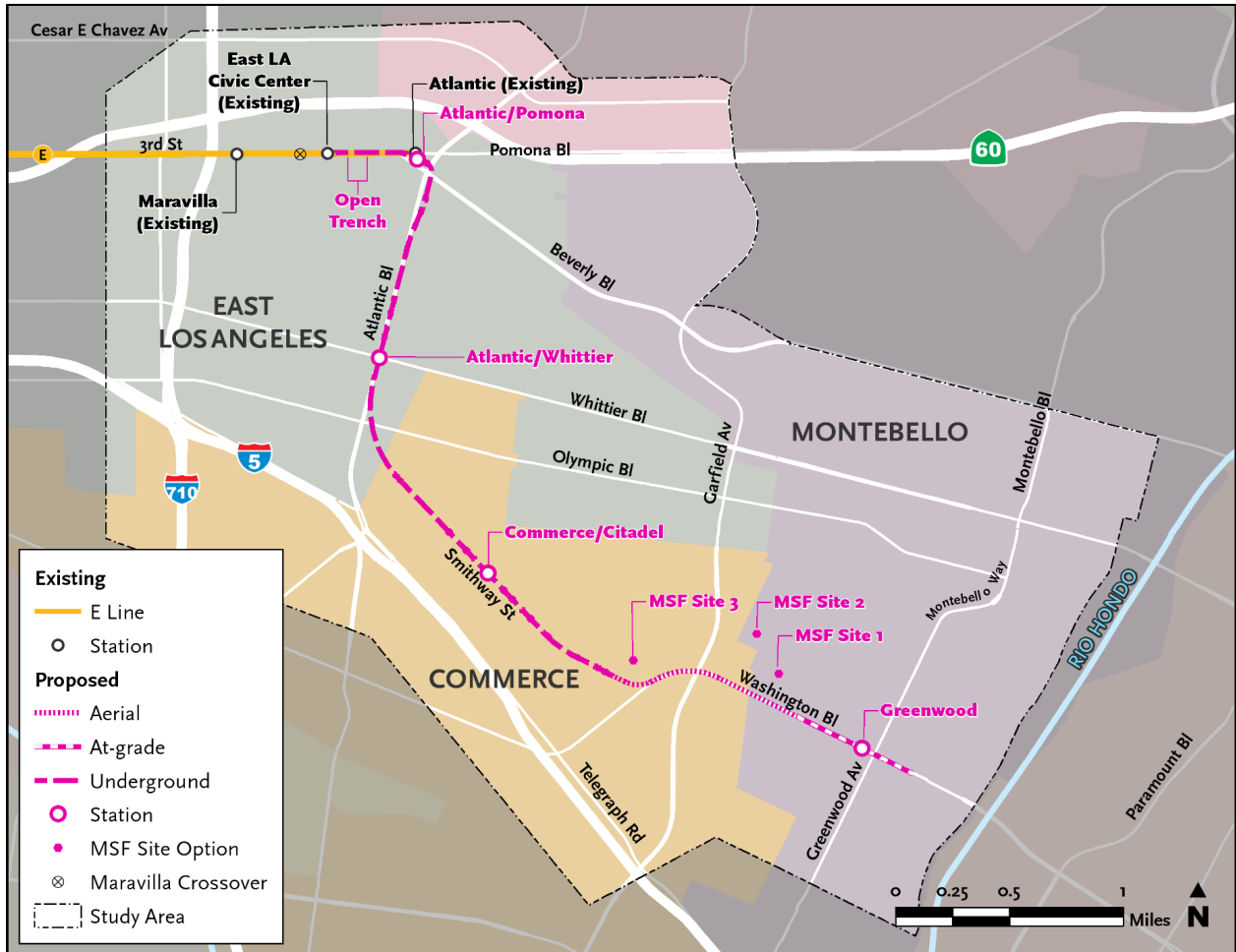
---

<sup>1</sup> According to the Federal Transit Administration (FTA), a guideway refers to a public transportation facility using and occupying a separate right-of-way (ROW) or rail line for the exclusive use of public transportation (FTA 2025). The Build Alternative guideway is the proposed rail line, including the underground, aerial, and at-grade configurations. The centerline refers to the center line between the guideway LRT tracks or structures that supports, contains, and physically guides the LRT vehicles.



Source: Metro; CDM Smith/AECOM JV 2026.

Figure 2.1. Study Area



Source: Metro; CDM Smith/AECOM JV 2026.

Figure 2.2. Study Area Close-up

## 2.2.1 Guideway Alignment

The Build Alternative includes revisions to the existing Metro E Line tracks west of the existing East Los Angeles Civic Center Station and a new guideway extension that begins east of the station in East Los Angeles (unincorporated Los Angeles County).

The existing tracks would be reconfigured to install a new at-grade double crossover<sup>2</sup> on 3rd Street between Arizona Avenue and Kern Avenue as shown in **Figure 2.3**. The new crossover, referred to as the Maravilla Crossover, is required to meet operational requirements of the guideway extension. Construction of the Maravilla Crossover would involve a minor shift of the existing track to the east and roadway resurfacing within the existing right-of-way (ROW). A train control house with electric power switches and auxiliary power room would be constructed at the vacant lot owned by Metro on the south side of 3rd Street between South Arizona Avenue and South Mednik Avenue (see **Figure 2.3**). This site is adjacent to an existing traction power substation (TPSS) that is surrounded by a block wall. The block wall would be extended to include the train control house site.

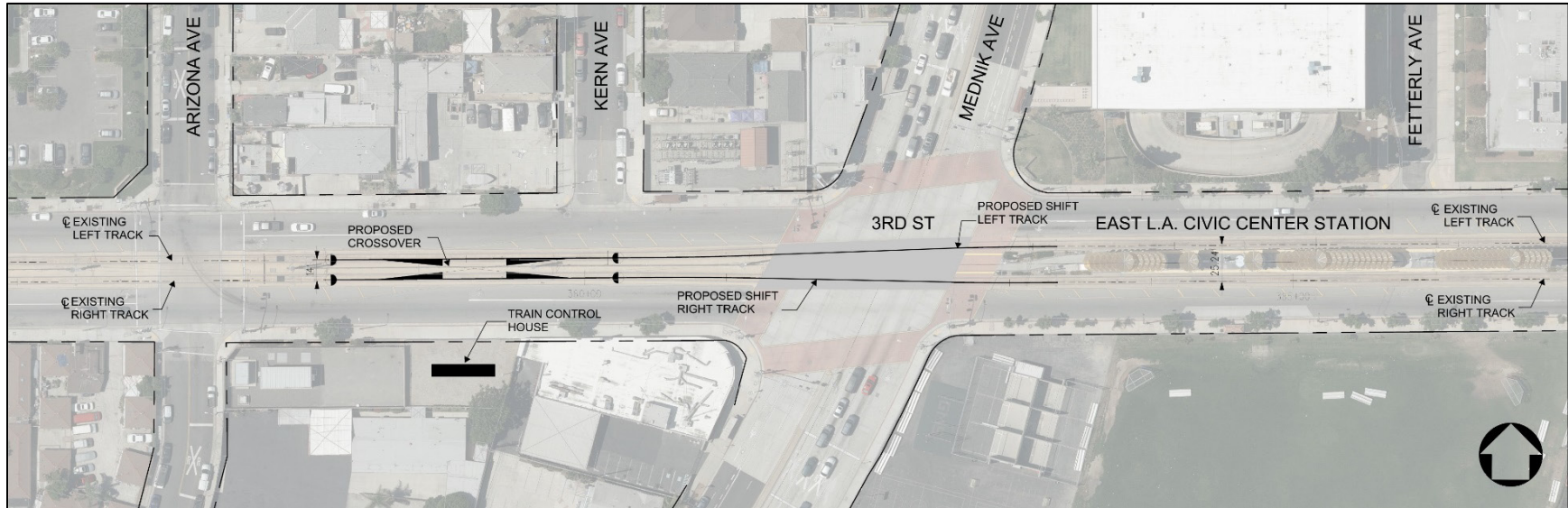
The new guideway would begin with a transition from the existing at-grade guideway to an underground guideway within an open trench extending from east of Civic Center Way to east of La Verne Avenue as shown in **Figure 2.4**. The trench would eliminate vehicle and pedestrian crossings of 3rd Street at La Verne Avenue and therefore, left turns to and from La Verne Avenue would be prohibited during construction and operation of the Build Alternative. Left turns would also be eliminated at Civic Center Way; however, the pedestrian crosswalk at this location would remain. To facilitate traffic movement to and from La Verne Avenue and Civic Center Way, eastbound traffic on 3rd Street would be allowed to make a U-turn on Wood Avenue to reverse direction. Westbound traffic would continue to be allowed to make a U-turn at Mednick Avenue to reverse direction. Additionally, a new access road would be constructed to allow Sheriff's Department vehicles to turn left from the Sheriff's Department driveway onto 3rd Street. A new high-visibility crosswalk would provide pedestrian access across 3rd Street between the existing pedestrian access at Civic Center Way and Woods Avenue.

Once underground, the guideway would follow 3rd Street to the proposed relocated underground Atlantic/Pomona station east of Beverly Boulevard. The underground guideway would then turn south, running east of Atlantic Boulevard until south of 4th Street and then underneath Atlantic Boulevard to approximately Verona Street and Olympic Boulevard. Then the underground guideway would curve southeast, running under Smithway Street near the Citadel Outlets in the City of Commerce.

After crossing Saybrook Avenue, the guideway would transition from underground to an aerial configuration. If MSF Site 1 or 3 is selected, the aerial guideway would continue east and merge into the center of Washington Boulevard at Gayhart Street. However, if MSF Site 2 is selected, the aerial guideway would continue east immediately to the north of Washington Boulevard then merge into the center of Washington Boulevard east of Garfield Avenue.

---

<sup>2</sup> Track crossovers allow a train to reverse direction and use adjacent track to continue operation. The Build Alternative includes the Maravilla Crossover and crossovers along the alignment extension.



Source: Metro; HNTB/Cordoba 2026.

Figure 2.3. Maravilla Crossover Exhibit



Source: HNTB/Cordoba 2026.

Figure 2.4. Conceptual 3rd Street Modifications

Under all three MSF site options, the aerial tracks would transition to an at-grade configuration between Vail Avenue and Maple Avenue. The alignment would remain at-grade in the center of Washington Boulevard until the intersection of Washington Boulevard and Greenwood Avenue in the City of Montebello, where it would shift slightly south of the center of Washington Boulevard. Revenue service would terminate at Greenwood station to the west of Greenwood Avenue and tail tracks would continue further east to Montebello Boulevard to allow for the LRT to reverse direction. The guideway and trackwork design would comply with the Metro Rail Design Criteria (MRDC).

### 2.2.1.1 Traffic Circulation Changes

Left turns would be eliminated at the intersection of Washington Boulevard and Maple Avenue where the at-grade alignment begins just west of the intersection. At the intersection of Washington Boulevard and Montebello Boulevard, two options for the guideway are being considered:

- Montebello Boulevard Option 1 (no left turn) – This option would remove left-turn pockets on Washington Boulevard and eliminate left turns onto Montebello Boulevard from both directions. Only through traffic movement and right turns would be allowed from Washington Boulevard at this intersection.
- Montebello Boulevard Option 2 (left-turn pocket) – This option would retain left-turn pockets on Washington Boulevard for traffic in both directions. This option would require widening Washington Boulevard and involves additional property acquisitions.

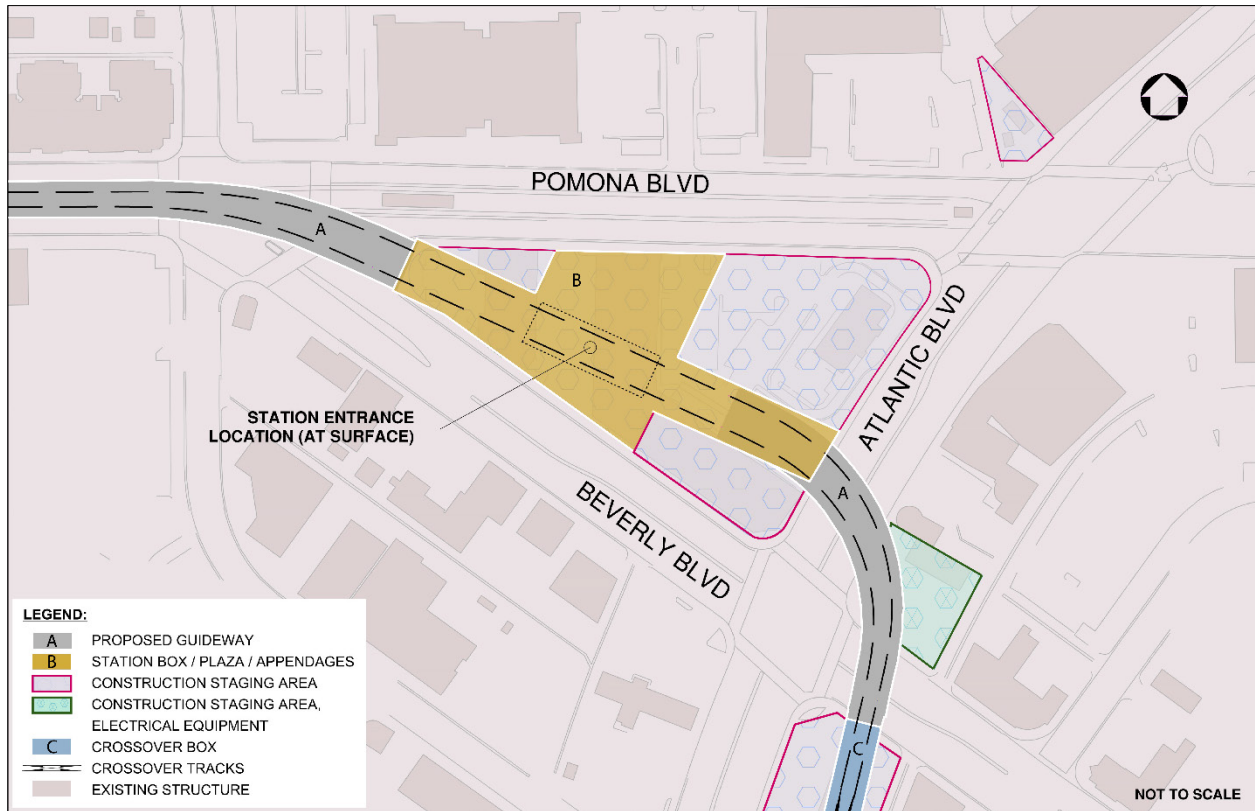
Additional changes to traffic circulation include a reduction in the number of traffic lanes on eastbound 3<sup>rd</sup> Street from two lanes to one between Civic Center Way and the new Sheriff's Department access road to accommodate the open trench and on Washington Boulevard between Saybrook Avenue and the eastern terminus from three lanes to two lanes to allow for the placement of columns to support the aerial guideway and for the right-of-way needs of the at-grade guideway. Unsignalized left-turns along the at-grade guideway would be prohibited. Minor changes to lane configurations at intersections may be required to accommodate new or modified traffic circulation patterns, such as along Washington Boulevard and near the intersection of 3<sup>rd</sup> Street and Atlantic Boulevard to accommodate the trench for the transition. There may also be new traffic signals or modifications to existing traffic signals to accommodate light rail movements and traffic circulation patterns at intersections and grade crossings and to facilitate pedestrian access to and from stations. Additional changes may include access changes at selected cross streets due to at-grade or aerial crossings and driveway widening at some industrial properties along Washington Boulevard.

## 2.2.2 Proposed Stations

The following stations would be constructed under the Build Alternative:

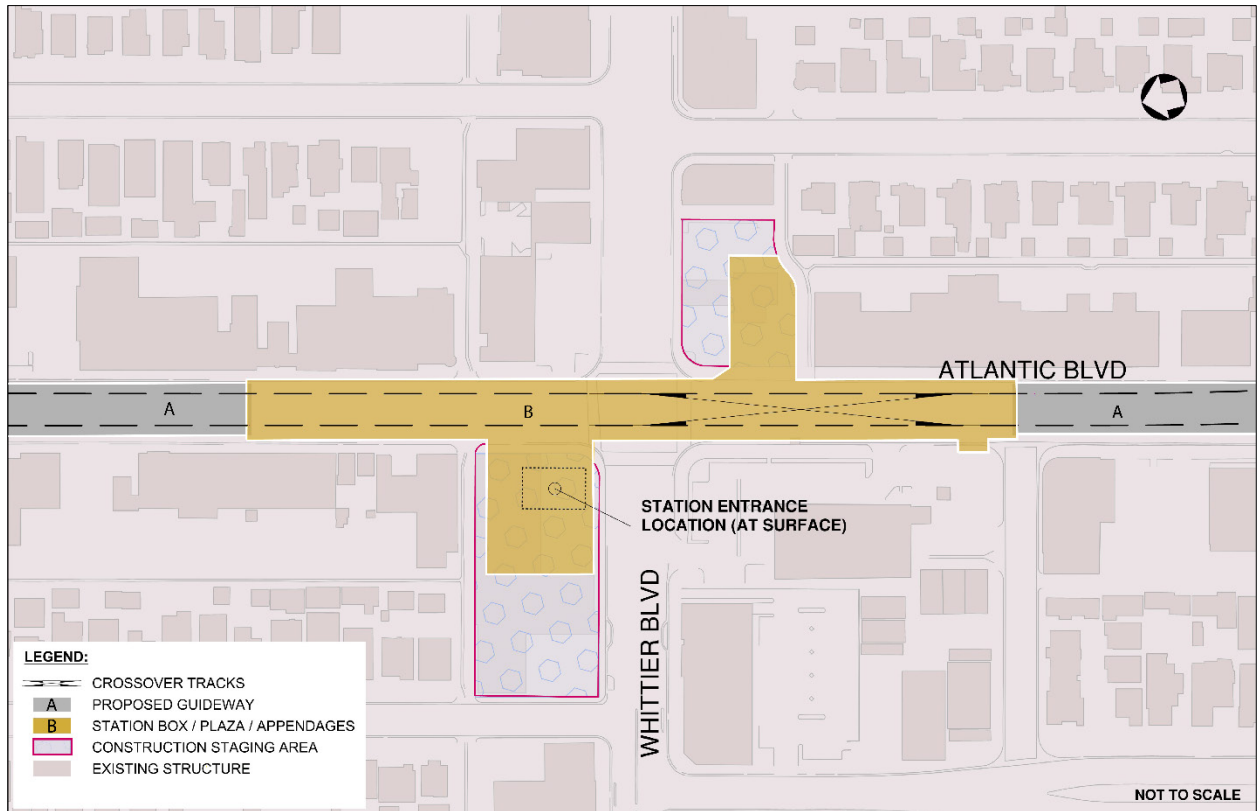
- Atlantic/Pomona – The Atlantic/Pomona station would relocate the existing at-grade Atlantic Station to an underground station with a center platform layout. This station would be located beneath the triangular parcel bounded by Atlantic Boulevard, Pomona Boulevard, and Beverly Boulevard. The existing parking structure with 280 parking spaces is located north of the 3rd Street and Atlantic Boulevard intersection would continue to serve this station. In coordination with Metro Art, efforts would be made, as feasible, to relocate the artwork from the existing Atlantic Station to the new Atlantic/Pomona station.
- Atlantic/Whittier – This station would be underground with a center platform located beneath the intersection of Atlantic and Whittier Boulevards in East Los Angeles. Parking would not be provided at this station. Access to the station would be provided via an entrance located on the northwest corner of the Whittier Boulevard and Atlantic Boulevard intersection.
- Commerce/Citadel – This station would be underground with a center platform located beneath Smithway Street near the Citadel Outlets in the City of Commerce. Parking would not be provided at this station. Access to the station would be provided via an entrance located south of Smithway Street west of Gaspar Avenue.
- Greenwood – This station would be at-grade with a center platform on Washington Boulevard located just west of Greenwood Avenue in the City of Montebello. This station would provide a surface parking facility with 270 to 370 proposed new surface parking spaces near the intersection of Greenwood Avenue and Washington Boulevard.

Conceptual station site plans are shown in **Figure 2.5** through **Figure 2.8**. Station public area designs and amenities would comply with the Systemwide Station Design Standards, Metro Art Program Policy, MRDC, and Architectural Standard and Directive Drawings. Design elements would include, but would not be limited to, station signs, entrance portal canopies at the underground stations, platform canopies at the at-grade station, plaza paving and landscaping, interior architectural finishes and furnishings, lighting, passenger telephones, sound attenuation features, customer information panels, real-time information digital screens, fare gates, fare vending machines, integrated public art, security cameras, and bike racks and lockers. Station entry portals with escalators and elevators would provide access to underground stations. Access to all stations would be compliant with the Americans with Disabilities Act (ADA) and would also have bicycle and pedestrian connections. Bicycle and pedestrian connections to the stations would comply with the Metro First/Last Mile (FLM) Guidelines and the MRDC. Details, including station area planning and urban design, would be determined during the Build Alternative's final design phase in compliance with Metro design standards and policies for Metro rail stations.



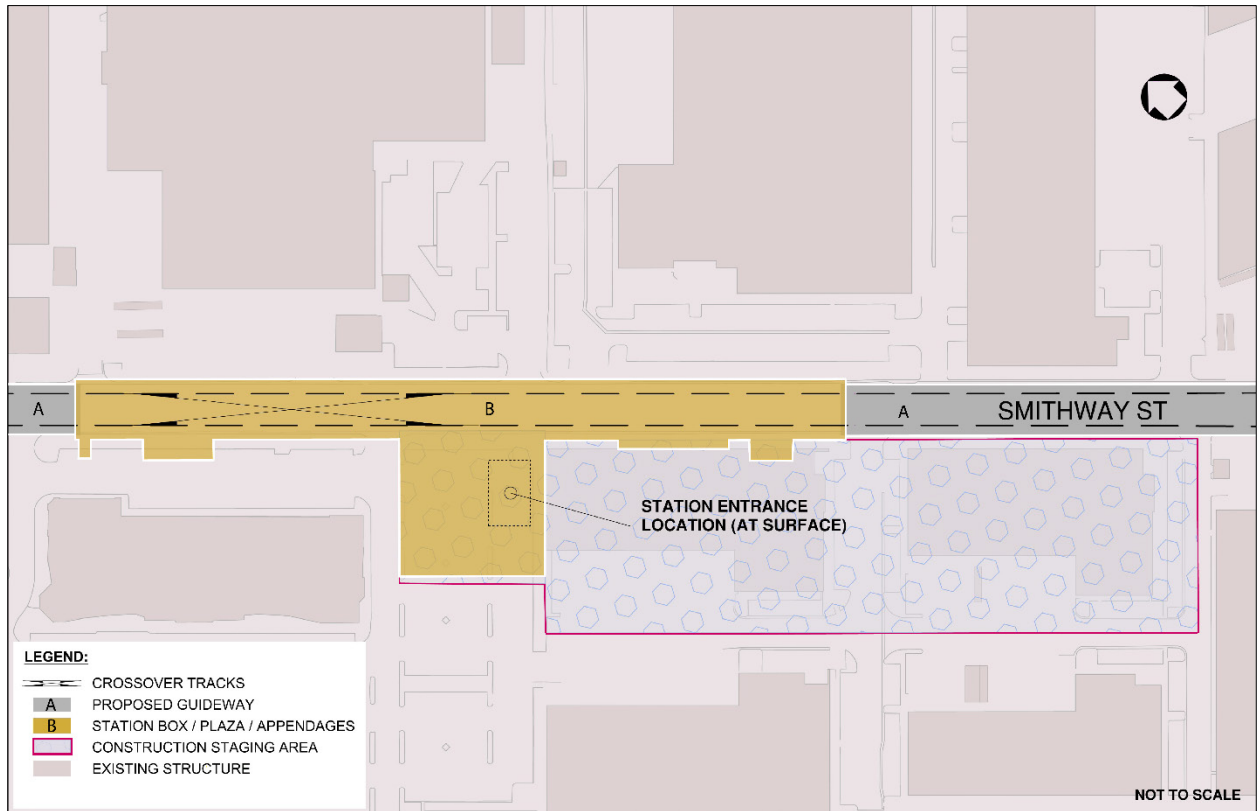
Source: Metro; HNTB/Cordoba 2026.

**Figure 2.5. Atlantic/Pomona Station Conceptual Site Plan**



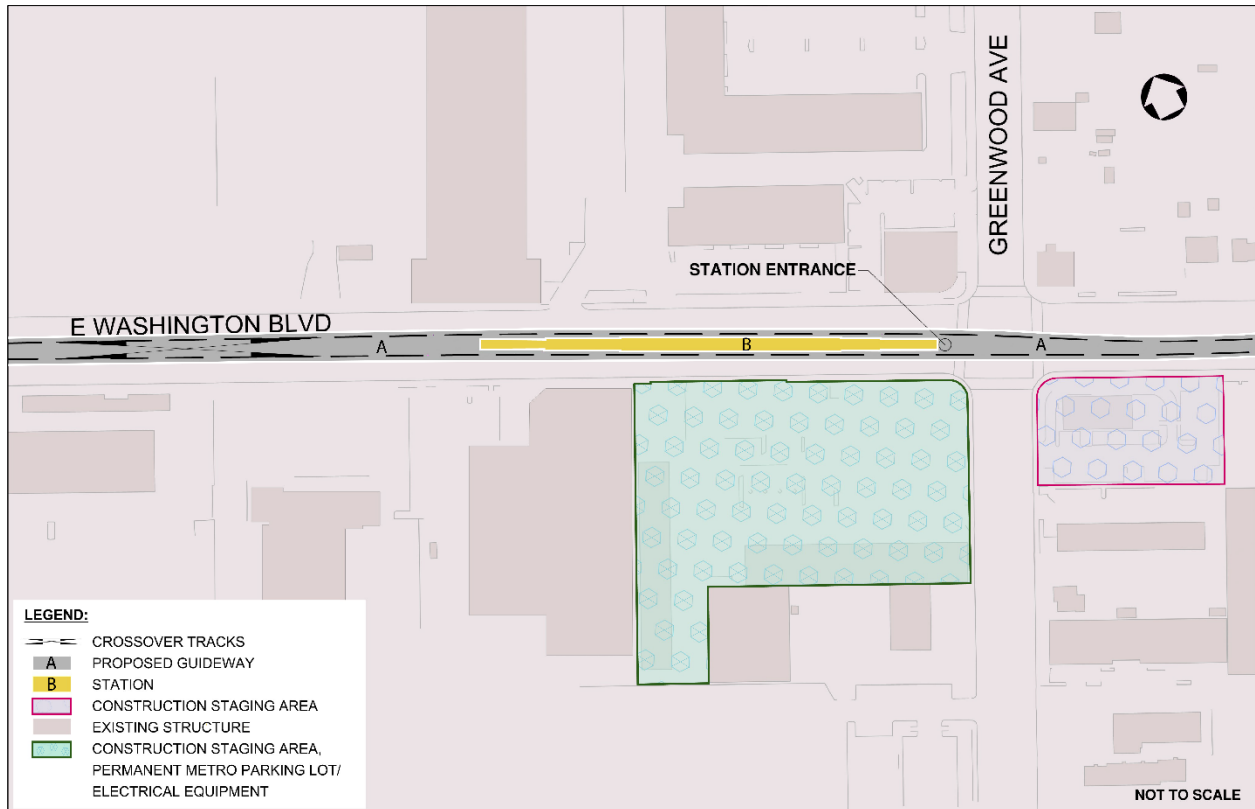
Source: Metro; HNTB/Cordoba 2026.

**Figure 2.6. Atlantic/Whittier Station Conceptual Site Plan**



Source: Metro; HNTB/Cordoba 2026.

**Figure 2.7. Commerce/Citadel Station Conceptual Site Plan**



Source: Metro; HNTB/Cordoba 2026.

**Figure 2.8. Greenwood Station Conceptual Site Plan**

## 2.2.3 Guideway and System Facilities

The Build Alternative would include additional elements to support vehicle operations, including but not limited to the OCS, tracks, crossovers, cross passages, ventilation structures, emergency fire exits, TPSS, train control houses with electric power switches and auxiliary power rooms, radio communications, an emergency generator, and the MSF. The Build Alternative would have an underground alignment of approximately 3.1 miles in length between La Verne and Saybrook Avenue. Ventilation shafts and emergency fire exits would be installed along the underground portion of the alignment as required by the current version of Metro’s Fire Life Safety Criteria. These would be located at the underground stations and adjacent to the crossover following the Atlantic/Pomona station. The Build Alternative alignment would travel along the median of the roadway for most of the route. The precise location of railroad system facilities would be determined in a subsequent design phase.

## 2.2.4 Maintenance and Storage

### 2.2.4.1 Maintenance and Storage Facility (Sites 1, 2, and 3)

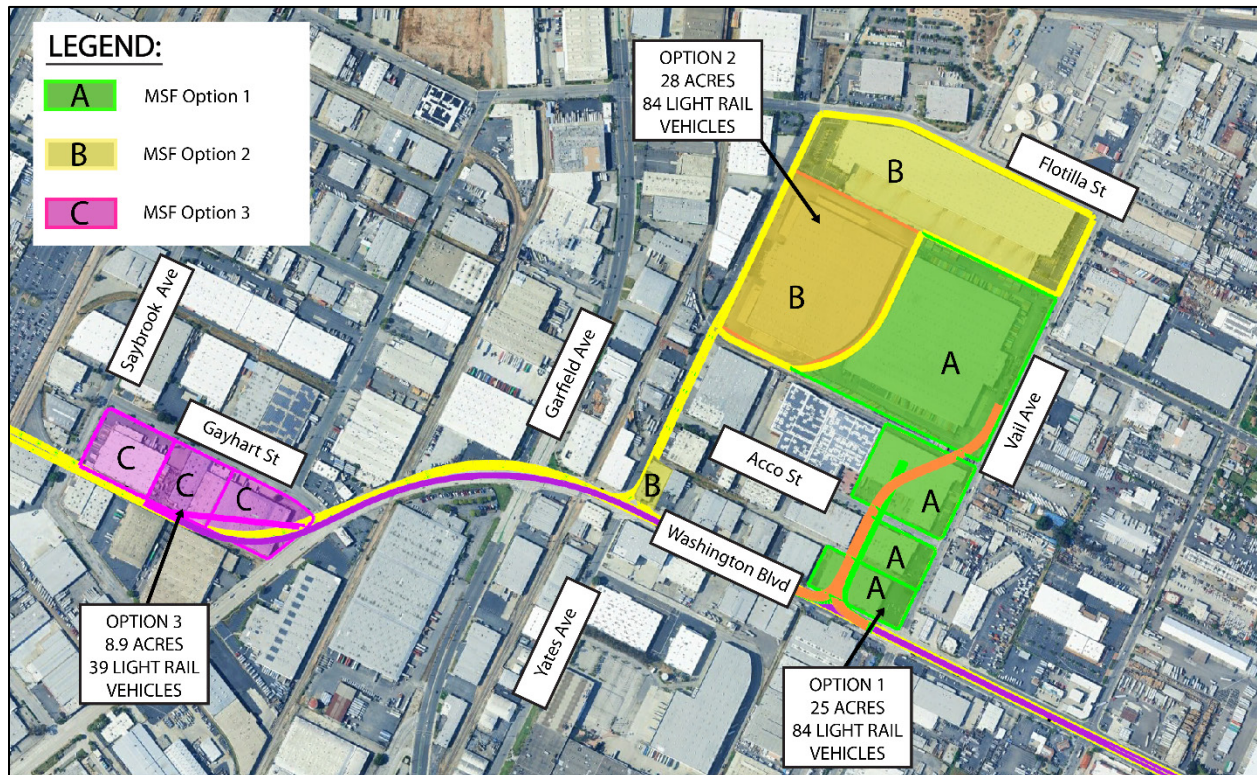
The Build Alternative would include equipment and facilities for cleaning and maintenance of rail cars and to store vehicles that are not in service. This would be supported by a new MSF that would be constructed in an industrial zone in the City of Montebello or in the City of Commerce.

Three site options for the MSF are evaluated in this report: MSF Sites 1 and 2 (25 acres and 28 acres in size, respectively) are in the City of Montebello and MSF Site 3 (9 acres in size) is in the City of Commerce. Only one of the three sites would be selected and constructed. The MSF would include equipment and facilities to clean and maintain rail cars, tracks, and other system components. The MSF would enable storage of light rail vehicles that are not in service and Metro's hi-rail service vehicles, and it would also provide office space for operation and administrative staff. MSF Sites 1 and 2 would have repair facilities and larger storage capacity as compared to MSF Site 3.

MSF Sites 1 and 2 would be north of Washington Boulevard and south of Flotilla Street. Specifically, MSF Site 1 would be west of Vail Avenue with mid-block yard lead tracks and MSF Site 2 would be west of MSF Site 1 with yard lead tracks on Yates Avenue. MSF Sites 1 and 2 would require yard lead tracks that connect to the main line at a wye junction (i.e., three-way junction). The yard lead tracks for MSF Sites 1 and 2 would connect to the mainline alignment in an aerial configuration and transition to at-grade as the track approaches the MSF.

MSF Site 3 would be located west of MSF Sites 1 and 2, at the tunnel boring machine launch (TBM) site at Gayhart Street, east of Saybrook Avenue. The tracks to the MSF would come off the mainline in the LRT ROW north of Washington Boulevard on the parcel east of Saybrook Avenue and south of Gayhart Street as the alignment transitions from an underground to an aerial configuration.

The evaluation of the MSF in this report refers to MSF Sites 1, 2, and 3. MSF Sites 1, 2, and 3 are discussed separately only when there is a difference in the analysis between the three sites. **Figure 2.9** shows the location of the three MSF site options, which are described in greater detail in the following sections.

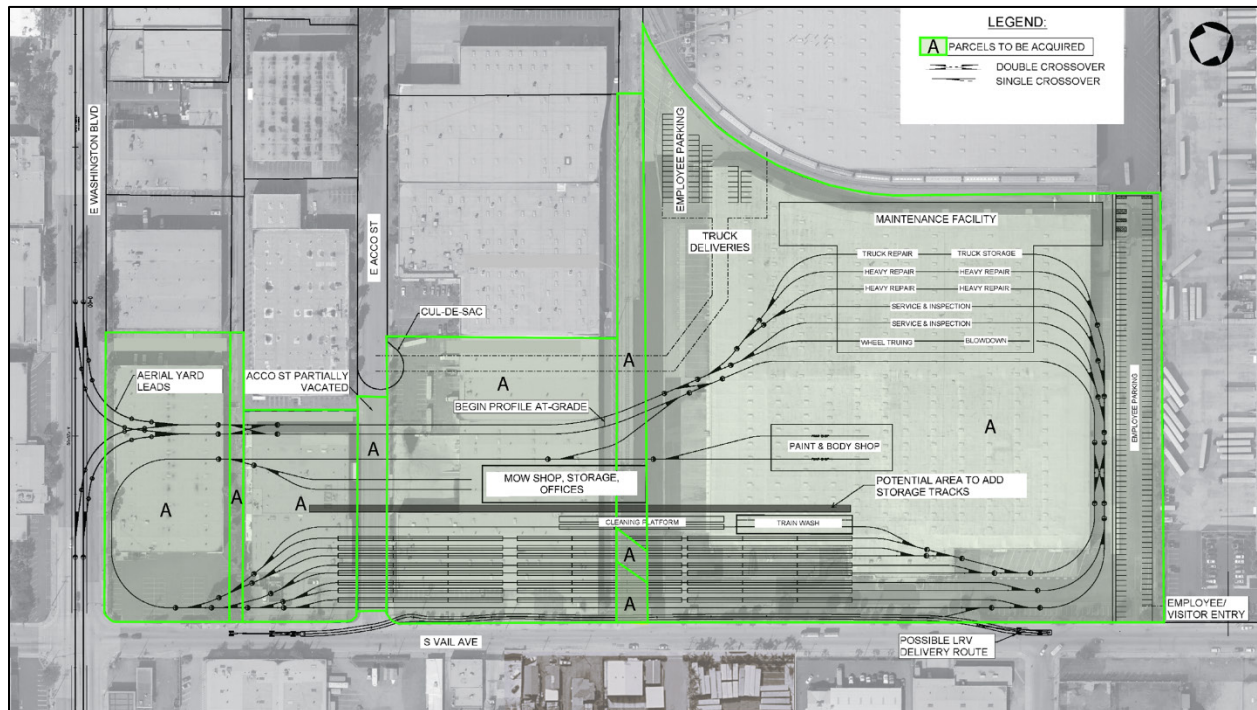


Source: HNTB/Cordoba 2026.

**Figure 2.9. MSF Site Options**

### 2.2.4.1.1 MSF Site 1: Aerial Yard Lead Tracks Located Mid-Block

MSF Site 1, shown in **Figure 2.10**, would be approximately 25 acres in size and would encompass four parcels on the west side of Vail Avenue between Flotilla Street and Washington Boulevard. The yard lead tracks to MSF Site 1 would be in an aerial configuration from Washington Boulevard, paralleling Vail Avenue, and would transition to at-grade as the track approaches the MSF. The yard lead tracks would require elimination of through-access to vehicles on Acco Street from Yates Avenue to Vail Avenue. A cul-de-sac would be provided on the westerly side of the lead tracks to ensure that access to businesses in this area is maintained from Yates Avenue. MSF Site 1 would require the full acquisition of five properties and partial acquisitions of two properties with commercial and industrial uses to accommodate the MSF and the lead tracks. A partial vacation of Acco Street would also be required. MSF Site 1 would accommodate storage of up to 84 light rail vehicles (LRV) cars and would have approximately 204 employee parking stalls (including 6 ADA parking stalls).



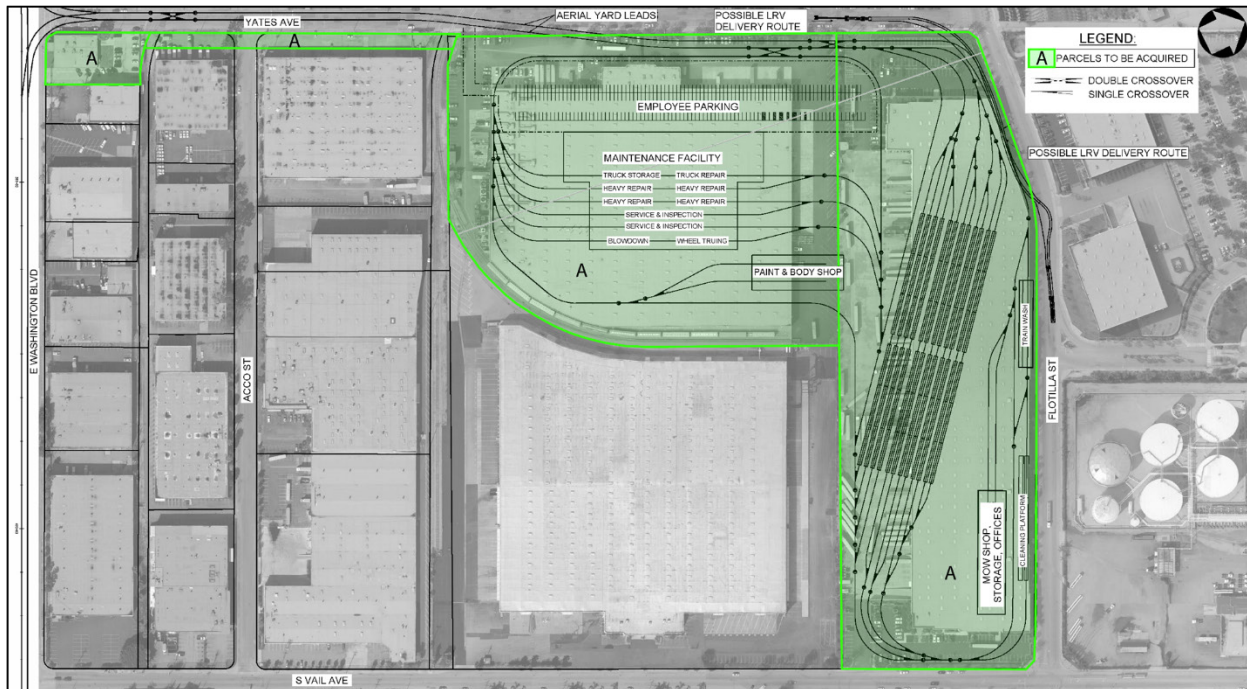
Source: Metro; HNTB/Cordoba 2026.

Key: LRV = Light Rail Vehicle; MOW = Maintenance of Way

**Figure 2.10. MSF Site 1**

### 2.2.4.1.2 MSF Site 2: Aerial Yard Lead Tracks Located along Yates Avenue

MSF Site 2, shown in **Figure 2.11**, would be approximately 28 acres in size and would encompass one parcel along the south frontage of Flotilla Street between Yates Avenue and Vail Avenue, and one adjacent parcel immediately to the south, east of Yates Avenue. Additional acreage would be needed to accommodate the yard lead tracks and associated construction staging. If MSF Site 2 is selected, the aerial guideway east of Gayhart Street would be located immediately to the north of Washington Boulevard and merge into the center median of Washington Boulevard east of Garfield Avenue. The yard lead tracks to the MSF would partially be in the City of Commerce, starting in an aerial configuration from Washington Boulevard along the easterly edge of Yates Avenue, and transitioning to at-grade as the tracks approach the MSF. Yates Avenue would retain one vehicle lane in both directions. Two lanes of traffic would be maintained in each direction along Washington Boulevard. MSF Site 2 would require full acquisition of seven parcels for the MSF and the yard lead tracks. MSF Site 2 would also require 10 partial acquisitions of properties including properties along Yates Avenue between Washington Boulevard and MSF Site 2 to accommodate the yard lead tracks and along Washington Boulevard between Gayhart Street and Yates Avenue for the mainline alignment and lead tracks. The MSF would accommodate storage of up to 84 LRV cars and would have approximately 255 employee parking stalls (7 ADA parking stalls).

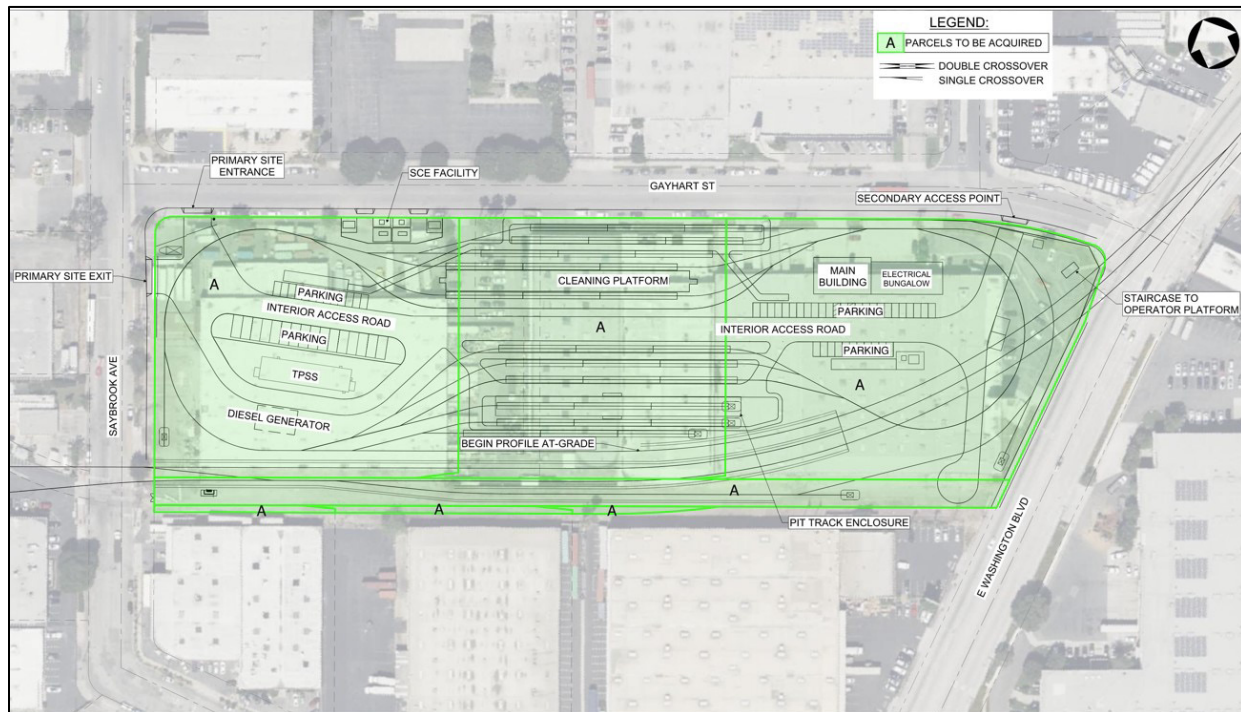

**Figure 2.11. MSF Site 2**

Source: Metro; HNTB/Cordoba 2026.

Key: LRV = Light Rail Vehicle; MOW = Maintenance of Way

### 2.2.4.1.3 MSF Site 3: Satellite Yard at Gayhart Street

MSF Site 3, shown in **Figure 2.12**, would be approximately 8.9 acres in size and would encompass three parcels south of Gayhart Street between Saybrook Avenue and Washington Boulevard in the City of Commerce. MSF Site 3 would require full acquisition of five parcels for the MSF, which would also be used for the transition from the tunnel to aerial tracks, construction staging, and the launching of the TBM. The tracks into the MSF would connect to the main line in an at-grade configuration between Saybrook Avenue and Washington Boulevard as the main line alignment transitions from underground to aerial. MSF Site 3 would accommodate storage of a minimum of 39 LRV cars and would have approximately 62 employee parking stalls (3 ADA parking stalls). MSF Site 3 would not have repair facilities.



Source: Metro; HNTB/Cordoba 2026.

Key: LRV = Light Rail Vehicle; SCE = Southern California Edison; TPSS = traction power substation

**Figure 2.12. MSF Site 3**

## 2.2.5 Construction

The Build Alternative would include the construction of an underground, aerial, and at-grade guideway for LRT. Key construction activities associated with the guideway (at-grade, aerial, underground) would include temporary roadway decking for the cut and cover sections of the underground guideway and the underground stations, tunnel boring for the remaining portions of the underground guideway, and the construction of an aerial viaduct for the aerial guideway. Additional activities would include underground and at-grade station construction, demolition, utility relocations, street improvements (such as sidewalk reconstruction and traffic signal installation), retaining walls, and LRT operating systems installation including TPSS and OCS. The Build Alternative would also include construction of a parking facility, other railroad system facilities, the Maravilla Crossover and other crossovers along the alignment, potential street widening, and the MSF. Utility relocation work would generally occur within the affected ROW and on adjacent and nearby streets.

In addition to adhering to regulatory requirements, the development of the Build Alternative would employ conventional construction methods, techniques, and equipment. All work for development of the LRT system would conform to accepted industry specifications and standards, including Best Management Practices (BMPs). Project engineering and construction would, at minimum, be completed in conformance with applicable regulations, guidelines, and criteria, including, but not limited to, Metro Rail Design Criteria, Architectural Standard and Directive Drawings, California Public Utilities Commission regulations, California Building Code, Metro Operating Rules, and Metro standard and directive drawings from other engineering disciplines as needed. Cooperation with the corridor cities and Los Angeles County would occur throughout the construction process.

Build Alternative construction is anticipated to last approximately 60 to 84 months. Construction activities for the at-grade alignment, aerial alignment, and underground alignment would occur simultaneously. The construction of the underground stations is anticipated to take 36 to 48 months, while the construction of the at-grade station is expected to last approximately 12 to 18 months. Most construction activities would occur during daytime hours. For specialized construction tasks, it may be necessary to work during nighttime hours to minimize traffic disruptions and disruptions to businesses and other land uses along the alignment. Traffic control and pedestrian control during construction would follow local jurisdiction guidelines and the Manual of Uniform Traffic Control Devices standards. Standard traffic control methods and devices would be used, including the use of signage, roadway markings, flagging, and barricades to regulate, warn, or guide road users. Laydown and storage areas (staging areas) for construction equipment and materials would be in the vicinity of the Build Alternative within parking facilities, and/or on parcels that would be acquired for the proposed stations and the MSF. Staging areas would be used to store building materials and construction equipment, assemble the TBM, temporarily store excavated materials, and house temporary field offices for Metro's contractor. A temporary electrical conduit would be extended from the existing Vail Substation north of Flotilla Street to the TBM launch site to power the TBM. This would involve installing the temporary conduit in a trench within the ROW of Yates Avenue and Washington Boulevard. The trench excavation would be approximately 3-feet wide and about 20-feet deep.

## 2.2.6 Operations

Operation of the Build Alternative would be managed by Metro staff and personnel. The Build Alternative would operate a train line using light rail technology. Operational activities of the Build Alternative would include train car operations, train car maintenance (including cleaning and storage), track maintenance, and general administration. In addition, the Build Alternative would include emergency lighting, communications and wayfinding systems, a command-and-control system, a public information system, and security systems to monitor activity at station platforms along the alignment and at the MSF. Operation of an MSF would include daily service and cleaning, inspection, and storage of light rail vehicles. MSF Sites 1 and 2 would also include repair facilities.

The operating hours and schedules for the Build Alternative would be comparable to the weekday, Saturday and Sunday, and holiday schedules for the Metro E Line. It is anticipated that trains would operate every day from 4 am to 1 am the following day. On weekdays, trains would operate approximately every 6 minutes during peak hours, every 10 minutes mid-day, and every 12 to 20 minutes in the early morning and after 7 pm. On weekends, trains would operate every 10 minutes from 9 am to 9 pm, and every 20 minutes before 9 am and after 9 pm. The operational headways (the time between vehicles past a given point) are consistent with Metro design requirements for future rail services.

Forecasted ridership for the Build Alternative anticipate approximately 7,550 total weekday station boardings by 2050 compared to 3,010 boardings at the existing Atlantic/Pomona Station under the No Build Alternative. Based on the operating headway requirements and ridership forecasts, Metro anticipates the need for an additional three trains for the Metro E Line to operate the Build Alternative. Each train would have three cars and there would be one spare train consisting of three train cars for a total of 12 new train cars.

## 2.3 No Build Alternative

The No Build Alternative evaluates the reasonably foreseeable effects within the Study Area if the Build Alternative were not approved. The No Build Alternative would maintain existing transit service through the year 2050. No new transportation infrastructure would be built within Los Angeles County aside from projects currently under construction or funded for construction and operation by 2050 via the 2008 Measure R or 2016 Measure M sales taxes. The No Build Alternative would include existing roadway and transit projects identified for funding in Metro's 2020 Long Range Transportation Plan (LRTP) and Southern California Association of Governments (SCAG) Connect SoCal 2024-2050 Regional Transportation Plan (2024 RTP). The No Build Alternative would include existing projects from the regional base year (2025) and planned regional projects in operation in the horizon year (2050).

The No Build Alternative is used for comparison purposes to assess the relative benefits and adverse effects of constructing a new transit project in the Study Area versus implementing only currently planned and funded projects. The No Build Alternative is required as a baseline for comparison under the National Environmental Policy Act (NEPA).

## 3.0 REGULATORY FRAMEWORK

Federal, state, and local governments all share responsibility for air quality management. The Federal Clean Air Act (CAA) and California Clean Air Act (CCAA) are the primary statutes that establish ambient air quality standards. They establish regulatory authorities to design and enforce air quality regulations.

### 3.1 Federal

#### 3.1.1 Clean Air Act

The U.S. Environmental Protection Agency (USEPA) is responsible for implementation of the CAA. The CAA was first enacted in 1955 and was amended in 1963, 1965, 1967, 1970, 1977, and 1990. Under authority granted by the CAA, USEPA established National Ambient Air Quality Standards (NAAQS) for atmospheric concentrations of the following criteria pollutants that are considered harmful to public health: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</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>), and sulfur dioxide (SO<sub>2</sub>).

**Table 3.1** presents the NAAQS for criteria air pollutants. Primary standards are set to protect public health, including “sensitive” populations such as individuals with respiratory conditions, children, and the elderly. Secondary standards are designed to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

O<sub>3</sub> is a secondary pollutant, meaning that it is formed in the atmosphere from reactions of other precursor compounds under certain conditions. Primary precursor compounds that lead to formation of O<sub>3</sub> include volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>). PM<sub>2.5</sub> can be emitted directly from sources (e.g., engines) or formed in the atmosphere from other precursor compounds. PM<sub>2.5</sub> precursor compounds in the South Coast Air Basin (SoCAB) include sulfur oxides (SO<sub>x</sub>), NO<sub>x</sub>, VOC, and ammonia.<sup>3</sup> **Table 3.2** summarizes the health effects associated with these pollutants.

The CAA specifies dates for achieving compliance with NAAQS and mandates that states submit, implement, and enforce a state implementation plan (SIP) to attain and maintain the NAAQS. SIPs must include pollution control measures and demonstrate how standards will be met. The CAA identifies specific emission reduction goals for areas not meeting NAAQS. The CAA requires a demonstration of reasonable further progress toward attainment and provides additional sanctions for failure to attain or meet interim milestones.

---

<sup>3</sup> Construction and operation of the Project (No Build Alternative and Build Alternative) would not be anticipated to result in substantial or quantifiable emissions of ammonia.

**Table 3.1. National and California Ambient Air Quality Standards**

Pollutant	Averaging Time	CAAQS	NAAQS Primary	NAAQS Secondary
CO	1-Hour	20 ppmv (23 mg/m <sup>3</sup> )	35 ppmv (40 mg/m <sup>3</sup> )	NS
	8-Hour	9.0 ppmv (10 mg/m <sup>3</sup> )	9 ppmv (10 mg/m <sup>3</sup> )	NS
NO <sub>2</sub>	1-Hour	0.18 ppmv (339 µg/m <sup>3</sup> )	0.100 ppmv (188 µg/m <sup>3</sup> )	NS
	Annual	0.030 ppmv (57 µg/m <sup>3</sup> )	0.053 ppmv (100 µg/m <sup>3</sup> )	Same as primary
O <sub>3</sub>	1-Hour	0.09 ppmv (180 µg/m <sup>3</sup> )	NS	NS
	8-Hour	0.070 ppmv (137 µg/m <sup>3</sup> )	0.070 ppmv (137 µg/m <sup>3</sup> )	Same as primary
Pb	30-Day Average	1.5 µg/m <sup>3</sup>	NS	NS
	Rolling 3-Month Average	NS	0.15 µg/m <sup>3</sup>	Same as primary
PM <sub>10</sub>	24-Hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Same as primary
	Annual	20 µg/m <sup>3</sup>	NS	NS
PM <sub>2.5</sub>	24-Hour	NS	35 µg/m <sup>3</sup>	Same as primary
	Annual	12 µg/m <sup>3</sup>	9.0 µg/m <sup>3</sup>	15.0 µg/m <sup>3</sup>
SO <sub>2</sub>	1-Hour	0.25 ppmv (655 µg/m <sup>3</sup> )	0.075 ppmv (196 µg/m <sup>3</sup> )	NS
	3-Hour	NS	NS	0.5 ppmv (1,300 µg/m <sup>3</sup> )
	24-Hour	0.04 ppmv (105 µg/m <sup>3</sup> )	NS	NS

Source: California Air Resources Board (CARB) 2024a.

 Key: µg/m<sup>3</sup> = micrograms per cubic meter; CAAQS = California Ambient Air Quality Standard; CO = carbon monoxide; mg/m<sup>3</sup> = milligrams per cubic meter; NAAQS = National Ambient Air Quality Standard; NO<sub>2</sub> = nitrogen dioxide; NS = no standard; O<sub>3</sub> = ozone; Pb = lead; PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; ppmv = parts per million by volume; SO<sub>2</sub> = sulfur dioxide

**Table 3.2. Characteristics and Health Effects of Criteria Pollutants**

Pollutant	Characteristics	Health Effects	Major Sources
CO	Odorless, colorless gas that is highly toxic. Formed by the incomplete combustion of fuels.	<ul style="list-style-type: none"> <li>▪ Impairment of oxygen transport in the bloodstream.</li> <li>▪ Aggravation of cardiovascular disease.</li> <li>▪ Fatigue, headache, dizziness.</li> </ul>	Automobile exhaust, combustion of fuels, and combustion of wood in woodstoves and fireplaces.
NO <sub>2</sub>	Reddish-brown gas formed during combustion.	<ul style="list-style-type: none"> <li>▪ Increased risk of acute and chronic respiratory disease.</li> </ul>	Automobile and diesel truck exhaust, industrial processes, and fossil-fueled power plants.
O <sub>3</sub>	A highly reactive photochemical pollutant created by the action of sunlight on ozone precursors (VOC and NO <sub>x</sub> ).	<ul style="list-style-type: none"> <li>▪ Eye irritation.</li> <li>▪ Respiratory function impairment.</li> </ul>	Combustion sources, such as factories and automobiles, and evaporation of solvents and fuels.
PM <sub>10</sub> and PM <sub>2.5</sub>	Small particles that measure 10 microns or less are termed PM <sub>10</sub> (fine particles 2.5 or less microns are PM <sub>2.5</sub> ). Solid and liquid particles of dust, soot, aerosols, smoke, ash, and pollen and other matter that are small enough to remain suspended in the air for a long period.	<ul style="list-style-type: none"> <li>▪ Aggravation of chronic disease and heart/lung disease symptoms.</li> </ul>	Combustion of gasoline, oil, diesel fuel, or wood. Dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, wind-blown dust from open lands, pollen, and fragments of bacteria.
SO <sub>2</sub>	Colorless gas with a pungent odor.	<ul style="list-style-type: none"> <li>▪ Increased risk of acute and chronic respiratory disease.</li> </ul>	Motor vehicles, locomotives, ships, and off-diesel equipment that are operated with fuels that contain high levels of sulfur.

Source: CARB, 2023.

Key: CO = carbon monoxide; NO<sub>2</sub> = nitrogen dioxide; NO<sub>x</sub> = nitrogen oxides; O<sub>3</sub> = ozone; PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compound

A nonattainment designation means an area does not meet (or contributes to ambient air quality in a region that does not meet) the NAAQS or CAAQS. A maintenance designation means an area was previously in nonattainment for a pollutant but was re-designated as attainment. A maintenance designation indicates that measures are included in the SIP intended to ensure that the NAAQS for a previously nonattainment pollutant are not exceeded again. **Table 3.3** presents the attainment designation and classification, where applicable, for each of the federal criteria air pollutants.

The SoCAB is designated as a federal nonattainment area for O<sub>3</sub>, PM<sub>2.5</sub>, and Pb. Nonattainment designations are classified into levels of severity based on the pollutant concentration levels that determine the mandated attainment date. In 1998, USEPA designated the SoCAB as an attainment/maintenance area for NO<sub>2</sub> because NO<sub>2</sub> levels in the region dropped below annual NAAQS in the early 1990s. In 2018, the SoCAB had been in attainment of the NO<sub>2</sub> standard for 20 years since the redesignation; therefore, the air quality conformity requirements no longer apply to NO<sub>2</sub> [see Title

40 of the Code of Federal Regulations (CFR) § 93.102(b)(4)]. USEPA designated the SoCAB as a maintenance area for CO in 2007 and PM<sub>10</sub> in 2013. The SoCAB was found to attain the 1997 PM<sub>2.5</sub> NAAQS in 2016; however, it remains a nonattainment area for the 2006 and 2012 PM<sub>2.5</sub> NAAQS.<sup>4</sup> As a result of the region’s maintenance and nonattainment NAAQS designations, the Project (including the No Build Alternative and Build Alternative) is subject to the air quality conformity requirements for CO, O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>.

**Table 3.3. Federal and State Attainment Status**

Pollutant	Federal (NAAQS) Status	State (CAAQS) Status
CO	Maintenance	Attainment
NO <sub>2</sub>	Attainment <sup>1</sup>	Attainment
O <sub>3</sub>	Nonattainment, Extreme	Nonattainment
Pb	Nonattainment <sup>2</sup>	Attainment
PM <sub>10</sub>	Maintenance	Nonattainment
PM <sub>2.5</sub>	Nonattainment <sup>3,4</sup>	Nonattainment
SO <sub>2</sub>	Attainment	Attainment

Sources: CARB, 2022; USEPA, 2024.

Notes:

- <sup>1</sup> The SoCAB was redesignated to attainment/maintenance in 1998 and has a maintenance plan approved under Section 175A of the CAA [see 40 CFR 93.102(b)(4)]. Maintenance area plans are valid under Section 175A for 10 years under each of two consecutive 10-year periods. When the two consecutive maintenance periods (i.e., 20 years) have lapsed without an exceedance, the region is considered in attainment for the federal standard and no longer subject to conformity requirements.
- <sup>2</sup> Only the Los Angeles County portion of the SoCAB is considered nonattainment for Pb. All other portions of the SoCAB are in attainment of the Pb NAAQS. Additionally, Pb is not a transportation-related pollutant, therefore, Project Pb emissions are not of concern.
- <sup>3</sup> Classified as serious nonattainment under the 2012 PM<sub>2.5</sub> NAAQS, serious nonattainment under the 2006 PM<sub>2.5</sub> NAAQS, and moderate nonattainment under the 1997 PM<sub>2.5</sub> NAAQS.
- <sup>4</sup> While currently designated a nonattainment area for the 1997 and 2006 PM<sub>2.5</sub> NAAQS, the South Coast Air Quality Management District (SCAQMD) is in the process of requesting redesignation to maintenance (CARB, 2021a).

Key: CO = carbon monoxide; NO<sub>2</sub> = nitrogen dioxide; O<sub>3</sub> = ozone; Pb = lead; PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SO<sub>2</sub> = sulfur dioxide

### 3.1.1.1 Transportation Conformity

USEPA has delegated authority to CARB for the monitoring and enforcement of air quality regulations in the state. The California SIP, developed in accordance with the CAA, contains state-level requirements regarding transportation.

Transportation Conformity, a program implemented to ensure highway and transit projects that receive federal funding and approval would be consistent with state and federal air quality goals, is required for transportation projects in nonattainment and maintenance areas (40 CFR Parts 51 and 93). The FTA is the agency responsible for ensuring that applicable transportation projects and plans conform to the SIP.

<sup>4</sup> Monitoring data currently shows that the SoCAB attained both the 1997 and 2006 24-hour PM<sub>2.5</sub> NAAQS. SCAQMD is currently in the process of requesting redesignation to maintenance for these standards (CARB, 2021a).

### 3.1.1.2 Mobile Source Air Toxics

Controlling air toxics emissions became a national priority with passage of the CAA amendments in 1990, whereby Congress mandated USEPA to regulate 188 air toxics, also known as hazardous air pollutants. USEPA has assessed this expansive list in its latest rule on the Control of Hazardous Air Pollutants from Mobile Sources and identified a group of 93 compounds emitted from mobile sources that are listed in USEPA Integrated Risk Information System (72 Federal Register [FR] 8427). USEPA refers to these compounds as mobile source air toxics (MSAT).

In addition, USEPA identified nine compounds with significant contributions from mobile sources that are among the national- and regional-scale cancer risk drivers from USEPA 2011 National Air Toxics Assessment. These are acetaldehyde, acrolein, benzene, 1,3-butadiene, diesel particulate matter, ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. In 2007, USEPA issued the MSAT rule (66 FR 17229), which established national vehicle and fuel standards for the control of MSAT emissions. These required controls have already and will continue to dramatically decrease MSAT emissions through cleaner fuels and cleaner engines.

## 3.2 State

While FTA itself is exempt from state regulations, Metro would ensure full compliance with all relevant environmental laws and regulations for the Project. Only those regulations applicable to the air quality environmental conditions in the baseline and future are discussed.

The CCAA, signed into law in 1988, requires all areas of the state to achieve and maintain the CAAQS by the earliest practicable date. CAAQS are at least as stringent as, and often more stringent than, NAAQS. **Table 3.1** lists currently applicable CAAQS and NAAQS. Attainment status for each pollutant with regard to CAAQS is presented in **Table 3.3**.

CARB has jurisdiction over a number of air pollutant emission sources in the state. Specifically, CARB can develop emission standards for stationary sources, as well as on-road motor vehicles (when USEPA grants them a waiver to do so) and some off-road mobile sources. CARB has delegated authority to regional air pollution control and air quality management districts to develop stationary source emission standards, issue air quality permits, and enforce permit conditions.

## 3.3 Regional and Local

While FTA itself is exempt from regional, and local regulations, Metro would ensure full compliance with all relevant environmental laws and regulations for the Project. Only those regulations applicable to the air quality environmental conditions in the baseline and future are discussed.

### 3.3.1 Southern California Association of Governments

Under conformity regulations of the CAA, SCAG is the metropolitan planning organization responsible for coordinating the development of transportation infrastructure in a six-county region of Southern California (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura). This ensures that air quality objectives are included with transportation goals in regional transportation plans. SCAG predicts population and business growth in the region.

SCAG estimates future demand for traffic, seaports, airports, and heavy and light rail infrastructure. From the demand estimates, SCAG develops a Regional Transportation Plan (RTP) and Federal Transportation Improvement Program (FTIP) to guide transportation growth and infrastructure development. The FTIP and RTP consider air quality requirements in the region. The FTIP is typically updated every two years. SCAG updates its forecasts and RTP approximately every four years. The most recently adopted RTP was the 2024 RTP, which was fully adopted by the SCAG Regional Council on April 4, 2024. The most recent 2025 FTIP was adopted by the FTA on September 5, 2024.

As noted above, CARB has delegated authority to regional air pollution control and air quality management districts to develop stationary source emission standards, issue air quality permits, and enforce permit conditions. The air quality management district for the Study Area is the SCAQMD. SCAQMD uses SCAG's forecasts for vehicle miles traveled (VMT), as well as activities predicted for seaports, airports, and rail, as well as stationary sources, to develop updates to Air Quality Management Plans (AQMPs) discussed below.

### 3.3.2 South Coast Air Quality Management District

SCAQMD is the agency principally responsible for comprehensive air pollution control in the SoCAB. To that end, SCAQMD works directly with SCAG, county transportation commissions, and local governments, and cooperates with state and federal government agencies. SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary. In coordination with CARB and SCAG, SCAQMD also prepares and implements the AQMPs, which is used by CARB in SIP development.

SCAQMD has jurisdiction over an area of 10,743 square miles consisting of Orange County, the non-desert portions of Los Angeles, Riverside and San Bernardino Counties, and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The SoCAB is a sub-region within SCAQMD's jurisdiction that covers an area of 6,745 square miles and encompasses all of Orange County and non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The Study Area is located within the Los Angeles sub-area of the SoCAB. While air quality in this area has improved in recent years, activity in the basin requires more regulation to meet ambient air quality standards.

SCAQMD has adopted a series of AQMPs to meet CAAQS and NAAQS. These plans mandate control technology for existing sources, control programs for area sources and indirect sources, a permitting

system designed to ensure no net increase in emissions from any new or modified permitted sources of emissions, transportation control measures, sufficient control strategies to achieve a five percent or more annual reduction in emissions (or 15 percent or more in a three-year period) for VOC, NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>, and demonstration of compliance with CARB's established reporting periods for compliance with air quality goals.

The current, USEPA-approved SIPs for each federal nonattainment or maintenance pollutant in the SoCAB are summarized below:

- CO – 2005 maintenance plan and request for re-designation to attainment status, approved by USEPA on May 11, 2007 (72 FR 26718)
- O<sub>3</sub> – SCAQMD 2016 AQMP and 2018 amendments, approved by USEPA on October 31, 2019 (84 FR 52005)
- Pb – 2012 Pb SIP, approved by USEPA on April 11, 2014 (79 FR 13875)
- PM<sub>10</sub> – 2009 maintenance plan and request for re-designation to attainment status, approved by USEPA on July 26, 2013 (78 FR 38223)<sup>5</sup>
- PM<sub>2.5</sub> – SCAQMD 2016 AQMP, approved by USEPA on February 12, 2019 (84 FR 3305)<sup>6</sup>

On March 3, 2017, SCAQMD adopted a comprehensive update, the SCAQMD 2016 AQMP for the SoCAB. The SCAQMD 2016 AQMP outlines air pollution control measures needed to meet federal O<sub>3</sub> and PM<sub>2.5</sub> standards. The SCAQMD 2016 AQMP was approved by CARB and submitted to USEPA for its final approval on April 27, 2017. An amendment revising the 1-hour O<sub>3</sub> implementation plan was submitted on December 20, 2018, and the AQMP was approved by USEPA on February 12, 2019.

On December 2, 2022, SCAQMD adopted the 2022 AQMP, which builds upon the previous 2016 AQMP with new and revised air quality and health effects analysis, and strategies and commitments for achieving the emission reductions necessary to achieve the NAAQS in the SoCAB in a timely manner. The 2022 AQMP was accounted for in the most recent CARB SIP Strategy submittal to USEPA, dated February 22, 2023.

Relevant SCAQMD rules that are applicable to the Project (including the No Build Alternative and Build Alternative) for this air quality analysis include Rule 403 and Rule 1113 described below.

### 3.3.2.1 Rule 403 – Fugitive Dust

Rule 403 prohibits emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area that remains visible beyond the emission source property line. During proposed construction, best available control measures identified in the rule would be required to minimize fugitive dust emissions from proposed earth-moving and grading activities. These measures would include site watering as necessary to maintain sufficient soil moisture content. Additional requirements apply to construction projects on property with 50 or more acres of disturbed surface area, or for any earth-moving operation with a daily earth-moving or throughput volume of 5,000 cubic yards or more three times during the most recent 365-day period. These requirements include submitting a dust

<sup>5</sup> The 2021 PM<sub>10</sub> Maintenance Plan for the SoCAB was submitted to USEPA for approval on July 22, 2021 (CARB, 2021b).

<sup>6</sup> The 2021 PM<sub>2.5</sub> Redesignation Request and Maintenance Plan was submitted to SCAQMD for approval on November 5, 2021, and will be considered by CARB at a later date (CARB, 2021a).

control plan, maintaining dust control records, and designating a SCAQMD-certified dust control supervisor.

### **3.3.2.2 Rule 1113 – Architectural Coatings**

Rule 1113 prohibits the use of architectural coatings that contain VOCs in excess of limits specified within the regulation. The regulation's limits apply to specific categories of coatings, including concrete-curing compounds, form release compounds, fireproofing coatings, flat coatings, primers, traffic coatings, and various other finishes applied to buildings, structures, and surfaces. Manufacturers, suppliers, and users of architectural coatings within the SCAQMD jurisdiction are required to comply with these VOC standards.

## **3.3.3 Los Angeles County Metropolitan Transportation Authority**

### **3.3.3.1 Construction Demolition Debris Recycling and Reuse Policy**

Metro's Construction Demolition Debris Recycling and Reuse Policy (Metro 2007) requires Metro to give preference to recyclable and recycled products in the selection of construction materials to the maximum extent feasible during design and construction of Metro or Metro-funded capital projects. Selected materials used in the construction of all structures related to transportation projects should not adversely affect the performance, safety, or the environment of the transportation system for which the material is used.

## **3.3.4 Los Angeles County**

The Los Angeles County 2035 General Plan, county-wide air quality element, outlines policies aimed at improving air quality in the SoCAB, which includes the majority of Los Angeles County. Applicable goals and policies include, but are not limited to, reducing air pollution and emissions through coordinated land use, transportation, air quality planning, and reducing emissions and fugitive dust from construction activities through implementation of BMPs.

## **3.3.5 City of Commerce**

The City of Commerce 2020 General Plan was adopted in 2008 and is intended to guide development in the city. The plan includes an air quality element which contains goals and policies applicable to the Project (City of Commerce 2008). Relevant goals and policies include:

- Air Quality Policy 1.6. The City of Commerce will consider all feasible alternatives to minimize emissions from diesel equipment (e.g., trucks, construction equipment, and generators)

- Air Quality Policy 2.7. The City of Commerce will promote mass transit ridership through careful planning of routes, headways, origins and destinations, and types of vehicles
- Air Quality Policy 4.6. The City of Commerce will work with local transit providers to incorporate best design practices for transit into new development projects.
- Air Quality Policy 5.1. The City of Commerce will ensure that all future public facilities and improvements do not have a significant adverse air quality impact on the community and that any such impacts must be mitigated to the fullest extent possible.

The City of Commerce is currently in the process of updating its General Plan.

### 3.3.6 City of Montebello

The Montebello General Plan was adopted on April 10, 2024, and is intended to guide the future development of the City. The General Plan includes policies related to air quality primarily in the Our Natural Community and Our Accessible Community Elements (City of Montebello 2024). Relevant goals and policies applicable to the air quality effects of project construction and operation include:

- P1.1 Enhance air and water quality, increase public green space through the integration of green infrastructure.
- P1.2 Support regional planning efforts to improve air quality.
- P1.3 Consider emission reduction goals in all major decisions on land use and investments in public infrastructure.
- P1.5 Coordinate initiatives and regulatory changes with local, regional, and state agencies to reduce motor vehicle emissions.
- P2.3 Maximize future Light Rail Stop with TOD [transit oriented development] Planning.
- P4.2. Promote the use of public transit through high-quality local and regional transit service and facilities.
- P4.3 Foster multimodal accessibility between transit services and destinations within the City.
- P4.5. Provide a network of complete streets that are safe and accessible for all transportation modes and users, including those with impaired mobility, with a system of multimodal and context-appropriate roadways that support a shift to alternative travel modes and a reduction in VMT.

## 4.0 METHODOLOGY

This section describes the methodology and assumptions for analysis of potential impacts to air quality. Construction projects may impact air quality through emissions from construction equipment or the generation of dust. Conversely, the operation of mass transit systems typically benefits air quality through reductions in the number of vehicles operating in an area.

### 4.1 Operations

Operational emissions include emissions related to the operation of public highway vehicles, project parking facilities, and the MSF (including MSF Sites 1, 2 and 3). For each of these emission sources, emissions were quantified so that the Build Alternative's 2050 benefits or impacts could be evaluated against those of the 2050 No Build Alternative. As detailed below, operation of proposed stations or the LRVs would not be expected to result in direct criteria pollutant emissions in the Study Area. For the MSF analysis, MSF Sites 1, 2, and 3 are discussed separately only when there is a difference in the analysis between the sites; otherwise, the impact analysis of the MSF applies to all three sites.

Regional traffic emissions were calculated from projected VMT for the existing conditions, 2050 Project conditions, and the 2050 No Build Alternative. This analysis used the current version of the California Emission Factor Model for On-road Motor Vehicles (EMFAC) approved by USEPA to develop emission factors used to calculate highway traffic emissions, EMFAC2021. On November 21, 2025, USEPA approved off-model adjustment factors for the EMFAC2021 model. These factors removed the emission benefits of the Advanced Clean Trucks, Zero-Emission Airport Shuttle, Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions Phase 1, and Heavy-Duty Omnibus regulations. The off-model adjustments were applied to EMFAC2021 model outputs and are incorporated in all results used throughout the analysis.

The EMFAC model was queried to determine the appropriate emission factors for the Los Angeles sub-area of the SoCAB, the model region most representative of the Study Area. The model generates emission factors for a variety of vehicle classes, representing different types of on-road vehicles that operate in the region, including passenger cars, buses, delivery trucks, heavy duty diesel trucks, motorcycles, and recreational vehicles. EMFAC was also used to describe the highway fleet mix (relative ratio of VMT travel in the region for each vehicle class) for the SoCAB in each year of the analysis. Aggregate highway-vehicle emission factors for each pollutant were determined by weighting the EMFAC default emission factors for each vehicle class using the fleet mix. The emission factors queried were for an average vehicle speed of 35 miles per hour for the existing conditions (2025)<sup>7</sup> analysis, and an average vehicle speed of 30 miles per hour for the future conditions (2050).<sup>8</sup>

<sup>7</sup> As described in Eastside Transit Corridor Phase 2 Transportation and Traffic Impacts Report, the base year data in Metro's regional travel demand forecasting model (the Corridor Based Model 2018 [CBM18]) is from 2017 and represents the data that was most recently available when the model was created in 2018. The model was updated and refined specifically for use in this study to ensure that major roadway and transit improvements expected to be completed through the Build Alternative buildout were included, and adjustment factors were applied to account for comparative population and employment changes in current 2024 RTP from the 2016 version used in CBM18.

<sup>8</sup> The traffic data developed for this study indicated slightly different aggregate highway speeds in 2025 versus future years; therefore, different average speed bins were used to determine the emission factors between the years of analysis (CDM Smith/AECOM JV 2026).

The Build Alternative would include the addition of a parking facility to accommodate passengers at the Greenwood station. Build Alternative-related parking would result in a new source of VOC emissions from evaporative leaks from parked vehicle fuel tanks. Evaporative emissions from vehicles left in the parking facility throughout the day were estimated using EMFAC reactive organic gases emission factors for the Los Angeles sub-area of the SoCAB. Similar to the determination of highway traffic emission factors, the EMFAC model was queried to generate evaporative VOC<sup>9</sup> emission factors for the vehicle classes most representative of those vehicles which would utilize Build Alternative parking facilities (light-duty automobiles and trucks), and those factors were weighted using the regional VMT-based fleet mix for those vehicle classes, resulting in an aggregated evaporative VOC emission factor. It was estimated that each parking space would be occupied, and thus contribute to evaporative Build Alternative VOC emissions, for 10-hours each day. Additional parking facility maintenance activities, such as lot restriping, would also result in VOC emissions. These emissions were estimated using default model parameters for the “parking lot” land use type of the California Emission Estimator Model (CalEEMod) version 2020.4.0.<sup>10</sup> Additional necessary modeling parameters for the parking facility includes the region (Los Angeles sub-area of the SoCAB), the climate zone (9), utility (Southern California Edison), and the count of spaces assumed for each facility. The station that would have the new parking facility and the number of spaces assumed in this analysis are presented below:

- Greenwood station – approximately 220 parking spaces located in a surface facility near the intersection of Greenwood Avenue and Washington Boulevard

Emissions from powering the electric LRT vehicles or lighting the proposed stations were assumed to be negligible in the future due to power generation requirements associated with California Senate Bill 100 and 1020, and therefore, were not estimated. Maintenance activities for the proposed stations would not be expected to result in a material amount of criteria pollutant emissions.

Operation of the MSF would result in criteria pollutant emissions from combustion of natural gas for comfort heating and from structure and LRT maintenance and upkeep activities. These emissions were quantified using default model parameters for the “warehouse with rail” land use type of CalEEMod with the following modeling parameters: region (Los Angeles sub-area of the SoCAB), climate zone (9), utility (Southern California Edison), and size (approximately 177,000 square feet based on the conceptual engineering drawings).

## 4.1.1 Project-Level Conformity Assessment

FTA must find that a transit project in a nonattainment or maintenance area meets the project-level conformity requirements before FTA can make a grant for any element of that project’s implementation.

---

<sup>9</sup> The definitions of VOC and reactive organic gases are functionally identical in the context of tailpipe and evaporative emissions. Emission factors for reactive organic gases from the EMFAC model were assumed to be representative of VOC emission factors from modeled sources.

<sup>10</sup> In May 2022, a new version of the CalEEMod model, version 2022.1.0.0, was initially released. This version migrated the model to a web-based platform, revised certain calculation methodologies, and updated certain default emission parameters, including updating on-road vehicle emission factors to use to EMFAC2021 data. CalEEMod 2022 has undergone 31 updates since its initial release, mostly associated with adjustments and bugfixes for the new web-based model platform. CalEEMod 2020.4.0 version was used in project modeling, incorporating significant project-specific data and adjusting to use current USEPA-approved EMFAC2021 emission factors. Neither the CalEEMod 2020.4.0 or CalEEMod 2022 models have been specifically required, approved, or recommended by USEPA.

### 4.1.1.1 Conforming RTP and FTIP

In order to conform, a transit project must come from a currently conforming RTP and FTIP, must not cause or contribute to any air quality hot-spots, and must follow any other requirements in the SIP for air quality that pertain to a project.

### 4.1.1.2 Hot-Spots

A project has the potential to result in one or more hot-spots (high localized ambient concentrations) when project emissions occur at higher rates in small or constricted areas. Consistent with FTA guidance, certain transit projects located in CO, PM<sub>2.5</sub>, or PM<sub>10</sub> nonattainment or maintenance areas would require quantitative hot-spot analyses during the NEPA process (40 CFR Part 93).

Projects requiring CO hot-spot analysis generally include projects that affect congested intersections (e.g., fixed guideway transit projects that take an existing traffic lane from a congested highway or projects that include major park-and-ride lots). Projects requiring PM<sub>2.5</sub> or PM<sub>10</sub> hot-spot analyses generally include major new or expanded transit centers or stations where a large number of diesel-powered transit vehicles (diesel buses, diesel commuter rail locomotives, or diesel ferryboats) will congregate. Projects typically not of concern for PM hot-spots are stations and transit centers serviced by non-diesel transit vehicles, new stations or transit centers with fewer than 10 diesel buses arriving in the peak hour, and expansion of existing stations or transit centers with an increase in arrivals during the peak hour of 10 or fewer diesel transit vehicles.

For the Build Alternative, traffic volumes at major intersections represent the only emission source which could result in CO hot-spots. To evaluate the potential for the project to result in or exacerbate a CO hot-spot, the hot-spot analysis considered a qualitative proportional rollback approach, evaluating the relationship between decreasing CO emission rates and increasing traffic volumes at the greatest peak-hour volume intersections within the Study Area (UC Davis 1997). Where the anticipated reductions to emission rates relative to existing conditions would be greater than the anticipated increase to peak hour volumes relative to existing conditions, no potential for CO hot-spots would be expected.

### 4.1.1.3 Operational Emissions

Consistent with FTA guidance, for a transportation project in a nonattainment or maintenance area of a transportation-related pollutant, where that transportation-related pollutant or its precursors would be reduced by the project, those emission reductions should be presented in the environmental review and that pollutant would not be considered of concern for that project.

Where emissions of a nonattainment transportation-related pollutant or precursor would not be reduced as a result of the project, emissions can be compared to regional criteria air pollutant thresholds, established by the SCAQMD, the regional entity with delegated authority of air quality for the SoCAB. The SCAQMD has established regional daily emission levels for various criteria pollutants. Projects for which emission levels would be below these thresholds would not be expected to cause a new NAAQS or CAAQS violation or exacerbate an existing violation within the region. These thresholds are summarized in **Table 4.1**.

**Table 4.1. SCAQMD Regional Operational Air Quality Significance Thresholds**

Pollutant	Operational Emissions (lbs/day)
CO	550
NO <sub>x</sub>	100
PM <sub>10</sub>	150
PM <sub>2.5</sub>	55
SO <sub>2</sub>	150
VOC	75
Pb <sup>1</sup>	3

Sources: SCAQMD 2023.

Notes:

<sup>1</sup> While the SoCAB is a nonattainment area for Pb, Pb is not a transportation-related pollutant, so the Project would not be of concern for Pb emissions. No further evaluation of Pb emissions is therefore included in this analysis.

Key: CO = carbon monoxide; lbs = pounds; NO<sub>x</sub> = nitrogen oxides; Pb = lead; PM<sub>10</sub> = fine particulate matter; PM<sub>2.5</sub> = fine particulate matter; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

### 4.1.1.3.1 Localized Impacts to Sensitive Land Uses

Consistent with FTA guidance, where transportation-related pollutants or their precursors would be reduced by a project, those pollutants would not be considered of concern for that project. Under operational conditions, the Build Alternative would be powered by electricity, and neither stations nor the MSF would be expected to result in appreciable localized emissions of air pollutants for which SCAQMD has developed localized impact thresholds. Virtually all Build Alternative-related operational emissions would be associated with highway traffic, most appropriately evaluated at the regional scale or hot-spot analysis.

## 4.2 Construction

Construction emissions were estimated for all components of the Build Alternative, including trenching TBM power infrastructure, construction of stations and parking facility for the Greenwood station, rail lines, and the MSF (including MSF Sites 1, 2, and 3). Emissions from construction of the Build Alternative were estimated from the methods developed by SCAQMD in its 1993 CEQA Air Quality Handbook (Handbook), except as noted below (SCAQMD 1993). Fugitive dust, engine exhaust, and area emissions were characterized into the following main categories:

- Architectural coatings
- Demolition and site clearing
- Grading and excavation
- Heavy-duty equipment on unpaved areas
- Loading/unloading of trucks
- Paving activities
- Paved road dust (haul/delivery trucks)
- Vehicle trips (including construction worker commuting and haul/delivery trucks)

Although the Handbook methodology was used to estimate emissions, several emission factors and calculation methods in the Handbook are outdated; thus, the analysis used the current USEPA-approved version of the CARB EMFAC model at the start of project analysis, EMFAC2021. This model was used to generate on-road emission factors instead of the on-road mobile source emission factors in the Handbook. CalEEMod, which includes off-road emission factors derived from the CARB's OFFROAD model, was used to generate emissions for off-road equipment instead of the off-road mobile source emission factors in the Handbook. The analysis also used factors developed for CalEEMod to update the fugitive construction dust and architectural coating emission factors identified in the Handbook.

Emission reductions associated with applicable rules and regulations, such as a 66 percent reduction in fugitive dust associated with site watering as required by SCAQMD Rule 403, were also incorporated into the analysis.

The Build Alternative was modeled using CalEEMod with the alignment subdivided into smaller components which were modeled individually. The emissions associated with overlapping components of construction were added together to determine total emissions from the Build Alternative. General Build Alternative component information, such as approximate construction durations and equipment requirements are presented in Chapter 2.0, Description of Alternatives, and Section 3.17, Construction Impacts, of the EA. Additional general details, including Build Alternative scheduling and activity assumptions, are consistent with those presented in Chapter 2.0 and Section 3.17 and are included throughout **Attachment A** of this Impacts Report. The following key details were assumed in the development of the construction air quality analysis:

- CalEEMod modeling parameters for the region (Los Angeles sub-area of the SoCAB) and climate zone (9) applicable to the Study Area, were used throughout construction. Although CalEEMod does not have land use categories which directly correspond to the MSF, LRT guideway, or other Build Alternative elements, surrogate land uses were used as detailed in the CalEEMod Construction References section of **Attachment A**.
- Construction for the underground segment of the alignment would follow the operation of the tunnel boring machine (TBM), which would progress at a rate of 30 feet per day.
- Construction of aerial and at-grade segments of the alignment would occur in segments that would be 0.5 mile or 1 mile or shorter in length, respectively.
- While construction of alignment segments would not generally overlap, some overlap would be expected and thus overlap was assumed in this analysis.
- Stations would generally be built simultaneously with the guideway as guideway construction reaches the station area.
- Construction phasing would generally start with demolition and site clearing, followed by utility relocation and temporary roadway reconfiguration before moving on to Build Alternative construction. Any overhead catenary system (OCS), traction power substation (TPSS), train control, or other additional installation activities would follow with station art, other railroad system facilities, and street improvements completed last.
- Build Alternative construction would typically occur during single 8-hour daytime shifts, although certain elements may require nighttime work instead of, or in addition to, typical activities.

- Vendor trip distances, vendor daily trip counts, worker trip distances, and worker trip counts were each estimated based on CalEEMod default values for construction of the applicable land use. Haul route distances were based on the average distance from the Build Alternative alignment to applicable construction landfills (Puente Hills, Monterey Park, Scholl Canyon, NuWay, and Savage Canyon) and haul volumes were derived from CalEEMod default values based on the footprint of demolished structures and excavated volumes modeled.
- Demolished structure footprints were estimated based on Build Alternative-specific site conceptual drawing details and satellite imagery from Google Earth Pro and industry standard assumptions (0.37 cubic yard of waste per square foot of demolition). Demolition haul trip counts were estimated from these quantities using CalEEMod default trip generation factors (20 tons or 16 cubic yards capacity per haul truck) (CAPCOA 2021). Excavated volumes were estimated based on Build Alternative-specific alignment excavation needs (summarized by linear foot in Attachment A), and excavation haul trip counts were estimated assuming no re-use of material on-site and 14 cubic yard capacity trucks.
- While worker, hauling, and vendor trip counts were estimated on a per-segment level for the air quality analysis, the overall Build Alternative trip counts are generally consistent with those presented in Chapter 2.0 of the EA.

### 4.2.1.1 Hot-Spots

When considering construction emissions under transportation conformity regulations, FTA defers to USEPA for guidance on when construction-related hot-spot analyses may be applicable. USEPA guidance states that PM hot-spot analyses are not applicable for construction activities if those activities are considered temporary, defined as emissions which occur only during the construction phase and last 5 years or less at any individual site (40 CFR Part 93.123[c][5]; USEPA 2010). As construction of the Build Alternative would be highly mobile, and construction would not be anticipated to occur at any one site for a period lasting more than 5 years, PM hot-spot analyses are not applicable to Build Alternative construction activities. Neither FTA nor USEPA specifically requires or recommends the analysis of CO hot-spots from construction activities.

### 4.2.1.2 Construction Emissions

For emissions generated during project construction, emissions can be compared to regional criteria air pollutant thresholds established by the SCAQMD. Projects for which emission levels would be below these thresholds would not be expected to cause a new NAAQS or CAAQS violation or exacerbate an existing violation within the region. These thresholds are summarized in **Table 4.2**.

**Table 4.2. SCAQMD Regional Construction Air Quality Significance Thresholds**

Pollutant	Construction Emissions (lbs/day)
CO	550
NO <sub>x</sub>	100
PM <sub>10</sub>	150
PM <sub>2.5</sub>	55
SO <sub>2</sub>	150
VOC	75
Pb <sup>1</sup>	3

Sources: SCAQMD 2023.

Notes:

<sup>1</sup> While the SoCAB is a nonattainment area for Pb, Pb is not a transportation-related pollutant, so the Project would not be of concern for Pb emissions. No further evaluation of Pb emissions is therefore included in this analysis.

Key: CO = carbon monoxide; lbs = pounds; NO<sub>x</sub> = nitrogen oxides; Pb = lead; PM<sub>10</sub> = fine particulate matter; PM<sub>2.5</sub> = fine particulate matter; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compound

#### 4.2.1.2.1 Localized Impacts to Sensitive Land Uses

Although construction of the Build Alternative would be highly mobile, and construction would not be anticipated to occur at any one site for a period lasting more than 5 years, localized emissions would be generated at areas across the Study Area throughout construction period.

The NAAQS and CAAQS are developed to be protective of both the general public and of sensitive subpopulations such as children, the elderly, and individuals with chronic respiratory problems who may be more sensitive to the health impacts of air pollutants. The SCAQMD defines sensitive receptors as those locations where a member of a sensitive subpopulations may be present for up to 24 hours; within the Study Area, sensitive receptors include residences, hospitals, and convalescent facilities (SCAQMD 2008). For evaluation of the potential for adverse air quality impacts to sensitive receptors and other land-uses where individuals may spend fewer than 24 consecutive hours, such as schools or commercial areas, localized emissions can be compared against SCAQMD's localized significance thresholds (LSTs). When not exceeded, LSTs indicate that local emissions have no potential to cause a new or exacerbate an existing local violation of the NAAQS or CAAQS. These LSTs are summarized in **Table 4.3**.

**Table 4.3. SCAQMD Localized Significance Thresholds for Construction**

Pollutant	Construction Emissions (lbs/day) <sup>1,2,3</sup>
CO	571
NO <sub>x</sub>	80
PM <sub>10</sub>	4
PM <sub>2.5</sub>	3

Sources: SCAQMD 2008.

Notes:

<sup>1</sup> SCAQMD establishes LSTs by source receptor area, construction site acreage, and distance to nearest receptor. SCAQMD assigns the City of Commerce to source receptor area 5, and the City of Montebello and East Los Angeles to source receptor area 11. The minimum applicable LSTs between source receptor area 5 and source receptor area 11 were used.

<sup>2</sup> The minimum (most conservative) LST site acreage, 1-acre, was assumed.

<sup>3</sup> For gaseous (CO and NO<sub>x</sub>) pollutants, the NAAQS and CAAQS include 1-hour exposure averaging periods, thus nearest receptor distance from the project site to which a member of the public could be exposed for up to 1-hour should be used. For particulate pollutants, the NAAQS and CAAQS feature longer (24-hour and annual) exposure averaging periods, thus the nearest sensitive receptor distance may be used. For both sets of pollutants in this analysis, the minimum (most conservative) LST receptor distance, 25-meters, was assumed.

Key: CO = carbon monoxide; lbs = pounds; NO<sub>x</sub> = nitrogen oxides; PM<sub>10</sub> = fine particulate matter; PM<sub>2.5</sub> = fine particulate matter

## 5.0 AFFECTED ENVIRONMENT

### 5.1 Air Quality Study Area

As described in **Section 3.3.2**, the Study Area is located within the SoCAB, an approximately 6,745-square-mile area encompassing all of Orange County and non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is bounded on the west by the Pacific Ocean, on the northwest by the Santa Susana Mountains and Simi Hills, on the north by the San Gabriel Mountains and San Bernardino Mountains, on the east by the San Jacinto Mountains and Santa Rosa Mountains, and on the south by the San Diego County line. A variety of air pollution sources, including vehicular traffic, commercial operations, and industrial operations contribute to regional air quality in the SoCAB, which is designated as a federal nonattainment area for O<sub>3</sub>, PM<sub>2.5</sub>, and Pb and is designated as a federal maintenance area for CO and PM<sub>10</sub>. Due to the regional scale at which rail systems operate and air quality is characterized, the reasonably foreseeable affected environment extends beyond the Study Area, including the subset of SoCAB (regional) traffic which would experience a mode shift from private vehicle travel to rail ridership under the Build Alternative.

### 5.2 Existing Conditions

#### 5.2.1 Climate and Atmospheric Conditions

The climate of the SoCAB is determined primarily by terrain and geography. Regional meteorology is dominated by a persistent high-pressure zone over the eastern Pacific Ocean. Seasonal variations in strength and position of this pressure system cause changes in area weather patterns. Local climatic conditions are characterized by warm summers, mild winters, infrequent rainfall, moderate daytime on-shore breezes, and moderate humidity. The SoCAB's normally mild climate is occasionally interrupted by periods of hot weather, winter storms, and hot easterly Santa Ana winds.

The SoCAB area has high levels of air pollution, particularly from June through September. Factors leading to high levels of pollution include a large amount of pollutant emissions, light winds, and shallow vertical atmospheric mixing. These factors reduce pollutant dispersion, exacerbating elevated air pollution levels. Pollutant concentrations in the SoCAB vary by location, season, and time of day. Concentrations of O<sub>3</sub>, for example, tend to be lower along the coast and in far inland areas of the basin and adjacent desert and higher in and near inland valleys. Over the past 30 years, substantial progress has been made in reducing air pollution levels in Southern California and the SoCAB.

Local climate conditions affect the dispersion, chemical reactions, and deposition of air pollutants throughout the region. Data from the South San Gabriel Valley meteorological monitoring station (designated Pico Rivera #2, CARB Number 70185) were used to characterize climatological conditions in the vicinity of the Build Alternative.<sup>11</sup> Additional meteorological statistics were sourced from the Western Regional Climate Center (WRCC) Montebello Cooperative Observer Network (COOP)

---

<sup>11</sup> CARB's iADAM website identifies this station as "Pico Rivera-4144 San Gabriel".

monitoring station. Historically, the maximum summer temperatures in the Study Area typically occur in August and average 89.7 degrees Fahrenheit (°F), the minimum winter temperatures typically occur in December and average 47.2°F, and annual rainfall averages 14.78 inches (WRCC 2013).

## 5.2.2 Existing Air Quality Conditions

Air quality conditions for a Study Area are typically the result of meteorological conditions and existing emission sources in an area.

### 5.2.2.1 Monitoring Data – Criteria Pollutants

Air quality data from monitoring stations near the Study Area is summarized in **Table 5.1**. This impact report used monitoring data from the South San Gabriel Valley station for most pollutants; however, the central Los Angeles station (designated North Main Street, CARB Number 70087) was used for pollutants not monitored at the South San Gabriel Valley station. These stations best represent air quality conditions at the Study Area; or, in the case of O<sub>3</sub>, best represent air quality conditions for the region. See **Table 5.1** for the location of the monitoring stations.

**Table 5.1. Summary of Pollutant Monitoring Data Near the Study Area**

Criteria Air Pollutant	Annual Monitoring Data			CAAQS	NAAQS
	2021	2022	2023		
<b>Carbon Monoxide (CO)</b>					
<b>South San Gabriel Valley Monitoring Station</b>					
Maximum concentration, 1-hour period, ppmv	1.8	1.6	1.8	20	35
Maximum concentration, 8-hour period, ppmv	1.5	1.5	1.3	9.0	9
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>					
<b>South San Gabriel Valley Monitoring Station</b>					
National standard design value, 1-hour period, ppmv	0.056	0.055	0.053	N/A	0.100
California designation value, 1-hour period, ppmv	0.070	0.070	0.060	0.18	N/A
National standard design value, annual average, ppmv	0.017	0.017	0.015	N/A	0.053
California designation value, annual average, ppmv	0.017	0.017	0.017	0.030	N/A
<b>Ozone (O<sub>3</sub>)</b>					
<b>South San Gabriel Valley Monitoring Station</b>					
Maximum concentration, 1-hour period, ppmv	0.104	0.123	0.120	0.09	N/A
National standard design value, 8-hour period, ppmv	0.076	0.075	0.071	N/A	0.070
California designation value, 8-hour period, ppmv	0.092	0.091	0.081	0.070	N/A
Days above 1-hour CAAQS (0.09 ppmv)	2	3	7	N/A	N/A
Days above 8-hour CAAQS (0.070 ppmv)	3	3	9	N/A	N/A
Days above 8-hour NAAQS (0.070 ppmv)	3	2	7	N/A	N/A

Criteria Air Pollutant	Annual Monitoring Data			CAAQS	NAAQS
	2021	2022	2023		
<b>Inhalable Particulate Matter (PM<sub>10</sub>)</b>					
<b>Los Angeles – North Main Street Monitoring Station</b>					
Maximum national concentration, 24-hour period, $\mu\text{g}/\text{m}^3$	64.0	61.0	58.0	N/A	150
Maximum state concentration, 24-hour period, $\mu\text{g}/\text{m}^3$	138.5	43.7	51.6	50	N/A
Maximum annual state concentration, 3-year average, $\mu\text{g}/\text{m}^3$	34	26	26	20	N/A
Estimated number of days above 24-hour CAAQS (50 $\mu\text{g}/\text{m}^3$ )	17.2	0.0	6.1	N/A	N/A
<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>					
<b>South San Gabriel Valley Monitoring Station</b>					
Maximum national concentration, 24-hour period, $\mu\text{g}/\text{m}^3$	66.0	53.8	60.7	N/A	35
National 2024 annual standard design value, $\mu\text{g}/\text{m}^3$	12.8	13.1	11.6	N/A	9.0
State annual designation value, $\mu\text{g}/\text{m}^3$	14	14	13	12	N/A
Estimated number of days above 24-hour NAAQS (35 $\mu\text{g}/\text{m}^3$ ) <sup>1</sup>	8.9	3.1	3.1	N/A	N/A

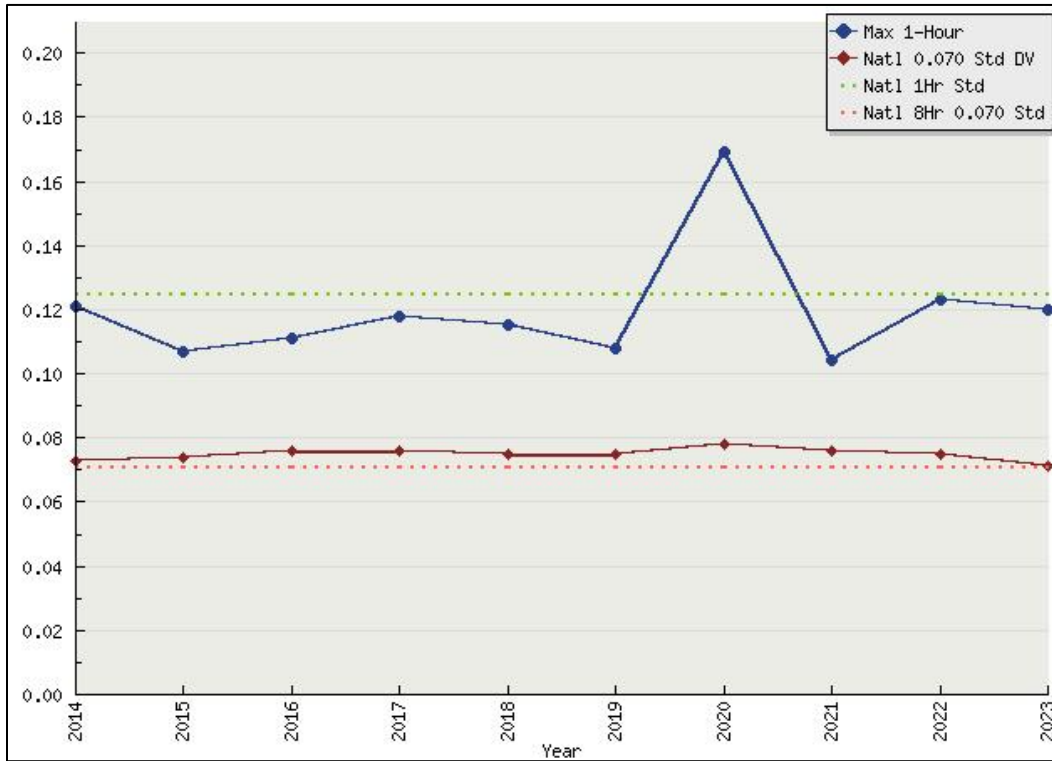
Sources: CARB, 2024b; SCAQMD, 2024.

Note:

<sup>1</sup> Most PM<sub>2.5</sub> measurements are taken every 6 days; therefore, the number of days over the 24-hour standard in any year is estimated mathematically.

Key:  $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter; CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppmv = parts per million by volume

Recorded 8-hour O<sub>3</sub> concentrations exceeded the NAAQS up to 7 days a year between 2021 and 2023 (see **Table 5.1**). The 24-hour and annual PM<sub>2.5</sub> NAAQS were also exceeded during the same period. Substantial year-to-year variations in monitored O<sub>3</sub> levels are common. Although no clear trend in O<sub>3</sub> levels is demonstrated by monitoring results from 2021 through 2023, the ten-year concentration trend shows a general flatline in O<sub>3</sub> concentrations, interrupted by a spike in maximum concentrations in 2020 (see **Figure 5.1**).



Source: CARB, 2024c.

**Figure 5.1. Ten-Year Ozone Concentration Trends**

### 5.2.2.2 Hot-Spots

CO pollution can have localized impacts that require additional analysis. If traffic volumes and congestion along a roadway substantially change, localized concentrations of CO have the potential to adversely affect sensitive populations.

This study evaluated CO hot-spots for the highest volume intersections in the Study Area. Under existing conditions, the highest peak hour-volume intersections within the Study Area would be the multiway intersection of Atlantic Boulevard, Triggs Street, Goodrich Boulevard, Telegraph Road, and Ferguson Drive with 4,243 vehicles in the peak hour, and the multiway intersection of Woods Avenue, Beverly Boulevard, 3rd Street, and Pomona Boulevard with 4,150 vehicles in the peak hour.

Moreover, the SoCAB is designated as a maintenance area for CO, for which the NAAQS was last exceeded in 2002 based on CARB historical monitoring data. As presented in **Table 5.1**, the maximum 1- and 8-hour concentrations of CO in the Study Area from 2021 through 2023 were 1.8 ppmv and 1.5 ppmv respectively, well below the 1- and 8-hour NAAQS of 35 ppmv and 9 ppmv. Future background concentrations may be estimated by adjusting the monitored maximum ambient background conditions proportionally to the ratio of future and current traffic volumes and the ratio of future to current emission factors.

### 5.2.2.3 Existing Operational Emissions

This study compiled emission inventories for the existing conditions baseline year. Identified potential operational emission sources include regional traffic, operation of LRVs, operation of LRV stations, evaporation of VOC from parked vehicle fuel tanks at LRV stations, operation of the MSF, and operation of any bus routes.

#### 5.2.2.3.1 Regional Highway Traffic Emissions

Emission modeling summarized in this impacts report includes the entire vehicle fleet mix for the SoCAB used in EMFAC and includes vehicle types such as passenger cars, trucks, buses, and motorcycles. This analysis uses the EMFAC2021 model to generate emission factors for these vehicle types. **Table 5.2** provides a summary of highway traffic emissions in the region.

**Table 5.2. Existing Conditions – Regional Traffic Emissions**

Emission Source	Daily Regional Emissions					
	VOC	CO	NOx	SO <sub>2</sub>	PM <sub>10</sub> <sup>1</sup>	PM <sub>2.5</sub> <sup>1</sup>
Regional Traffic Emission Factor (2025) (g/mi) <sup>2</sup>	0.100	1.323	0.160	0.003	0.323	0.084
Regional Traffic (lbs/day) <sup>3</sup>	112,421	1,490,131	179,699	3,536	364,202	94,110

Source: CDM Smith/AECOM JV 2026.

Notes:

<sup>1</sup> The emission factors for particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) include engine exhaust, tire wear, brake wear, and paved road dust.

<sup>2</sup> The EMFAC emission factors are based on the SoCAB geographic area fleet mix and an average vehicle speed of 35 miles per hour (based on traffic modeling information).

<sup>3</sup> Daily emissions are based on a regional daily estimated VMT of 510,828,000 (CDM Smith/AECOM JV 2026).

Key: CO = carbon monoxide; g/mi = grams per mile; lbs = pounds; NOx = nitrogen oxides; PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

#### 5.2.2.3.2 LRV Operation Emissions

No LRVs operate in the Study Area under existing conditions, and therefore, existing emissions from this source would be zero. Moreover, since LRVs would be powered by electricity, there would also be no direct emissions of criteria pollutants from this source under the Build Alternative. Thus, LRV-related emissions were not further considered for air quality impacts.

#### 5.2.2.3.3 Station Operation Emissions

One at-grade LRV station, located at the current alignment terminus at Atlantic Boulevard operates in the Study Area under existing conditions. However, since existing and future LRV stations would be powered by electricity, there would be no direct emissions of criteria pollutants from this source under the Build Alternative. Thus, LRV station-related emissions were not further considered for air quality impacts.

### 5.2.2.3.4 Parking-Related Emissions

Parking-related evaporative VOC emissions were analyzed for all Build Alternative-related parking facilities. While parking at existing facilities would result in regional evaporative VOC emissions, the emissions from these existing non-Build Alternative facilities would not substantially change as a result of the Build Alternative. Therefore, there would be no existing Build Alternative-related emissions from this source.

### 5.2.2.3.5 Maintenance Storage Facility Emissions

Under the Build Alternative, operational emissions associated with the MSF were analyzed. However, no MSF operates within the Study Area under existing conditions. Therefore, there would be no existing emissions from this source.

### 5.2.2.3.6 Bus Operations Emissions

No bus routes were projected to be substantially adjusted or altered as part of the implementation of the Project (No Build Alternative and Build Alternative). Moreover, consistent with CARB’s Innovative Clean Transit Regulation, regional buses will be gradually transitioned to a 100 percent zero-emission bus fleet. Thus, it is expected that any adjustments to bus operations which would occur as a result of the Project would not result in direct emissions from this source. Therefore, emissions related to local bus routes were not considered in the estimated emissions under existing conditions or the 2050 No Build Alternative or Build Alternative.

### 5.2.2.3.7 Total Operational Emissions

**Table 5.3** summarizes the total regional operating emissions which would be associated with Project-related sources under existing conditions.

**Table 5.3. Existing Conditions – Regional Total Operational Emissions**

Emission Source	Daily Regional Emissions (lbs/day)					
	VOC	CO	NOx	SO <sub>2</sub>	PM <sub>10</sub> <sup>1</sup>	PM <sub>2.5</sub> <sup>1</sup>
Regional Traffic <sup>2</sup>	112,421	1,490,131	179,699	3,536	364,202	94,110
Total	112,421	1,490,131	179,699	3,536	364,202	94,110

Source: CDM Smith/AECOM JV 2026.

Notes:

<sup>1</sup> The emission factors for particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) include engine exhaust, tire wear, brake wear, and paved road dust.

<sup>2</sup> Daily emissions are based on a regional daily estimated VMT of 510,828,000 (CDM Smith/AECOM JV 2026).

Key: CO = carbon monoxide; lbs = pounds; NOx = nitrogen oxides; PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

## 6.0 ENVIRONMENTAL CONSEQUENCES

### 6.1 No Build Alternative

The No Build Alternative would maintain existing transit service through the year 2050. No new transportation infrastructure would be built within the Study Area aside from projects currently under construction or funded for construction and operation by 2050 via the 2008 Measure R or 2016 Measure M sales taxes. This alternative would include the highway and transit projects in Metro’s 2020 LRTP) Update and the 2024 RTP. Under the No Build Alternative, the Build Alternative would be constructed or operated.

#### 6.1.1 Operational Impacts

This section describes the results of the operational air quality impact analysis conducted for the No Build Alternative. More detailed emission calculations and model outputs can be found in **Attachment A** through **Attachment C** of this impacts report.

##### 6.1.1.1 Conforming RTP and FTIP

SCAG’s current 2024 RTP identifies the Study Area as a priority development area for urban transit and identifies the Build Alternative in the 2024 RTP Project List Technical Report as *1TR0704 – Gold Line Eastside Extension* (SCAG 2024). The Build Alternative was incorporated into regional growth projections and transportation strategies in the 2024 RTP.

Under the No Build Alternative, the Metro E Line would not be extended east from its current terminus at Atlantic Station in East Los Angeles. Because the Build Alternative was incorporated in the growth and transit projections in the 2024 RTP, the No Build Alternative would not support the growth and transit projections and would be inconsistent with currently approved RTP and FTIP. Thus, an adverse effect would occur.

##### 6.1.1.2 Hot-Spots

This study evaluated CO hot-spots for the highest volume intersections in the Study Area. Under the No Build Alternative, the highest peak hour-volume intersections within the Study Area would be the multiway intersection of Woods Avenue, Beverly Boulevard, 3rd Street, and Pomona Boulevard with 4,469 vehicles in the peak hour, and the multiway intersection of Atlantic Boulevard, Triggs Street, Goodrich Boulevard, Telegraph Road, and Ferguson Drive with 4,442 vehicles in the peak hour.

The SoCAB is designated as a maintenance area for CO, for which the NAAQS was last exceeded in 2002 based on CARB historical monitoring data. As presented in **Table 5.1**, the maximum 1- and 8-hour concentrations of CO in the Study Area from 2021 through 2023 were 1.8 ppmv and 1.5 ppmv respectively, well below the 1- and 8-hour NAAQS of 35 ppmv and 9 ppmv. CARB’s EMFAC2021 model including the November 2025 off-model adjustment factors indicates that, driven by state and federal

engine standard requirements, highway fleet aggregate CO emission rates would be dramatically lower in 2050 than under existing conditions (2025). For example, the fleet-aggregate CO running exhaust emission factors in 2025 and 2050 were 1.32 grams per mile and 0.85 grams per mile, respectively, reflecting a 35.7 percent reduction over that period. The EMFAC2021 emission factors are also understood to be conservative, not accounting for the further emission factor reductions which would be expected from implementation of future state and federal vehicle emission control or fuel efficiency requirements.

Although peak vehicles per hour counts at the busiest intersections in the Study Area would increase relative to existing conditions, the combination of already low maximum ambient monitored concentrations and anticipated reductions to CO emission rates indicate that there would be no potential for the No Build Alternative to generate a CO hot-spot.

Under the No Build Alternative, no Build Alternative element would be constructed or operated. Therefore, with respect to PM hot-spots, the No Build Alternative would not result in any new large congregations of diesel-powered transit vehicles and there would be no potential for the No Build Alternative to generate a PM hot-spot or adverse effects to occur.

### 6.1.1.3 Regional Emissions

While the existing Atlantic Station, local and regional bus routes, and various parking facilities would continue to operate under the No Build Alternative, these sources would either not directly emit criteria pollutant emissions or would not be directly affected by implementation of the No Build Alternative. No MSF would operate in the Study Area under the No Build Alternative. The only operational emissions under the No Build Alternative which would be affected by the Build Alternative are the subset of regional traffic which would experience a mode shift from private vehicle travel to rail ridership under the Build Alternative. For the purpose of isolating reasonably foreseeable effects of the Build Alternative, Project-affected regional traffic emissions within the SoCAB associated with the No Build Alternative are estimated.

**Table 6.1** summarizes the total regional operating emissions which would be associated with No Build Alternative-related sources.

**Table 6.1. No Build Alternative – Regional Total Operational Emissions (2050)**

Emission Source	Daily Regional Emissions					
	VOC	CO	NOx	SO <sub>2</sub>	PM <sub>10</sub> <sup>1</sup>	PM <sub>2.5</sub> <sup>1</sup>
Regional Traffic Emission Factor (2050) (g/mi) <sup>2</sup>	0.058	0.850	0.125	0.003	0.323	0.083
Regional Traffic (lbs/day) <sup>3</sup>	73,292	1,081,888	158,988	3,315	411,588	105,659
Total (lbs/day)	73,292	1,081,888	158,988	3,315	411,588	105,659

Source: CDM Smith/AECOM JV 2026.

Notes:

<sup>1</sup> The emission factors for particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) include engine exhaust, tire wear, brake wear, and paved road dust.

<sup>2</sup> The EMFAC emission factors are based on the SoCAB geographic area fleet mix and an average vehicle speed of 35 miles per hour (based on traffic modeling information).

<sup>3</sup> Daily emissions are based on a regional daily estimated VMT of 577,229,000 (CDM Smith/AECOM JV 2026).

Key: CO = carbon monoxide; g/mi = grams per mile; lbs = pounds; NOx = nitrogen oxides; PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

### 6.1.1.3.1 Mobile Source Air Toxics

An analysis of national trends performed by the Federal Highway Administration (FHWA) using USEPA's Motor Vehicle Emissions Simulator Version 3 (MOVES3) model indicates a combined reduction in annual MSAT emissions of over 76 percent for the priority transportation MSAT from 2020 to 2060 (FHWA 2023). These trends are presented in **Figure 6.1**.

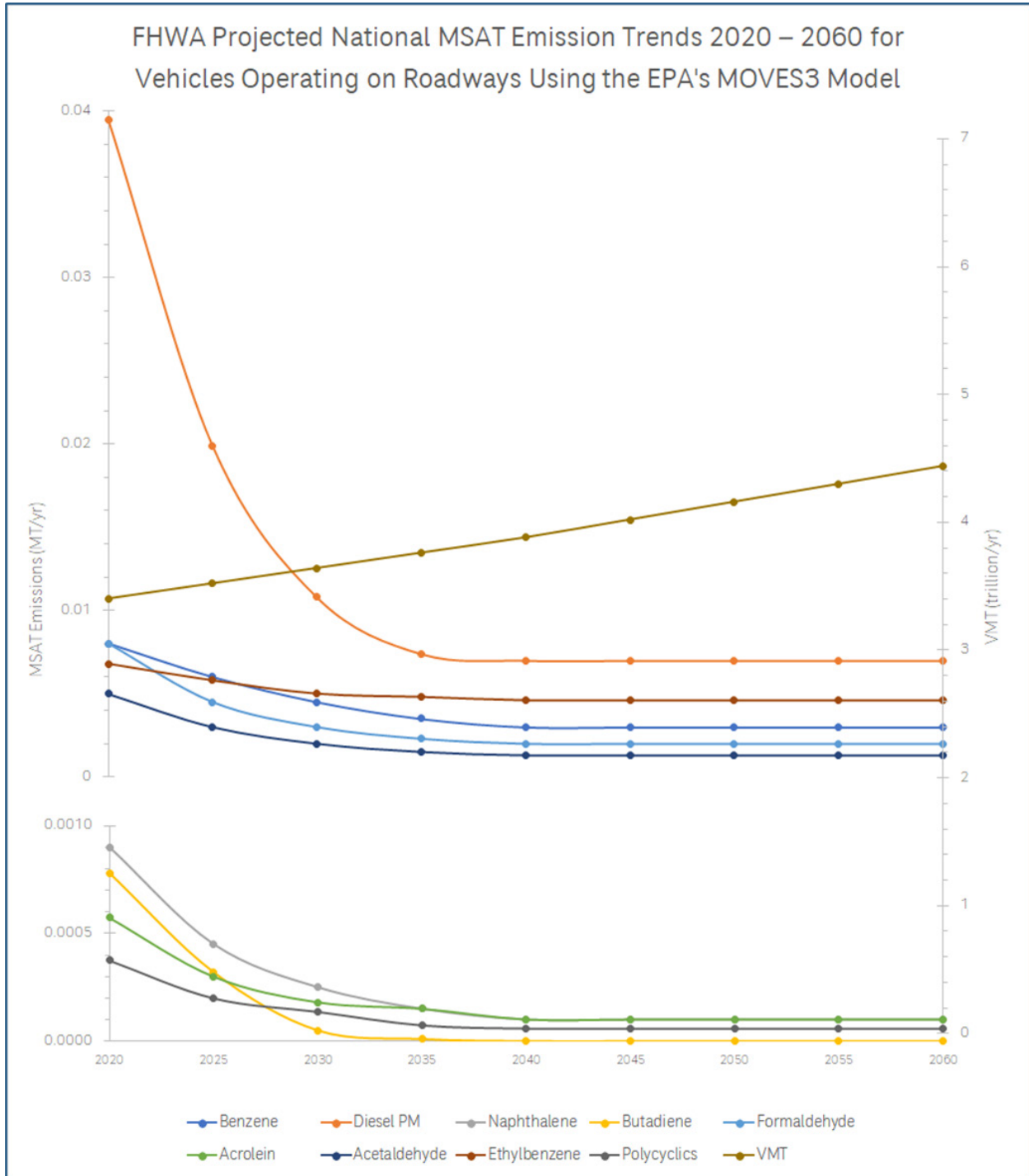
While local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures, the magnitude of projected emission reductions is so great that MSAT emissions in the region would be expected to be lower than existing conditions in virtually all locations under either the Build Alternative or the No Build Alternative. Thus, no adverse effect would occur.

## 6.1.2 Construction

No project element would be constructed under the No Build Alternative. Construction of already planned transit and roadway projects would be temporary and conform with applicable federal, state, regional, and local air quality regulations and standards, such as the CAA and SCAQMD Rules. Thus, construction of these projects is not expected to result in an adverse effect on air quality.

## 6.2 Atlantic to Greenwood Alternative

The Build Alternative is an electric-powered light rail service extension in eastern Los Angeles County and the Cities of Commerce and Montebello. It would consist of 4.7 miles of reconfigured and new LRT guideway to extend the Metro E Line east from the current terminus at Atlantic Boulevard to an at-grade terminal station at the Greenwood station in the City of Montebello. The Build Alternative would involve construction and subsequent operation of four stations, other railroad system facilities, and the MSF. The Build Alternative would not introduce new population or housing growth in the Study Area and any additional employment at Metro operated facilities would not disproportionately contribute to the growth projections in the 2024 RTP. The construction and subsequent operation of the Build Alternative would result in ridership amounting to a reduction in regional passenger vehicle VMT of an estimated 2,544,000 miles annually. These VMT reductions are the result of travel mode shifts from private vehicles to rail ridership for the subset of regional traffic within the SoCAB affected by the Build Alternative.



Source: FHWA 2023.

**Figure 6.1. National Mobile Source Air Toxics Projected Trends (2020 – 2060)**

## 6.2.1 Operational Impacts

This section describes the results of the operational air quality impact analysis conducted for the Build Alternative. More detailed emission calculations and model outputs can be found in **Attachment A** through **Attachment C** of this Impacts Report.

### 6.2.1.1 Conforming RTP and FTIP

SCAG's current 2024 RTP identifies the Study Area as a priority development area for urban transit and identifies the Build Alternative in the 2024 RTP Project List Technical Report *as 1TR0704 – Gold Line Eastside Extension* (SCAG 2024). The Build Alternative was incorporated into regional growth projections and transportation strategies in the 2024 RTP.

The Build Alternative is identified in the 2025 Federal Transportation Improvement Program Project Listing, approved by the Federal Highway Administration and Federal Transit Administration on December 16, 2024. The Build Alternative is identified in the FTIP as “Eastside Transit Corridor Phase 2 - Metro L Line (Gold) Eastside Extension from its terminus at Atlantic Station in East Los Angeles to eastern Los Angeles County” under FTIP Identification LA0G626 for the preliminary engineering and right-of-way phases and RTP Identification 1TR0704 which is consistent with the definition of the Build Alternative. Project funding is programmed under the current 2025 FTIP. Additional funding for future project phases will be programmed under the FTIP at a later date.

The Build Alternative was incorporated in the growth and transit projections in the 2024 RTP and is included in the current 2025 FTIP. It would support the planned growth and transit strategies, be consistent with projections, and would not conflict with these applicable plans. No adverse effect would occur.

### 6.2.1.2 Hot-Spots

This study evaluated CO hot-spots for the highest volume intersections in the Study Area. Under the Build Alternative, the highest peak hour-volume intersections within the Study Area would be the multiway intersection of Woods Avenue, Beverly Boulevard, 3rd Street, and Pomona Boulevard with 4,514 vehicles in the peak hour, and the multiway intersection of Atlantic Boulevard, Triggs Street, Goodrich Boulevard, Telegraph Road, and Ferguson Drive with 4,428 vehicles in the peak hour.

Moreover, the SoCAB is designated as a maintenance area for CO, for which the NAAQS was last exceeded in 2002 based on CARB historical monitoring data. As presented in **Table 5.1**, the maximum 1- and 8-hour concentrations of CO in the Study Area from 2021 through 2023 were 1.8 ppmv and 1.5 ppmv respectively, well below the 1- and 8-hour NAAQS of 35 ppmv and 9 ppmv. CARB's EMFAC2021 model, including the November 2025 off-model adjustment factors, indicates that, driven by state and federal engine standard requirements, highway fleet aggregate CO emission rates would be dramatically lower in 2050 than under existing conditions (2025). For example, the fleet-aggregate CO running exhaust emission factors in 2025 and 2050 were 1.32 grams per mile and 0.85 grams per mile, respectively, reflecting a 35.7 percent reduction over that period. The EMFAC2021 emission factors are also understood to be conservative, not accounting for the further emission factor reductions which

would be expected from implementation of future state and federal vehicle emission control or fuel efficiency requirements.

Relative to the No Build Alternative, peak traffic counts under the Build Alternative would be negligibly higher at the busiest intersection. Although peak vehicles per hour counts at the busiest intersections in the Study Area would increase under the Build Alternative relative to existing conditions, the combination of already low maximum ambient monitored concentrations, and anticipated reductions to CO emission rates indicate that there would be no potential for the Build Alternative to generate a CO hot-spot.

With respect to PM hot-spots, the Build Alternative is located within a maintenance area for the PM<sub>10</sub> NAAQS and a nonattainment area for the PM<sub>2.5</sub> NAAQS and therefore, interagency consultation was necessary for purposes of transportation conformity. As discussed in **Section 4.1.1.2**, LRVs would be powered by electricity, not diesel fuel. It is not expected that the Build Alternative would result in any new large congregations of diesel-powered transit vehicles, which indicates that there would be no potential to generate a PM hot-spot.

USEPA guidance for hot-spot analysis and interagency consultation were applied to determine whether the Build Alternative is a Project of Air Quality Concern. Per the transportation conformity rules and regulations, all nonexempt projects must go through review by the Transportation Conformity Working Group (TCWG). On March 24, 2026, the TCWG determined that the Build Alternative is not a Project of Air Quality Concern. The Build Alternative was approved and concurred upon by interagency consultation at the TCWG meeting as a project not having adverse impacts on air quality, and the Build Alternative meets the requirements of the Clean Air Act and 40 Code of Federal Regulations 93.116.

No adverse effect would occur with respect to CO or PM hot-spots.

### 6.2.1.3 Emissions

While local and regional bus routes and existing non-project various parking facilities would continue to operate under the Build Alternative, these sources would either not directly emit criteria pollutant emissions or would not be directly affected by implementation of the Build Alternative. While four new stations would operate within the Study Area under the Build Alternative, these sources would not directly emit criteria pollutant emissions. Similarly, the operation of the Maravilla Crossover would not directly emit criteria pollutant emissions. Emissions associated with evaporative off-gassing from parked vehicles at Build Alternative parking facilities would occur in the Study Area. The operational emission sources most affected by the Build Alternative would be regional traffic. The Build Alternative's reasonably foreseeable effect would be mode shift of some travelers in the Study Area to rail ridership, replacing vehicle trips and reducing the associated vehicular emissions. Since air quality is characterized at a regional scale and the rail system is a large and interconnected transportation network that extends beyond the Study Area, the Build Alternative-related ridership shift would reduce VMT within the SoCAB region more than would be seen just within the Study Area. These regional VMT reductions are therefore included in this evaluation.

**Table 6.2** summarizes the total regional operating emissions that would be associated with operation of the Build Alternative excluding operation of the MSF. As presented, emissions of all relevant criteria pollutants and precursors would be reduced as a result of the Build Alternative. Thus, no adverse effect would occur.

**Table 6.2. Build Alternative without MSF – Total Operational Emissions**

Emission Source	Daily Regional Emissions (lbs/day) <sup>1</sup>					
	VOC	CO	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Build Alternative (2050)</b>						
Regional Traffic	73,291	1,081,873	158,986	3,315	411,582	105,657
Parking Lot Maintenance and Parked Vehicle Fuel Evaporation	0	--	--	--	--	--
Total	73,291	1,081,873	158,986	3,315	411,582	105,657
<b>No Build Alternative (2050)</b>						
Regional Traffic	73,292	1,081,888	158,988	3,315	411,588	105,659
Total	73,292	1,081,888	158,988	3,315	411,588	105,659
<b>Build Alternative (2050) minus No Build Alternative (2050)</b>						
Net Project Emissions	(1)	(15)	(2)	(0)	(6)	(1)
Net Air Quality Benefit?	Yes	Yes	Yes	Yes	Yes	Yes

Source: CDM Smith/AECOM JV 2026.

Note:

<sup>1</sup> Emission reductions (beneficial effects) are shown in parentheses.

Key: CO = carbon monoxide; lbs = pounds; NO<sub>x</sub> = nitrogen oxides; PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

### 6.2.1.3.1 Maintenance and Storage Facility

The Build Alternative would include an MSF located on one of the following sites: Site 1 (25 acres), Site 2 (28 acres), or Site 3 (8.9 acres). The scale of operations at either MSF Site 1 or 2 would be similar and, if constructed, up to 84 LRV cars could be accommodated for storage at either site option. MSF Site 3 would be smaller and would accommodate a minimum of 39 LRV cars.

Although electricity used for site lighting may differ marginally as a result of the differing site sizes, emissions of criteria pollutant emissions from operational activities would not be expected to differ if either MSF Site 1 or 2 is constructed. Due to the smaller footprint and reduced LRV car accommodation, MSF Site 3 would result in operational emissions less than MSF Sites 1 and 2. **Table 6.3** summarizes the expected total regional operating emissions that would be associated with Build Alternative-related sources depending on which MSF site is chosen.

**Table 6.3. Build Alternative with MSF – Total Operational Emissions**

Emission Source	Daily Regional Emissions (lbs/day) <sup>1</sup>					
	VOC	CO	NOx	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Build Alternative (2050)</b>						
Regional Traffic	73,291	1,081,873	158,986	3,315	411,582	105,657
MSF Site 1 or 2	4	0	0	0	0	0
MSF Site 3	0	0	0	0	0	0
Parking Lot Maintenance and Parked Vehicle Fuel Evaporation	0	--	--	--	--	--
Total with MSF Site 1 or 2	73,295	1,081,873	158,986	3,315	411,582	105,657
Total with MSF Site 3	73,291	1,081,873	158,986	3,315	411,582	105,657
<b>No Build Alternative (2050)</b>						
Regional Traffic	73,292	1,081,888	158,988	3,315	411,588	105,659
Total	73,292	1,081,888	158,988	3,315	411,588	105,659
<b>Build Alternative with MSF minus No Build Alternative</b>						
Net Build Alternative Emissions with MSF Site 1 or Site 2	3	(15)	(2)	(0)	(6)	(1)
Net Build Alternative Emissions with MSF Site 3	(1)	(15)	(2)	(0)	(6)	(1)
Net Air Quality Benefit?	No	Yes	Yes	Yes	Yes	Yes
SCAQMD Regional Significance Threshold	55	550	55	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CDM Smith/AECOM JV 2026.

Note:

<sup>1</sup> Emission reductions (beneficial effects) are shown in parentheses.

 Key: CO = carbon monoxide; lbs = pounds; NOx = nitrogen oxides; PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

As presented, emissions of all relevant criteria pollutants and precursors, except for VOCs, would be reduced as a result of the Build Alternative with MSF Sites 1 or 2. While emissions of VOC would increase as a result of the Build Alternative, this increase would be below SCAQMD regional emission thresholds and there would be no potential for the operational emissions of the Build Alternative to cause a new NAAQS violation or exacerbate an existing violation. Thus, no adverse effect would occur.

Emissions of all relevant criteria pollutants and precursors, including VOCs, would be lower under the Build Alternative with MSF Site 3, and therefore, like the Build Alternative with MSF Site 1 or 2, no adverse effect would occur.

### 6.2.1.3.2 Mobile Source Air Toxics

As discussed in **Section 6.1.1.3.1**, MSAT emissions in the region would be expected to be lower than existing conditions in virtually all locations under the Build Alternative. Additionally, for transportation projects affecting regional VMT, the amount of MSAT which would be emitted would be proportional to

the forecasted VMT. Thus, the difference in MSAT emissions between the Build Alternative and the No Build Alternative would be similarly proportional, assuming all other variables, such as fleet mix and average vehicle speed, remain the same. Since the Build Alternative would decrease VMT relative to the No Build Alternative, regional MSAT emissions would also be expected to decrease. Thus, the Build Alternative would have a beneficial effect.

## 6.2.2 Construction

This section describes the results of the construction air quality impact analysis conducted for the Build Alternative. More detailed emission calculations and model outputs can be found in **Attachment A** through **Attachment C** of this Impacts Report.

### 6.2.2.1 Regional Emissions

The Build Alternative would involve a variety of construction activities throughout the Study Area (as discussed in **Section 2.2.5**) and would be conducted in accordance with the Metro Green Construction Policy (discussed in **Section 3.3.3.5**). **Table 6.4** summarizes the construction-related emissions that would be associated with the Build Alternative without construction of the MSF. Construction-related emissions would be temporary (approximately 60 to 84 months) and the maximum total peak day emissions would not be expected to exceed SCAQMD regional emission thresholds, thus no adverse effect would occur.

**Table 6.4. Build Alternative without MSF – Regional Daily Construction Emissions**

Emission Source	Regional Daily Emissions (lbs/day)					
	VOC	CO	NOx	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Guideway	4	39	34	<1	5	2
Stations	6	53	46	<1	4	2
Parking	5	9	6	<1	2	1
Street Widening and TPSS	2	18	14	<1	2	1
Maximum Total for Build Alternative without MSF <sup>1</sup>	11	81	67	<1	8	4
SCAQMD Regional Significance Threshold	75	550	100	150	150	55
Exceeds Level	No	No	No	No	No	No

Source: CDM Smith/AECOM JV 2026.

Note:

<sup>1</sup> Maximum total peak day emissions do not equal the sum of the maximum peak day emissions for each separate construction element because the peak day activity for each element do not necessarily overlap on the same day.

Key: CO = carbon monoxide; lbs = pounds; MSF = maintenance and storage facility; NOx = nitrogen oxides;

PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SCAQMD = South Coast Air Quality Management District;

SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

#### 6.2.2.1.1 Maintenance and Storage Facility

The emissions from construction activities would differ minorly depending on which site—MSF Site 1, 2, or 3—is selected, due to slightly different parcel acquisition and the size of the MSF.

**Table 6.5** through **Table 6.7** summarize the construction-related emissions that would be associated with the Build Alternative if the MSF is constructed at each of the three sites. As with the Build Alternative without the MSF, construction-related emissions for the Build Alternative including the MSF (at either MSF Site 1, 2, or 3) would be temporary and below SCAQMD regional emission thresholds, thus no adverse effect would occur.

**Table 6.5. Build Alternative with MSF Site 1 – Regional Daily Construction Emissions**

Emission Source	Regional Daily Emissions (lbs/day)					
	VOC	CO	NOx	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Build Alternative without MSF	11	81	67	<1	8	4
MSF Site 1	6	11	9	<1	2	1
Maximum Total for Build Alternative with MSF Site 1 <sup>1</sup>	16	92	76	<1	8	4
SCAQMD Regional Significance Threshold	75	550	100	150	150	55
Exceeds Level	No	No	No	No	No	No

Source: CDM Smith/AECOM JV 2026.

Note:

<sup>1</sup> Maximum total peak day emissions do not equal the sum of the maximum peak day emissions for each separate construction element because the peak day activity for each element do not necessarily overlap on the same day.

Key: CO = carbon monoxide; lbs = pounds; MSF = maintenance and storage facility; NOx = nitrogen oxides;

PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SCAQMD = South Coast Air Quality Management District;

SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

**Table 6.6. Build Alternative with MSF Site 2 – Regional Daily Construction Emissions**

Emission Source	Regional Daily Emissions (lbs/day)					
	VOC	CO	NOx	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Build Alternative without MSF	11	81	67	<1	8	4
MSF Site 2	6	14	11	<1	2	1
Maximum Total for Build Alternative with MSF Site 2 <sup>1</sup>	17	94	78	<1	9	5
SCAQMD Regional Significance Threshold	75	550	100	150	150	55
Exceeds Level	No	No	No	No	No	No

Source: CDM Smith/AECOM JV 2026.

Note:

<sup>1</sup> Maximum total peak day emissions do not equal the sum of the maximum peak day emissions for each separate construction element because the peak day activity for each element do not necessarily overlap on the same day.

Key: CO = carbon monoxide; lbs = pounds; MSF = maintenance and storage facility; NOx = nitrogen oxides;

PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SCAQMD = South Coast Air Quality Management District;

SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

**Table 6.7. Build Alternative with MSF Site 3 – Regional Daily Construction Emissions**

Emission Source	Regional Daily Emissions (lbs/day)					
	VOC	CO	NOx	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Build Alternative without MSF	11	81	67	<1	8	4
MSF Site 3	2	3	3	<1	1	<1
Maximum Total for Build Alternative with MSF Site 3 <sup>1</sup>	12	83	69	<1	8	4
SCAQMD Regional Significance Threshold	75	550	100	150	150	55
Exceeds Level	No	No	No	No	No	No

Source: CDM Smith/AECOM JV 2026.

Note:

<sup>1</sup> Maximum total peak day emissions do not equal the sum of the maximum peak day emissions for each separate construction element because the peak day activity for each element do not necessarily overlap on the same day.

Key: CO = carbon monoxide; lbs = pounds; MSF = maintenance and storage facility; NOx = nitrogen oxides;

 PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SCAQMD = South Coast Air Quality Management District;

 SO<sub>2</sub> = sulfur dioxide; VOC = volatile organic compounds

### 6.2.2.2 Localized Impacts to Sensitive Land Uses

Although construction of the Build Alternative would be highly mobile, and construction would not be anticipated to occur at any one site for a period lasting more than 5 years, localized emissions would be generated at areas across the Study Area throughout construction period. **Table 6.8** summarizes the maximum localized daily construction-related emissions for each applicable criteria air pollutant and the construction activity under the Build Alternative without construction of the MSF which are associated with those emissions. Construction-related emissions would be temporary (approximately 60 to 84 months) and the maximum localized daily emissions would not be expected to exceed SCAQMD LSTs, thus no adverse effect would occur.

**Table 6.8. Build Alternative without MSF – Localized Daily Construction Emissions**

Emission Source	Peak Localized Daily Emissions (lbs/day)			
	CO	NOx	PM <sub>10</sub>	PM <sub>2.5</sub>
Construction Activity	Gayhart, Davie, and Garfield Site Clearing	Gayhart, Davie, and Garfield Site Clearing	Guideway, At-Grade	Guideway, At-Grade
Build Alternative without MSF	22	22	2	1
SCAQMD Localized Significance Threshold for Study Area	571	80	4	3
Exceeds Level	No	No	No	No

Source: CDM Smith/AECOM JV 2026.

Key: CO = carbon monoxide; lbs = pounds; MSF = maintenance and storage facility; NOx = nitrogen oxides;

 PM<sub>10</sub> = inhalable particulate matter; PM<sub>2.5</sub> = fine particulate matter; SCAQMD = South Coast Air Quality Management District

### 6.2.2.2.1 Maintenance and Storage Facility

Although the regional emissions from construction activities under the Build Alternative with an MSF at Sites 1, 2, or 3 would differ from the regional emissions from Build Alternative without an MSF, construction of an MSF would not result in greater peak localized daily emissions than those generated by the Build Alternative without an MSF's construction activities. Therefore, there would be no difference in peak localized daily emissions with the construction of an MSF at any site. As with the Build Alternative without the MSF, construction-related emissions for the Build Alternative including the MSF (at either MSF Site 1, 2, or 3) would be temporary and below SCAQMD LSTs, thus no adverse effect would occur.

---

## **7.0 PROJECT MEASURES AND MITIGATION MEASURES**

### **7.1 Project Measures**

Project measures are design features, BMPs, or other measures required by law, including permit approvals. No project measures are applicable to the Build Alternative.

### **7.2 Mitigation Measures**

Mitigation measures are actions required to reduce the major adverse effects identified in this Impacts Report. No mitigation measures are applicable to the Build Alternative as no major adverse effects were identified.

## 8.0 PREPARERS QUALIFICATIONS

Name	Title	Education	Experience (Years)
Chris Campbell	Air Quality Specialist/ Independent Reviewer	MS – Environmental Analysis, Rice University, 2011 BS – Economics, Texas A&M University, 2008	11
Jeremy Gilbride	Air Quality Specialist/Task Leader	BS – Chemical Engineering, University of Massachusetts, Amherst, 2015	10
John Pehrson	Principal Environmental Scientist/Technical Specialist Reviewer	MBA – California State University, Fullerton, 2000 BS – Chemical Engineering, University of California, Davis, 1981	40
Nicholas Pham	Air Quality Specialist	MS – Civil and Environmental Engineering, University of California, Irvine, 2020 BS – Environmental Engineering, University of California, Irvine, 2019	1

## 9.0 REFERENCES CITED

Bay Area Air Quality Management District (BAAQMD). 2023. BAAQMD 2022 CEQA Air Quality Guidelines – Screening for Criteria Air Pollutants and Precursors, revised April 20, 2023. Available at:

[https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening\\_final-pdf.pdf](https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening_final-pdf.pdf). Accessed January 8, 2025.

CDM Smith/AECOM JV. 2019. Metro Eastside Alternatives Analysis: Highway Vehicle Miles, Vehicle Hours and Average Speed.

CARB. 2021a. Staff Report – CARB Review of the South Coast 2021 PM<sub>2.5</sub> Redesignation Request and Maintenance Plan. Available at: <https://ww2.arb.ca.gov/resources/documents/2021-south-coast-pm25-redesignation-request-and-maintenance-plan>. Accessed January 8, 2025.

CARB. 2021b. 2021 South Coast PM<sub>10</sub> Maintenance Plan Submittal Letter to U.S. EPA. Available at: [https://ww2.arb.ca.gov/sites/default/files/2021-10/Transmittal\\_letter\\_to\\_US\\_EPA\\_for\\_South\\_Coast\\_PM10\\_maintenance\\_Plan\\_RWC\\_signed\\_72221.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-10/Transmittal_letter_to_US_EPA_for_South_Coast_PM10_maintenance_Plan_RWC_signed_72221.pdf). Accessed January 8, 2025.

CARB. 2022. State Area Designation Maps. Available at: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>. Accessed January 8, 2025.

CARB. 2023. Health Effects of Air Pollutants. Available at: <https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health>; <https://ww2.arb.ca.gov/resources/ozone-and-health>; <https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health>; and <https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>. Accessed January 8, 2025.

California Air Resources Board (CARB). 2024a. Ambient Air Quality Standards Chart. Available at: [https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table\\_ADA\\_FINAL\\_07222024.pdf](https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf). Accessed December 13, 2024.

CARB. 2024b. iADAM – Air Quality Data Statistics. Available at: <http://www.arb.ca.gov/adam/>. Accessed January 8, 2025.

CARB. 2024c. iADAM – Trends Summary: National Ozone Statistics. Available at: <http://www.arb.ca.gov/adam/>. Accessed December 13, 2024.

California Air Pollution Control Officers Association (CAPCOA). 2021. California Emissions Estimator Model User's Guide Version 2020.4.0. Available at: [https://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01\\_user-39-s-guide2020-4-0.pdf](https://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/01_user-39-s-guide2020-4-0.pdf). Accessed April 15, 2025.

City of Commerce. 2008. 2020 General Plan. Available at: <https://www.ci.commerce.ca.us/Home/ShowDocument?id=76>. Accessed January 8, 2025.

City of Montebello. 2024. 2024-2040 General Plan. Available at: [https://www.montebelloca.gov/departments/planning\\_community\\_development/planning\\_division/advanced\\_planning](https://www.montebelloca.gov/departments/planning_community_development/planning_division/advanced_planning). Accessed December 13, 2024.

Federal Highway Administration (FHWA). 2023. Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. Available at: [https://www.fhwa.dot.gov/Environment/air\\_quality/air\\_toxics/policy\\_and\\_guidance/msat/fhwa\\_nepa\\_msat\\_memorandum\\_2023.pdf](https://www.fhwa.dot.gov/Environment/air_quality/air_toxics/policy_and_guidance/msat/fhwa_nepa_msat_memorandum_2023.pdf). Accessed January 8, 2025.

Los Angeles County. 2015. Los Angeles County 2035 General Plan Air Quality Element. Available at: <https://planning.lacounty.gov/long-range-planning/general-plan/general-plan/>. Accessed January 8, 2025.

Los Angeles County, Metropolitan Transportation Authority (Metro). 2007. Metro Construction and Demolitions Debris Recycling and Reuse Policy. Available at: [https://libraryarchives.metro.net/DPGTL/papers/Construction\\_and\\_Demolition\\_Debris\\_Recycling\\_Reuse\\_Policy\\_GEN51.pdf](https://libraryarchives.metro.net/DPGTL/papers/Construction_and_Demolition_Debris_Recycling_Reuse_Policy_GEN51.pdf). Accessed January 8, 2025.

Los Angeles County Metropolitan Transportation Authority (Metro). 2024. Metro Rail Design Criteria (MRDC). Los Angeles, CA.

Southern California Association of Government (SCAG). 2024. Connect SoCal Project List Technical Report. Available at: <https://scag.ca.gov/connect-socal>. Accessed December 13, 2024.

South Coast Air Quality Management District (SCAQMD). 1993. CEQA Air Quality Handbook. April (with Errata May 1993).

SCAQMD. 2008. Final Localized Significance Threshold Methodology, Revised. July. Available at: <https://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>. Accessed March 22, 2026.

SCAQMD. 2023. South Coast AQMD Air Quality Significance Thresholds. March. Available at: <https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf>. Accessed March 22, 2026.

SCAQMD. 2024. Historical Air Quality Data by Year (2023, 2021, 2021). Available at: <http://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year>. Accessed January 8, 2025.

University of California, Davis (UC Davis). 1997. Transportation Project-Level Carbon Monoxide Protocol Revised December, 1997. December. Available at: <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/co-protocol-searchable-a11y.pdf>. Accessed March 19, 2026.

U.S. Environmental Protection Agency (USEPA). 2024. Details of Criteria Pollutant Nonattainment Area Summary Report (Green Book), revised November 30, 2024. Available at: <https://www3.epa.gov/airquality/greenbook/anc2.html>. Accessed December 13, 2024.

USEPA. 2010. Transportation Conformity Guidance for Qualitative Hot-spot Analyses in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas. Available at: [https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20101201\\_otaq\\_epa-420\\_b-10-040\\_transport\\_conform\\_hot-spot\\_analysis.pdf](https://www3.epa.gov/ttn/naaqs/aqmguide/collection/cp2/20101201_otaq_epa-420_b-10-040_transport_conform_hot-spot_analysis.pdf). Accessed April 15, 2025.

Western Regional Climate Center (WRCC). 2013. Montebello California 1979 - 2011 Monthly Climate Summary. Available at: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5790>. Accessed January 8, 2025.

# ATTACHMENT A – CONSTRUCTION EMISSIONS CALCULATIONS

















Atlantic to Greenwood - Daily Regional Emissions

Construction Activity	Start Date	End Date	CO																				
			Daily Emissions (lb./day)	11/29/2029	1/23/2030	2/8/2030	2/9/2030	2/26/2030	2/27/2030	3/1/2030	4/5/2030	4/6/2030	4/9/2030	4/10/2030	4/19/2030	4/20/2030	4/23/2030	4/24/2030	5/24/2030	8/28/2030	9/11/2030	10/24/2031	10/25/2031
==== Construction Start =====																							
Saybrook Ave Site Clearing - Demolition	9/1/2027	9/28/2027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	9/29/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial =====																							
Gayhart, Davie, and Garfield Site Clearing	4/1/2028	7/18/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Aerial - Track	5/23/2028	5/28/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TBM Power Trenching =====																							
Trenching from Power to TBM Entry	6/5/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																							
Davie TPSS	7/19/2028	12/6/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== MSF =====																							
MSF - Site Clearing	10/2/2028	2/26/2030	13.6	13.6	13.6	13.6	13.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MSF - Construction	2/27/2030	10/24/2031	--	--	--	--	--	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	--
==== Greenwood Station =====																							
Greenwood Station - Site Clearing	8/25/2029	8/30/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Site Clearing	8/31/2029	9/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Station Construction (At-Grade)	9/21/2029	2/8/2030	8.1	8.1	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Greenwood Parking =====																							
Parking	2/9/2030	2/27/2030	--	--	--	9.4	9.4	9.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial - Greenwood / Montebello =====																							
Guideway, Aerial - Track, 0.5 mile	5/29/2029	11/29/2029	10.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, At-Grade - Greenwood / Montebello =====																							
Guideway, At-Grade - Construction, 1.1 mile	5/29/2029	9/25/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, At-Grade - Track, 1.1 mile	9/26/2029	1/23/2030	7.2	7.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Street Widening =====																							
Street Widening - Washington   Greenwood	9/21/2029	10/17/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Street Widening - Washington   S Montebello	10/18/2029	3/1/2030	16.2	16.2	16.2	16.2	16.2	16.2	16.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Sub-Grade - Start =====																							
Guideway, Sub-Grade - Track	5/30/2028	6/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Sub-Grade - Track	9/27/2028	10/18/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station =====																							
Atlantic Station - Site Clearing	6/17/2028	7/21/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atlantic Station - Excavation	7/22/2028	1/19/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atlantic Station - Construction	1/20/2029	5/24/2030	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	--	--	--	--	--
==== Guideway, Sub-Grade - End =====																							
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	6/14/2028	5/21/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station =====																							
Commerce Station - Site Clearing	4/1/2028	5/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Site Clearing	6/1/2028	6/1/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Excavation	6/1/2028	11/30/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Construction	12/1/2028	4/5/2030	13.1	13.1	13.1	13.1	13.1	13.1	13.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																							
Commerce TPSS - Site Clearing	4/6/2030	4/9/2030	--	--	--	--	--	--	--	13.6	13.6	--	--	--	--	--	--	--	--	--	--	--	--
Commerce TPSS	4/10/2030	8/28/2030	--	--	--	--	--	--	--	--	--	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	--	--	--	--
==== Whittier Station =====																							
Whittier Station - Site Clearing	6/2/2028	6/16/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whittier Station - Excavation	6/17/2028	12/15/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whittier Station - Construction	12/16/2028	4/19/2030	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																							
Whittier TPSS - Site Clearing	4/20/2030	4/23/2030	--	--	--	--	--	--	--	--	--	--	--	13.6	13.6	--	--	--	--	--	--	--	--
Whittier TPSS	4/24/2030	9/11/2030	--	--	--	--	--	--	--	--	--	--	--	--	--	4.7	4.7	4.7	4.7	4.7	--	--	--











Atlantic to Greenwood - Daily Regional Emissions

Construction Activity	Start Date	End Date	PM10 Total																				
			Daily Emissions (lb./day)	11/29/2029	1/23/2030	2/8/2030	2/9/2030	2/26/2030	2/27/2030	3/1/2030	4/5/2030	4/6/2030	4/9/2030	4/10/2030	4/19/2030	4/20/2030	4/23/2030	4/24/2030	5/24/2030	8/28/2030	9/11/2030	10/24/2031	10/25/2031
==== Construction Start =====																							
Saybrook Ave Site Clearing - Demolition	9/1/2027	9/28/2027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	9/29/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial =====																							
Gayhart, Davie, and Garfield Site Clearing	4/1/2028	7/18/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Aerial - Track	5/23/2028	5/28/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TBM Power Trenching =====																							
Trenching from Power to TBM Entry	6/5/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																							
Davie TPSS	7/19/2028	12/6/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== MSF =====																							
MSF - Site Clearing	10/2/2028	2/26/2030	2.0	2.0	2.0	2.0	2.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MSF - Construction	2/27/2030	10/24/2031	--	--	--	--	--	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	--
==== Greenwood Station =====																							
Greenwood Station - Site Clearing	8/25/2029	8/30/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Site Clearing	8/31/2029	9/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Station Construction (At-Grade)	9/21/2029	2/8/2030	0.4	0.4	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Greenwood Parking =====																							
Greenwood Parking	2/9/2030	2/27/2030	--	--	--	1.6	1.6	1.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial - Greenwood / Montebello =====																							
Guideway, Aerial - Track, 0.5 mile	5/29/2029	11/29/2029	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, At-Grade - Greenwood / Montebello =====																							
Guideway, At-Grade - Construction, 1.1 mile	5/29/2029	9/25/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, At-Grade - Track, 1.1 mile	9/26/2029	1/23/2030	1.4	1.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Street Widening =====																							
Street Widening - Washington   Greenwood	9/21/2029	10/17/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Street Widening - Washington   S Montebello	10/18/2029	3/1/2030	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Sub-Grade - Start =====																							
Guideway, Sub-Grade - Track	5/30/2028	6/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Sub-Grade - Track	9/27/2028	10/18/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station =====																							
Atlantic Station - Site Clearing	6/17/2028	7/21/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atlantic Station - Excavation	7/22/2028	1/19/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station - Construction =====																							
Atlantic Station - Construction	1/20/2029	5/24/2030	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	--	--	--	--	--
==== Guideway, Sub-Grade - End =====																							
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	6/14/2028	5/21/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station =====																							
Commerce Station - Site Clearing	4/1/2028	5/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Site Clearing	6/1/2028	6/1/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Excavation	6/1/2028	11/30/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station - Construction =====																							
Commerce Station - Construction	12/1/2028	4/5/2030	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																							
Commerce TPSS - Site Clearing	4/6/2030	4/9/2030	--	--	--	--	--	--	--	2.0	2.0	--	--	--	--	--	--	--	--	--	--	--	--
Commerce TPSS	4/10/2030	8/28/2030	--	--	--	--	--	--	--	--	--	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	--	--	--	--
==== Whittier Station =====																							
Whittier Station - Site Clearing	6/2/2028	6/16/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whittier Station - Excavation	6/17/2028	12/15/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Whittier Station - Construction =====																							
Whittier Station - Construction	12/16/2028	4/19/2030	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	--	--	--	--	--	--	--	--	--
==== TPSS =====																							
Whittier TPSS - Site Clearing	4/20/2030	4/23/2030	--	--	--	--	--	--	--	--	--	--	--	2.0	2.0	--	--	--	--	--	--	--	--
Whittier TPSS	4/24/2030	9/11/2030	--	--	--	--	--	--	--	--	--	--	--	--	--	0.3	0.3	0.3	0.3	--	--	--	--



Atlantic to Greenwood - Daily Regional Emissions

Table with 22 columns: Construction Activity, Start Date, End Date, PM2.5 Total Daily Emissions (lb./day) for 11/30/2028, 12/1/2028, 12/6/2028, 12/15/2028, 12/16/2028, 1/19/2029, 1/20/2029, 5/21/2029, 5/28/2029, 5/29/2029, 6/20/2029, 8/25/2029, 8/30/2029, 8/31/2029, 9/20/2029, 9/21/2029, 9/25/2029, 9/26/2029, 10/17/2029, 10/18/2029. Rows include various construction activities like Construction Start, Demolition, Trenching, Guideway Aerial, etc.

Atlantic to Greenwood - Daily Regional Emissions

Construction Activity	Start Date	End Date	PM2.5 Total																			
			Daily Emissions (lb./day)	11/29/2029	1/23/2030	2/8/2030	2/9/2030	2/26/2030	2/27/2030	3/1/2030	4/5/2030	4/6/2030	4/9/2030	4/10/2030	4/19/2030	4/20/2030	4/23/2030	4/24/2030	5/24/2030	8/28/2030	9/11/2030	10/24/2031
==== Construction Start =====																						
Saybrook Ave Site Clearing - Demolition	9/1/2027	9/28/2027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	9/29/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial =====																						
Gayhart, Davie, and Garfield Site Clearing	4/1/2028	7/18/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Aerial - Track	5/23/2028	5/28/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TBM Power Trenching =====																						
Trenching from Power to TBM Entry	6/5/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Davie TPSS	7/19/2028	12/6/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== MSF =====																						
MSF - Site Clearing	10/2/2028	2/26/2030	0.8	0.8	0.8	0.8	0.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MSF - Construction	2/27/2030	10/24/2031	--	--	--	--	--	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	--
==== Greenwood Station =====																						
Greenwood Station - Site Clearing	8/25/2029	8/30/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Site Clearing	8/31/2029	9/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Station Construction (At-Grade)	9/21/2029	2/8/2030	0.3	0.3	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Greenwood Parking =====																						
Parking	2/9/2030	2/27/2030	--	--	--	0.6	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial - Greenwood / Montebello =====																						
Guideway, Aerial - Track, 0.5 mile	5/29/2029	11/29/2029	0.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, At-Grade - Greenwood / Montebello =====																						
Guideway, At-Grade - Construction, 1.1 mile	5/29/2029	9/25/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, At-Grade - Track, 1.1 mile	9/26/2029	1/23/2030	0.5	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Street Widening =====																						
Street Widening - Washington   Greenwood	9/21/2029	10/17/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Street Widening - Washington   S Montebello	10/18/2029	3/1/2030	0.6	0.6	0.6	0.6	0.6	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Sub-Grade - Start =====																						
Guideway, Sub-Grade - Track	5/30/2028	6/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Sub-Grade - Track	9/27/2028	10/18/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station =====																						
Atlantic Station - Site Clearing	6/17/2028	7/21/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atlantic Station - Excavation	7/22/2028	1/19/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station - Construction =====																						
Atlantic Station - Construction	1/20/2029	5/24/2030	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	--	--	--	--
==== Guideway, Sub-Grade - End =====																						
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	6/14/2028	5/21/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station =====																						
Commerce Station - Site Clearing	4/1/2028	5/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Site Clearing	6/1/2028	6/1/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Excavation	6/1/2028	11/30/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station - Construction =====																						
Commerce Station - Construction	12/1/2028	4/5/2030	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Commerce TPSS - Site Clearing	4/6/2030	4/9/2030	--	--	--	--	--	--	--	--	0.8	0.8	--	--	--	--	--	--	--	--	--	--
Commerce TPSS	4/10/2030	8/28/2030	--	--	--	--	--	--	--	--	--	--	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	--	--
==== Whittier Station =====																						
Whittier Station - Site Clearing	6/2/2028	6/16/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whittier Station - Excavation	6/17/2028	12/15/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Whittier Station - Construction =====																						
Whittier Station - Construction	12/16/2028	4/19/2030	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	--	--	--	--	--	--	--	--
==== TPSS =====																						
Whittier TPSS - Site Clearing	4/20/2030	4/23/2030	--	--	--	--	--	--	--	--	--	--	--	--	0.8	0.8	--	--	--	--	--	--
Whittier TPSS	4/24/2030	9/11/2030	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2	0.2	0.2	0.2	--	--





Atlantic to Greenwood - Daily On-Site Emissions

Construction Activity	Start Date	End Date	ROG Daily Emissions (lb./day)																			
			11/29/2029	1/23/2030	2/8/2030	2/9/2030	2/26/2030	2/27/2030	3/1/2030	4/5/2030	4/6/2030	4/9/2030	4/10/2030	4/19/2030	4/20/2030	4/23/2030	4/24/2030	5/24/2030	8/28/2030	9/11/2030	10/24/2031	10/25/2031
==== Construction Start =====																						
Saybrook Ave Site Clearing - Demolition	9/1/2027	9/28/2027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	9/29/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial =====																						
Gayhart, Davie, and Garfield Site Clearing	4/1/2028	7/8/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Aerial - Track	5/23/2028	5/28/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TBM Power Trenching =====																						
Trenching from Power to TBM Entry	6/5/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Davie TPSS	7/19/2028	12/6/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== MSF =====																						
MSF - Site Clearing	10/2/2028	2/26/2030	1.2	1.2	1.2	1.2	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MSF - Construction	2/27/2030	10/24/2031	--	--	--	--	--	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	--
==== Greenwood Station =====																						
Greenwood Station - Site Clearing	8/25/2029	8/30/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Site Clearing	8/31/2029	9/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Station Construction (At-Grade)	9/21/2029	2/8/2030	0.8	0.8	0.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Greenwood Parking =====																						
Greenwood Parking	2/9/2030	2/27/2030	--	--	--	4.5	4.5	4.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Parking =====																						
Guideway, Aerial - Greenwood / Montebello	5/29/2029	11/29/2029	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial - Track, 0.5 mile =====																						
Guideway, Aerial - Track, 0.5 mile	5/29/2029	11/29/2029	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, At-Grade - Greenwood / Montebello =====																						
Guideway, At-Grade - Construction, 1.1 mile	5/29/2029	9/25/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, At-Grade - Track, 1.1 mile	9/26/2029	1/23/2030	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Street Widening =====																						
Street Widening - Washington   Greenwood	9/21/2029	10/17/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Street Widening - Washington   S Montebello	10/18/2029	3/1/2030	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Sub-Grade - Start =====																						
Guideway, Sub-Grade - Track	5/30/2028	6/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Sub-Grade - Track	9/27/2028	10/18/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station =====																						
Atlantic Station - Site Clearing	6/17/2028	7/21/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atlantic Station - Excavation	7/22/2028	1/19/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station - Construction =====																						
Atlantic Station - Construction	1/20/2029	5/24/2030	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	--	--	--	--
==== Guideway, Sub-Grade - End =====																						
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	6/14/2028	5/21/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station =====																						
Commerce Station - Site Clearing	4/1/2028	5/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Site Clearing	6/1/2028	6/1/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Excavation	6/1/2028	11/30/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station - Construction =====																						
Commerce Station - Construction	12/1/2028	4/5/2030	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Commerce TPSS - Site Clearing	4/6/2030	4/9/2030	--	--	--	--	--	--	--	--	1.2	1.2	--	--	--	--	--	--	--	--	--	--
Commerce TPSS	4/10/2030	8/28/2030	--	--	--	--	--	--	--	--	--	--	0.4	0.4	0.4	0.4	0.4	0.4	0.4	--	--	--
==== Whittier Station =====																						
Whittier Station - Site Clearing	6/2/2028	6/16/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whittier Station - Excavation	6/17/2028	12/15/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Whittier Station - Construction =====																						
Whittier Station - Construction	12/16/2028	4/19/2030	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	--	--	--	--	--	--	--	--
==== TPSS =====																						
Whittier TPSS - Site Clearing	4/20/2030	4/23/2030	--	--	--	--	--	--	--	--	--	--	--	--	1.2	1.2	--	--	--	--	--	--
Whittier TPSS	4/24/2030	9/11/2030	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.4	0.4	0.4	0.4	--	--





Atlantic to Greenwood - Daily On-Site Emissions

Construction Activity	Start Date	End Date	NOX Daily Emissions (lb./day)																			
			11/29/2029	1/23/2030	2/8/2030	2/9/2030	2/26/2030	2/27/2030	3/1/2030	4/5/2030	4/6/2030	4/9/2030	4/10/2030	4/19/2030	4/20/2030	4/23/2030	4/24/2030	5/24/2030	8/28/2030	9/11/2030	10/24/2031	10/25/2031
==== Construction Start =====																						
Saybrook Ave Site Clearing - Demolition	9/1/2027	9/28/2027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	9/29/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial =====																						
Gayhart, Davie, and Garfield Site Clearing	4/1/2028	7/8/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Aerial - Track	5/23/2028	5/28/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TBM Power Trenching =====																						
Trenching from Power to TBM Entry	6/5/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Davie TPSS	7/19/2028	12/6/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== MSF =====																						
MSF - Site Clearing	10/2/2028	2/26/2030	10.4	10.4	10.4	10.4	10.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MSF - Construction	2/27/2030	10/24/2031	--	--	--	--	--	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	--
==== Greenwood Station =====																						
Greenwood Station - Site Clearing	8/25/2029	8/30/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Site Clearing	8/31/2029	9/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Station Construction (At-Grade)	9/21/2029	2/8/2030	6.9	6.9	6.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Greenwood Parking =====																						
Greenwood Parking	2/9/2030	2/27/2030	--	--	--	5.7	5.7	5.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial - Greenwood / Montebello =====																						
Guideway, Aerial - Track, 0.5 mile	5/29/2029	11/29/2029	11.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, At-Grade - Greenwood / Montebello =====																						
Guideway, At-Grade - Construction, 1.1 mile	5/29/2029	9/25/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, At-Grade - Track, 1.1 mile	9/26/2029	1/23/2030	4.5	4.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Street Widening =====																						
Street Widening - Washington   Greenwood	9/11/2029	10/17/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Street Widening - Washington   S Montebello	10/18/2029	3/1/2030	10.6	10.6	10.6	10.6	10.6	10.6	10.6	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Sub-Grade - Start =====																						
Guideway, Sub-Grade - Track	5/30/2028	6/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Sub-Grade - Track	9/27/2028	10/18/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station =====																						
Atlantic Station - Site Clearing	6/17/2028	7/21/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atlantic Station - Excavation	7/22/2028	1/19/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station - Construction =====																						
Atlantic Station - Construction	1/20/2029	5/24/2030	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	--	--	--	--
==== Guideway, Sub-Grade - End =====																						
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	6/14/2028	5/21/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station =====																						
Commerce Station - Site Clearing	4/1/2028	5/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Site Clearing	6/1/2028	6/1/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Excavation	6/1/2028	11/30/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station - Construction =====																						
Commerce Station - Construction	12/1/2028	4/5/2030	11.7	11.7	11.7	11.7	11.7	11.7	11.7	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Commerce TPSS - Site Clearing	4/6/2030	4/9/2030	--	--	--	--	--	--	--	10.4	10.4	--	--	--	--	--	--	--	--	--	--	--
Commerce TPSS	4/10/2030	8/28/2030	--	--	--	--	--	--	--	--	--	3.4	3.4	3.4	3.4	3.4	3.4	3.4	--	--	--	--
==== Whittier Station =====																						
Whittier Station - Site Clearing	6/2/2028	6/16/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whittier Station - Excavation	6/17/2028	12/15/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Whittier Station - Construction =====																						
Whittier Station - Construction	12/16/2028	4/19/2030	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Whittier TPSS - Site Clearing	4/20/2030	4/23/2030	--	--	--	--	--	--	--	--	--	--	--	10.4	10.4	--	--	--	--	--	--	--
Whittier TPSS	4/24/2030	9/11/2030	--	--	--	--	--	--	--	--	--	--	--	--	--	3.4	3.4	3.4	3.4	3.4	--	--





Atlantic to Greenwood - Daily On-Site Emissions

Construction Activity	Start Date	End Date	CO Daily Emissions (lb./day)																			
			11/29/2029	1/23/2030	2/8/2030	2/9/2030	2/26/2030	2/27/2030	3/1/2030	4/5/2030	4/6/2030	4/9/2030	4/10/2030	4/19/2030	4/20/2030	4/23/2030	4/24/2030	5/24/2030	8/28/2030	9/11/2030	10/24/2031	10/25/2031
==== Construction Start =====																						
Saybrook Ave Site Clearing - Demolition	9/1/2027	9/28/2027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	9/29/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial =====																						
Gayhart, Davie, and Garfield Site Clearing	4/1/2028	7/18/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Aerial - Track	5/23/2028	5/28/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TBM Power Trenching =====																						
Trenching from Power to TBM Entry	6/5/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Davie TPSS	7/19/2028	12/6/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== MSF =====																						
MSF - Site Clearing	10/2/2028	2/26/2030	12.3	12.3	12.3	12.3	12.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MSF - Construction	2/27/2030	10/24/2031	--	--	--	--	--	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	--
==== Greenwood Station =====																						
Greenwood Station - Site Clearing	8/25/2029	8/30/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Site Clearing	8/31/2029	9/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Station Construction (At-Grade)	9/21/2029	2/8/2030	7.9	7.9	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Greenwood Parking =====																						
Parking	2/9/2030	2/27/2030	--	--	--	7.3	7.3	7.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial - Greenwood / Montebello =====																						
Guideway, Aerial - Track, 0.5 mile	5/29/2029	11/29/2029	9.7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, At-Grade - Greenwood / Montebello =====																						
Guideway, At-Grade - Construction, 1.1 mile	5/29/2029	9/25/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, At-Grade - Track, 1.1 mile	9/26/2029	1/23/2030	5.4	5.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Street Widening =====																						
Street Widening - Washington   Greenwood	9/11/2029	10/17/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Street Widening - Washington   S Montebello	10/18/2029	3/1/2030	15.6	15.6	15.6	15.6	15.6	15.6	15.6	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Sub-Grade - Start =====																						
Guideway, Sub-Grade - Track	5/30/2028	6/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Sub-Grade - Track	9/27/2028	10/18/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station =====																						
Atlantic Station - Site Clearing	6/17/2028	7/21/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atlantic Station - Excavation	7/22/2028	1/19/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station - Construction =====																						
Atlantic Station - Construction	1/20/2029	5/24/2030	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	--	--	--	--
==== Guideway, Sub-Grade - End =====																						
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	6/14/2028	5/21/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station =====																						
Commerce Station - Site Clearing	4/1/2028	5/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Site Clearing	6/1/2028	6/1/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Excavation	6/1/2028	11/30/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station - Construction =====																						
Commerce Station - Construction	12/1/2028	4/5/2030	12.9	12.9	12.9	12.9	12.9	12.9	12.9	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Commerce TPSS - Site Clearing	4/6/2030	4/9/2030	--	--	--	--	--	--	--	12.3	12.3	--	--	--	--	--	--	--	--	--	--	--
Commerce TPSS	4/10/2030	8/28/2030	--	--	--	--	--	--	--	--	--	4.6	4.6	4.6	4.6	4.6	4.6	4.6	--	--	--	--
==== Whittier Station =====																						
Whittier Station - Site Clearing	6/2/2028	6/16/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whittier Station - Excavation	6/17/2028	12/15/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Whittier Station - Construction =====																						
Whittier Station - Construction	12/16/2028	4/19/2030	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Whittier TPSS - Site Clearing	4/20/2030	4/23/2030	--	--	--	--	--	--	--	--	--	--	--	12.3	12.3	--	--	--	--	--	--	--
Whittier TPSS	4/24/2030	9/11/2030	--	--	--	--	--	--	--	--	--	--	--	--	--	4.6	4.6	4.6	4.6	--	--	--





Atlantic to Greenwood - Daily On-Site Emissions

Construction Activity	Start Date	End Date	SO2 Daily Emissions (lb./day)																			
			11/29/2029	1/23/2030	2/8/2030	2/9/2030	2/26/2030	2/27/2030	3/1/2030	4/5/2030	4/6/2030	4/9/2030	4/10/2030	4/19/2030	4/20/2030	4/23/2030	4/24/2030	5/24/2030	8/28/2030	9/11/2030	10/24/2031	10/25/2031
==== Construction Start =====																						
Saybrook Ave Site Clearing - Demolition	9/1/2027	9/28/2027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	9/29/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial =====																						
Gayhart, Davie, and Garfield Site Clearing	4/1/2028	7/1/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Aerial - Track	5/23/2028	5/28/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TBM Power Trenching =====																						
Trenching from Power to TBM Entry	6/5/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Davie TPSS	7/19/2028	12/6/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== MSF =====																						
MSF - Site Clearing	10/2/2028	2/26/2030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
MSF - Construction	2/27/2030	10/24/2031	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Greenwood Station =====																						
Greenwood Station - Site Clearing	8/25/2029	8/30/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Site Clearing	8/31/2029	9/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Station Construction (At-Grade)	9/21/2029	2/8/2030	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Greenwood Parking =====																						
Greenwood Parking	2/9/2030	2/27/2030	--	--	--	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Parking =====																						
==== Guideway, Aerial - Greenwood / Montebello =====																						
Guideway, Aerial - Track, 0.5 mile	5/29/2029	11/29/2029	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, At-Grade - Greenwood / Montebello =====																						
Guideway, At-Grade - Construction, 1.1 mile	5/29/2029	9/25/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, At-Grade - Track, 1.1 mile	9/26/2029	1/23/2030	0.0	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Street Widening =====																						
Street Widening - Washington   Greenwood	9/11/2029	10/17/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Street Widening - Washington   S Montebello	10/18/2029	3/1/2030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Sub-Grade - Start =====																						
Guideway, Sub-Grade - Track	5/30/2028	6/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Sub-Grade - Track	9/27/2028	10/18/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station =====																						
Atlantic Station - Site Clearing	6/17/2028	7/21/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atlantic Station - Excavation	7/22/2028	1/19/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station - Construction =====																						
Atlantic Station - Construction	1/20/2029	5/24/2030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--
==== Guideway, Sub-Grade - End =====																						
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	6/14/2028	5/21/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station =====																						
Commerce Station - Site Clearing	4/1/2028	5/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Site Clearing	6/1/2028	6/1/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Excavation	6/1/2028	11/30/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station - Construction =====																						
Commerce Station - Construction	12/1/2028	4/5/2030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Commerce TPSS - Site Clearing	4/6/2030	4/9/2030	--	--	--	--	--	--	--	0.0	0.0	--	--	--	--	--	--	--	--	--	--	--
Commerce TPSS	4/10/2030	8/28/2030	--	--	--	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--
==== Whittier Station =====																						
Whittier Station - Site Clearing	6/2/2028	6/16/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whittier Station - Excavation	6/17/2028	12/15/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Whittier Station - Construction =====																						
Whittier Station - Construction	12/16/2028	4/19/2030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Whittier TPSS - Site Clearing	4/20/2030	4/23/2030	--	--	--	--	--	--	--	--	--	--	--	0.0	0.0	--	--	--	--	--	--	--
Whittier TPSS	4/24/2030	9/11/2030	--	--	--	--	--	--	--	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	--	--





Atlantic to Greenwood - Daily On-Site Emissions

Construction Activity	Start Date	End Date	PM10 Total Daily Emissions (lb./day)																			
			11/29/2029	1/23/2030	2/8/2030	2/9/2030	2/26/2030	2/27/2030	3/1/2030	4/5/2030	4/6/2030	4/9/2030	4/10/2030	4/19/2030	4/20/2030	4/23/2030	4/24/2030	5/24/2030	8/28/2030	9/11/2030	10/24/2031	10/25/2031
==== Construction Start =====																						
Saybrook Ave Site Clearing - Demolition	9/1/2027	9/28/2027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	9/29/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial =====																						
Gayhart, Davie, and Garfield Site Clearing	4/1/2028	7/18/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Aerial - Track	5/23/2028	5/28/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TBM Power Trenching =====																						
Trenching from Power to TBM Entry	6/5/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Davie TPSS	7/19/2028	12/6/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== MSF =====																						
MSF - Site Clearing	10/2/2028	2/26/2030	1.1	1.1	1.1	1.1	1.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MSF - Construction	2/27/2030	10/24/2031	--	--	--	--	--	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	--
==== Greenwood Station =====																						
Greenwood Station - Site Clearing	8/25/2029	8/30/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Site Clearing	8/31/2029	9/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Station Construction (At-Grade)	9/21/2029	2/8/2030	0.3	0.3	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Greenwood Parking =====																						
Parking	2/9/2030	2/27/2030	--	--	--	0.3	0.3	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial - Greenwood / Montebello =====																						
Guideway, Aerial - Track, 0.5 mile	5/29/2029	11/29/2029	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5
==== Guideway, At-Grade - Greenwood / Montebello =====																						
Guideway, At-Grade - Construction, 1.1 mile	5/29/2029	9/25/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, At-Grade - Track, 1.1 mile	9/26/2029	1/23/2030	0.2	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Street Widening =====																						
Street Widening - Washington   Greenwood	9/21/2029	10/17/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Street Widening - Washington   S Montebello	10/18/2029	3/1/2030	0.5	0.5	0.5	0.5	0.5	0.5	0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Sub-Grade - Start =====																						
Guideway, Sub-Grade - Track	5/30/2028	6/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Sub-Grade - Track	9/27/2028	10/18/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station =====																						
Atlantic Station - Site Clearing	6/17/2028	7/21/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atlantic Station - Excavation	7/22/2028	1/19/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station - Construction =====																						
Atlantic Station - Construction	1/20/2029	5/24/2030	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	--	--	--
==== Guideway, Sub-Grade - End =====																						
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	6/14/2028	5/21/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station =====																						
Commerce Station - Site Clearing	4/1/2028	5/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Site Clearing	6/1/2028	6/1/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Excavation	6/1/2028	11/30/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station - Construction =====																						
Commerce Station - Construction	12/1/2028	4/5/2030	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	--	--	--	--	--	--	--	--	--	--	--
==== Commerce TPSS =====																						
Commerce TPSS - Site Clearing	4/6/2030	4/9/2030	--	--	--	--	--	--	--	--	1.1	1.1	--	--	--	--	--	--	--	--	--	--
Commerce TPSS	4/10/2030	8/28/2030	--	--	--	--	--	--	--	--	--	--	0.2	0.2	0.2	0.2	0.2	0.2	0.2	--	--	--
==== Whittier Station =====																						
Whittier Station - Site Clearing	6/2/2028	6/16/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whittier Station - Excavation	6/17/2028	12/15/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Whittier Station - Construction =====																						
Whittier Station - Construction	12/16/2028	4/19/2030	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Whittier TPSS - Site Clearing	4/20/2030	4/23/2030	--	--	--	--	--	--	--	--	--	--	--	1.1	1.1	--	--	--	--	--	--	--
Whittier TPSS	4/24/2030	9/11/2030	--	--	--	--	--	--	--	--	--	--	--	--	--	0.2	0.2	0.2	0.2	0.2	--	--





Atlantic to Greenwood - Daily On-Site Emissions

Construction Activity	Start Date	End Date	PM2.5 Total Daily Emissions (lb./day)																			
			11/29/2029	1/23/2030	2/8/2030	2/9/2030	2/26/2030	2/27/2030	3/1/2030	4/5/2030	4/6/2030	4/9/2030	4/10/2030	4/19/2030	4/20/2030	4/23/2030	4/24/2030	5/24/2030	8/28/2030	9/11/2030	10/24/2031	10/25/2031
==== Construction Start =====																						
Saybrook Ave Site Clearing - Demolition	9/1/2027	9/28/2027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	9/29/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, Aerial =====																						
Gayhart, Davie, and Garfield Site Clearing	4/1/2028	7/8/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Aerial - Track	5/23/2028	5/28/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TBM Power Trenching =====																						
Trenching from Power to TBM Entry	6/5/2027	3/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== TPSS =====																						
Davie TPSS	7/19/2028	12/6/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== MSF =====																						
MSF - Site Clearing	10/2/2028	2/26/2030	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MSF - Construction	2/27/2030	10/24/2031	--	--	--	--	--	--	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	--
==== Greenwood Station =====																						
Greenwood Station - Site Clearing	8/25/2029	8/30/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Site Clearing	8/31/2029	9/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Greenwood Station - Station Construction (At-Grade)	9/21/2029	2/8/2030	0.3	0.3	0.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Greenwood Parking =====																						
Greenwood Parking	2/9/2030	2/27/2030	--	--	--	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
==== Guideway, Aerial - Greenwood / Montebello =====																						
Guideway, Aerial - Track, 0.5 mile	5/29/2029	11/29/2029	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Guideway, At-Grade - Greenwood / Montebello =====																						
Guideway, At-Grade - Construction, 1.1 mile	5/29/2029	9/25/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, At-Grade - Track, 1.1 mile	9/26/2029	1/23/2030	0.2	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Street Widening =====																						
Street Widening - Washington   Greenwood	9/21/2029	10/17/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Street Widening - Washington   S Montebello	10/18/2029	3/1/2030	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
==== Guideway, Sub-Grade - Start =====																						
Guideway, Sub-Grade - Track	5/30/2028	6/20/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guideway, Sub-Grade - Track	9/27/2028	10/18/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station =====																						
Atlantic Station - Site Clearing	6/17/2028	7/21/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Atlantic Station - Excavation	7/22/2028	1/19/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Atlantic Station - Construction =====																						
Atlantic Station - Construction	1/20/2029	5/24/2030	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	--
==== Guideway, Sub-Grade - End =====																						
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	6/14/2028	5/21/2029	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station =====																						
Commerce Station - Site Clearing	4/1/2028	5/31/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Site Clearing	6/1/2028	6/1/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Commerce Station - Excavation	6/1/2028	11/30/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Commerce Station - Construction =====																						
Commerce Station - Construction	12/1/2028	4/5/2030	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
==== TPSS =====																						
Commerce TPSS - Site Clearing	4/6/2030	4/9/2030	--	--	--	--	--	--	--	--	0.5	0.5	--	--	--	--	--	--	--	--	--	--
Commerce TPSS	4/10/2030	8/28/2030	--	--	--	--	--	--	--	--	--	--	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	--
==== Whittier Station =====																						
Whittier Station - Site Clearing	6/2/2028	6/16/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Whittier Station - Excavation	6/17/2028	12/15/2028	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
==== Whittier Station - Construction =====																						
Whittier Station - Construction	12/16/2028	4/19/2030	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	--	--	--	--	--	--	--
==== TPSS =====																						
Whittier TPSS - Site Clearing	4/20/2030	4/23/2030	--	--	--	--	--	--	--	--	--	--	--	--	0.5	0.5	--	--	--	--	--	--
Whittier TPSS	4/24/2030	9/11/2030	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1	0.1	0.1	0.1	0.1	0.1

Eastside Transit Corridor Phase II  
Phasing and Schedule

Atlantic to Greenwood

Construction Activity	Start Date	End Date	Segment Duration (days)	Segment Area (sqft)	Notes	Roundtrips per Day			CalEEMod Reference
						Worker	Vendor	Hauling	
=== Construction Start ===									
Saybrook Ave Site Clearing - Demolition	9/1/2027	9/28/2027	19	62,250	Saybrook site cleared first to allow set up for both underground and aerial guideway	40	0	11	demo_util_siteprep
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	9/29/2027	3/31/2028	132	37,000	Beginning of excavation near Saybrook to set up TBM	25	0	41	guideway_underground_transition
=== Guideway, Aerial ===									
Gayhart, Davie, and Garfield Site Clearing	4/1/2028	7/18/2028	77	253,967	Site cleared in preparation for aerial guideway	40	0	11	demo_util_siteprep
Guideway, Aerial - Track	5/23/2028	5/28/2029	264	158,400	Assumed to start once the Gayhart and Davie sites have been cleared, 1-mile (incl. MSF leads)	33	13	6	guideway_aerial
=== TBM Power Trenching ===									
Trenching from Power to TBM Entry	6/5/2027	3/31/2028	300	36,000	Trenching from Power to TBM Entry	5	2	1	tpss
=== TPSS ===									
Davie TPSS	7/19/2028	12/6/2028	100	12,000	n/a	5	2	0	tpss
=== MSF ===									
MSF - Site Clearing	10/2/2028	2/26/2030	366	1,219,685	Includes new partial takes and greater of demolition area between each of the optional sites.	40	0	11	demo_util_siteprep
MSF - Construction	2/27/2030	10/24/2031	432	1,219,685	Assumed half the total MSF site area to be meaningfully developed	89	29	0	msf
=== Greenwood Station ===									
Greenwood Station - Site Clearing	8/25/2029	8/30/2029	4	12,700	STAGING OPTION 1 DRAFT EIR (BOTH USED IN NEPA)	40	0	11	demo_util_siteprep
Greenwood Station - Site Clearing	8/31/2029	9/20/2029	14	45,750	STAGING OPTION 2 DRAFT EIR (BOTH USED IN NEPA)	40	0	11	demo_util_siteprep
Greenwood Station - Station Construction (At-Grade)	9/21/2029	2/8/2030	100	8,100	n/a	6	2	0	station_grade
=== Greenwood Parking ===									
Parking	2/9/2030	2/27/2030	13	370	VALUE IN SQFT COLUMN IS COUNT OF SPACES, NOT SQFT.	62	24	0	parking
=== Guideway, Aerial - Greenwood / Montebello ===									
Guideway, Aerial - Track, 0.5 mile	5/29/2029	11/29/2029	132	79,200	approximately 0.5-mile aerial crossing option	33	13	6	guideway_aerial
=== Guideway, At-Grade - Greenwood / Montebello ===									
Guideway, At-Grade - Construction, 1.1 mile	5/29/2029	9/25/2029	85	290,400	approximately 1.1-mile at-grade crossing option; this is the extra buffer on either side of the track	18	0	10	guideway_grade_site
Guideway, At-Grade - Track, 1.1 mile	9/26/2029	1/23/2030	85	145,200	approximately 1.1-mile at-grade crossing option	55	22	0	guideway_grade_rail
=== Street Widening ===									
Street Widening - Washington   Greenwood	9/21/2029	10/17/2029	18	2,200	n/a	17	1	0	roadways
Street Widening - Washington   S Montebello	10/18/2029	3/1/2030	96	12,000	n/a	17	1	0	roadways
=== Guideway, Sub-Grade - Start ===									
Guideway, Sub-Grade - Track	5/30/2028	6/20/2029	276	168,000	modeled as one month (approximately 1/4 mile of boring); 3 miles total	16	4	53	guideway_underground
Guideway, Sub-Grade - Track	9/27/2028	10/18/2029	276	168,000	start of second boring machine	16	4	53	guideway_underground
=== Atlantic Station ===									
Atlantic Station - Site Clearing	6/17/2028	7/21/2028	25	80,850	STAGING OPTION 2	40	0	11	demo_util_siteprep
Atlantic Station - Excavation	7/22/2028	1/19/2029	130	13,500	NOTE: Staging must be complete before Sub-Grade - End so that staging can support that effort as well;	13	0	44	station_underground_cutcover
Atlantic Station - Construction	1/20/2029	5/24/2030	350	8,100	Station must be after TBM is done. per ACE team recommendation, maximum duration used in modeling	8	3	0	station_underground

Atlantic to Greenwood

Construction Activity	Start Date	End Date	Segment Duration (days)	Segment Area (sqft)	Notes	Roundtrips per Day			CalEEMod Reference
						Worker	Vendor	Hauling	
==== Guideway, Sub-Grade - End =====									
Guideway, Underground - Trenching, Retaining Wall, Fill Construction	6/14/2028	5/21/2029	243	68,000	Beginning of excavation near Atlantic Station to receive TBM; Assumed complete at least one month before first TBM arrives.	25	0	14	guideway_underground_transition
==== Commerce Station =====									
Commerce Station - Site Clearing	4/1/2028	5/31/2028	43	141,858	NEPA staging area refinements assuming full demolition of buildings.	40	0	11	demo_util_siteprep
Commerce Station - Site Clearing	6/1/2028	6/1/2028	0	0		0	0	0	demo_util_siteprep
Commerce Station - Excavation	6/1/2028	11/30/2028	130	13,500		13	0	29	station_underground_cutcover
Commerce Station - Construction	12/1/2028	4/5/2030	350	8,100	per ACE team recommendation, maximum duration used in modeling	8	3	0	station_underground
==== TPSS =====									
Commerce TPSS - Site Clearing	4/6/2030	4/9/2030	2	3,600	n/a	40	0	11	demo_util_siteprep
Commerce TPSS	4/10/2030	8/28/2030	100	12,000	n/a	5	2	1	tpss
==== Whittier Station =====									
Whittier Station - Site Clearing	6/2/2028	6/16/2028	10	30,750	STAGING OPTION 1 (USED IN NEPA)	40	0	11	demo_util_siteprep
Whittier Station - Excavation	6/17/2028	12/15/2028	130	13,500		13	0	12	station_underground_cutcover
Whittier Station - Construction	12/16/2028	4/19/2030	350	8,100	per ACE team recommendation, maximum duration used in modeling	8	3	0	station_underground
==== TPSS =====									
Whittier TPSS - Site Clearing	4/20/2030	4/23/2030	2	3,600	n/a	40	0	11	demo_util_siteprep
Whittier TPSS	4/24/2030	9/11/2030	100	12,000	n/a	5	2	1	tpss

Eastside Transit Corridor Phase II  
EMFAC Emission Rates Summary

**2025 Emission Factors for Construction Phase (g/mile)**

Source	ROG	TOG	CO	NOx	SOx	PM10 Emissions					PM2.5 Emissions				
						PM10 Total	PM10 Exhaust	PM10 Tire Wear	PM10 Brake Wear	Paved Road Dust	PM2.5 Total	PM2.5 Exhaust	PM2.5 Tire Wear	PM2.5 Brake Wear	Paved Road Dust
Workers	0.071	0.023	0.494	0.032	0.001	0.305	0.001	0.003	0.004	0.297	0.077	0.001	0.001	0.001	0.074
Hauling/Vendors	0.025	0.014	0.141	0.787	0.005	0.331	0.006	0.007	0.022	0.297	0.089	0.006	0.002	0.008	0.074

Notes:

EMFAC2021 fleet mix for geographic area limited to the Los Angeles sub-area of the South Coast Air Basin was used.

**2025 Emission Factors for Construction Phase (lb./mile)**

Source	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Vendor/Haul Emission Factors	5.61E-05	1.74E-03	3.12E-04	1.18E-05	7.31E-04	1.97E-04
Worker Emission Factors	1.57E-04	7.12E-05	1.09E-03	2.83E-06	6.72E-04	1.70E-04

**2025 Emission Factors for Construction Phase (lb./trip)**

pounds per trip	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Vendor	3.87E-04	1.20E-02	2.15E-03	8.12E-05	5.04E-03	1.36E-03
Hauling	4.65E-04	1.44E-02	2.58E-03	9.75E-05	6.06E-03	1.63E-03
Workers	2.31E-03	1.05E-03	1.60E-02	4.17E-05	9.88E-03	2.50E-03

Trip Lengths: Miles  
 Vendor 6.9 CALEEMOD DEFAULT (one way trip)  
 Hauling 8.2875 Construction IR indicates Puente Hills, Monterey Park, Irwindale (Scholl Canyon, NuWay) and local landfills like Savage Canyon (averaged distance to alignment used)  
 Worker 14.7 CALEEMOD DEFAULT (one way trip)

Eastside Transit Corridor Phase II  
CalEEMod Model Assumptions

Construction Modeling Assumptions

- CalEEMod - Project Characteristics: Guideway - Grade
- CalEEMod - Project Characteristics: County - Los Angeles (South Coast)
- CalEEMod - Project Characteristics: CEC Forecasting Climate Zone - 9
- CalEEMod - Project Characteristics: Land Use Setting - Urban
- CalEEMod - Project Characteristics: Construction Start Date - Saturday, January 1, 2022
- CalEEMod - Project Characteristics: Operational Year - 2028
- CalEEMod - Project Characteristics: CHECKED - Apply EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule
- CalEEMod - Project Characteristics: User Defined Utility Company (Default 0 utility use for construction-only activities)
- CalEEMod - Mitigation - Construction: CHECKED - Water Exposed Area; Frequency - 3
- CalEEMod - Mitigation - Construction: Remark - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Phasing Order

- Demolition / Site Clearing
- Utility Relocation / Temporary Roadway Reconfiguration
- Construction

Phasing General

- TBM would occur concurrent to aerial/at-grade alignment
- TBM rate of 30 feet per day
- Aerial construction in 0.5-mile or shorter segments
- At-grade construction in 1.0-mile or shorter segments
- Segment overlap could occur
- Stations built simultaneously to guideway
- Track installation and OCS, TPSS, Train Control, etc would occur during and after construction
- Station art, ancillary facilities, and street improvements would follow (not overlap) guideway construction
- Daytime construction assumed for modeling purposes, although certain special elements may require some nighttime work (i.e. one, 8-hour shift)

Station Details

- at-grade stations would be 270 feet long and approx 24-feet wide (23-feet for center platform or 2x 12-foot for side platform)
- aerial stations would be 270 feet long and approx 30-feet wide
- underground stations similar to aerial, but underground

Traction Power Substation (TPSS) Details

- entirely prefabricated
- 60 x 80 foot-slab
- site clearing uses typical equipment
- actual installation of TPSS uses crane/forklift/concrete truck

OCS would be constructed following guideway and would require relatively minimal equipment/emissions to install

Off-site Vehicle Trips and Excavation Notes

- on-site vehicle loading/unloading emissions estimated using CalEEMod default calculations for input haul volumes (see "fugitive" PM emissions line items in CalEEMod outputs)
- all off-site vehicle emissions (exhaust, road dust, etc.) estimated separately from CalEEMod using CalEEMod default or project-specific trip counts
- worker and vendor daily roundtrips estimated corresponding to CalEEMod modeled reference surrogate land-use types for any given alignment segment of station element
- site clearing (demolition) hauling roundtrips estimated corresponding to CalEEMod modeled reference surrogate land-use types for reference demolition segment (75,000 sqft bldg demolition per 100,000 sqft parcel)
- excavation hauling roundtrips estimated corresponding to estimated segment-specific haul volumes with 30% bulking factor (1.3 times multiplier) applied. pre-bulking volumes were calculated as follows:
  - bored tunnel: 24.62 cubic yards excavated per linear foot;
  - retained cut: 19.56 cubic yards excavated per linear foot;
  - cut and cover (bored tunnel entry/exit): 46.44 cubic yards per linear foot;
  - cut and cover (subgrade stations): 49.00 cubic yards per linear foot;
  - embedded track (at-grade guideway): 1.48 cubic yards per linear foot;
  - column foundations (aerial guideway): 218.17 cubic yards per foundation (4);
- hauling truck volumes assumed to be 14 cubic yards

Guideway - Underground - Los Angeles-South Coast County, Summer

Guideway - Underground  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	14.00	1000sqft	0.32	14,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use - one, approximately 21-foot diameter bored tunnels at a rate of 30 feet per day; one month

Construction Phase - Project-specified duration

Off-road Equipment - Includes equipment for construction and operation-related utility work; "Other Construction Equipment" represents the electric TBM;

Off-road Equipment - Electric tunnel bore

Off-road Equipment - task-specific equipment to support behind TBM (other equipment is electric TBM)

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Grading - Assumed 100% of tunnel area exported

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Guideway - Underground - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	0.2361	2.0343	1.9839	5.1600e-003	0.0000	0.0811	0.0811	0.0000	0.0770	0.0770	0.0000	494.2455	494.2455	0.1176	0.0000	497.1850
Maximum	0.2361	2.0343	1.9839	5.1600e-003	0.0000	0.0811	0.0811	0.0000	0.0770	0.0770	0.0000	494.2455	494.2455	0.1176	0.0000	497.1850

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Underground Utilities	Site Preparation	1/1/2024	1/31/2024	5	23	
2	Tunnel Bore	Building Construction	1/1/2024	1/31/2024	5	23	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

Guideway - Underground - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Underground Utilities	Cement and Mortar Mixers	1	1.00	9	0.56
Underground Utilities	Concrete/Industrial Saws	1	2.00	81	0.73
Tunnel Bore	Other Construction Equipment	1	24.00	0	0.00
Underground Utilities	Forklifts	1	2.00	89	0.20
Underground Utilities	Rubber Tired Loaders	1	4.00	203	0.36

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Underground Utilities - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.2361	2.0343	1.9839	5.1600e-003		0.0811	0.0811		0.0770	0.0770	0.0000	494.2455	494.2455	0.1176		497.1850
Total	0.2361	2.0343	1.9839	5.1600e-003	0.0000	0.0811	0.0811	0.0000	0.0770	0.0770	0.0000	494.2455	494.2455	0.1176		497.1850

3.3 Tunnel Bore - 2024

---

Guideway - Trenching, Retaining Wall, Fill Construction - Los Angeles-South Coast County, Summer

Guideway - Trenching, Retaining Wall, Fill Construction  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	37.00	1000sqft	0.85	37,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use - distances estimated using Google Earth

Construction Phase - project schedule - 6 months

Off-road Equipment - task-specific equipment

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Grading - 37,000 sqft area measured in Google Earth; 50-ft assumed depth to start boring; excavate half due to incline

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Guideway - Trenching, Retaining Wall, Fill Construction - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2024	0.9079	8.6792	11.5389	0.0187	0.0114	0.4017	0.4132	1.7300e-003	0.3713	0.3730	0.0000	1,779.7825	1,779.7825	0.5590	0.0000	1,793.7570
Maximum	0.9079	8.6792	11.5389	0.0187	0.0114	0.4017	0.4132	1.7300e-003	0.3713	0.3730	0.0000	1,779.7825	1,779.7825	0.5590	0.0000	1,793.7570

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Guideway Trenching, Retaining Wall, Fill Grading		1/1/2024	7/2/2024	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

Guideway - Trenching, Retaining Wall, Fill Construction - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Guideway Trenching, Retaining Wall, Fill Construction	Skid Steer Loaders	1	7.00	65	0.37
Guideway Trenching, Retaining Wall, Fill Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Guideway Trenching, Retaining Wall, Fill Construction	Excavators	1	6.00	158	0.38
Guideway Trenching, Retaining Wall, Fill Construction	Cranes	1	4.00	231	0.29
Guideway Trenching, Retaining Wall, Fill Construction	Rollers	1	4.00	80	0.38
Guideway Trenching, Retaining Wall, Fill Construction	Cement and Mortar Mixers	2	6.00	9	0.56
Guideway Trenching, Retaining Wall, Fill Construction	Forklifts	2	6.00	89	0.20

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Guideway Trenching, Retaining Wall, Fill Construction - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0114	0.0000	0.0114	1.7300e-003	0.0000	1.7300e-003			0.0000			0.0000
Off-Road	0.9079	8.6792	11.5389	0.0187		0.4017	0.4017		0.3713	0.3713	0.0000	1,779.7825	1,779.7825	0.5590		1,793.7570
Total	0.9079	8.6792	11.5389	0.0187	0.0114	0.4017	0.4132	1.7300e-003	0.3713	0.3730	0.0000	1,779.7825	1,779.7825	0.5590		1,793.7570

Guideway, At-Grade, Site Preparation - Los Angeles-South Coast County, Summer

Guideway, At-Grade, Site Preparation  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	264.00	1000sqft	6.06	264,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use - 12.5-ft width per rail (2x), 12.5-ft buffer assumed (2x), 1-mile length segment

Construction Phase - Estimated duration for 1-mile segment: 4 months

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Grading - Assumed import/export of material/ballast (2-ft depth for rail-area only)

Construction Off-road Equipment Mitigation - Watering is required by SCAQMD rules and is not considered mitigation.

Guideway, At-Grade, Site Preparation - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	1.3642	11.4236	13.6299	0.0272	1.2889	0.5155	1.8043	0.6584	0.4851	1.1435	0.0000	2,614.3404	2,614.3404	0.6635	0.0000	2,630.9287
Maximum	1.3642	11.4236	13.6299	0.0272	1.2889	0.5155	1.8043	0.6584	0.4851	1.1435	0.0000	2,614.3404	2,614.3404	0.6635	0.0000	2,630.9287

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2024	4/16/2024	5	77	

Acres of Grading (Site Preparation Phase): 19.25

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.06

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

Guideway, At-Grade, Site Preparation - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Air Compressors	1	8.00	78	0.48
Site Preparation	Concrete/Industrial Saws	1	4.00	81	0.73
Site Preparation	Excavators	1	7.00	158	0.38
Site Preparation	Off-Highway Trucks	1	4.00	402	0.38
Site Preparation	Rubber Tired Dozers	1	4.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	2	6.00	97	0.37

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.2889	0.0000	1.2889	0.6584	0.0000	0.6584			0.0000			0.0000
Off-Road	1.3642	11.4236	13.6299	0.0272		0.5155	0.5155		0.4851	0.4851	0.0000	2,614.3404	2,614.3404	0.6635		2,630.9287
Total	1.3642	11.4236	13.6299	0.0272	1.2889	0.5155	1.8043	0.6584	0.4851	1.1435	0.0000	2,614.3404	2,614.3404	0.6635		2,630.9287

Guideway, At-Grade, Construction - Los Angeles-South Coast County, Summer

Guideway, At-Grade, Construction  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	132.00	1000sqft	3.03	132,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use - 12.5-ft width per rail (2x), 1-mile length segment

Construction Phase - Estimated duration for 1-mile segment: 4 months

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Construction Off-road Equipment Mitigation - Watering is required by SCAQMD rules and is not considered mitigation.

Guideway, At-Grade, Construction - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	0.6177	4.5140	5.4106	8.5800e-003	0.0000	0.1970	0.1970	0.0000	0.1885	0.1885	0.0000	735.9261	735.9261	0.1588	0.0000	739.8963
Maximum	0.6177	4.5140	5.4106	8.5800e-003	0.0000	0.1970	0.1970	0.0000	0.1885	0.1885	0.0000	735.9261	735.9261	0.1588	0.0000	739.8963

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Rail Construction	Building Construction	1/14/2024	4/30/2024	5	77	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

Guideway, At-Grade, Construction - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Rail Construction	Cement and Mortar Mixers	4	6.00	9	0.56
Rail Construction	Forklifts	2	8.00	89	0.20
Rail Construction	Welders	1	8.00	46	0.45
Rail Construction	Aerial Lifts	1	4.00	63	0.31

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Rail Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6177	4.5140	5.4106	8.5800e-003		0.1970	0.1970		0.1885	0.1885	0.0000	735.9261	735.9261	0.1588		739.8963
Total	0.6177	4.5140	5.4106	8.5800e-003		0.1970	0.1970		0.1885	0.1885	0.0000	735.9261	735.9261	0.1588		739.8963

Guideway - Aerial - Los Angeles-South Coast County, Summer

Guideway - Aerial  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking Structure	79.20	1000sqft	1.82	79,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use - 0.5-mile long x 30-ft wide elevated rail

Construction Phase - Total elevated trackwork duration (12 months) divided by modeled elevated guideway (1-mile) => 12 months / mile (half mile modeled)

Off-road Equipment - task-specific equipment

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Guideway - Aerial - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	1.2124	11.1245	9.7176	0.0253	0.0000	0.4539	0.4539	0.0000	0.4269	0.4269	0.0000	2,405.0642	2,405.0642	0.6396	0.0000	2,421.0542
Maximum	1.2124	11.1245	9.7176	0.0253	0.0000	0.4539	0.4539	0.0000	0.4269	0.4269	0.0000	2,405.0642	2,405.0642	0.6396	0.0000	2,421.0542

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Guideway Construction	Building Construction	1/1/2024	7/2/2024	5	132	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.82

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

Guideway - Aerial - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Guideway Construction	Air Compressors	1	6.00	78	0.48
Guideway Construction	Bore/Drill Rigs	1	4.00	221	0.50
Guideway Construction	Cement and Mortar Mixers	2	8.00	9	0.56
Guideway Construction	Concrete/Industrial Saws	1	2.00	81	0.73
Guideway Construction	Cranes	2	6.00	231	0.29
Guideway Construction	Forklifts	1	6.00	89	0.20
Guideway Construction	Aerial Lifts	2	4.00	63	0.31
Guideway Construction	Rubber Tired Loaders	1	4.00	203	0.36

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Guideway Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2124	11.1245	9.7176	0.0253		0.4539	0.4539		0.4269	0.4269	0.0000	2,405.0642	2,405.0642	0.6396		2,421.0542
Total	1.2124	11.1245	9.7176	0.0253		0.4539	0.4539		0.4269	0.4269	0.0000	2,405.0642	2,405.0642	0.6396		2,421.0542

Station - Underground - Station Construction - Los Angeles-South Coast County, Summer

Station - Underground - Station Construction  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	8.10	1000sqft	0.19	8,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use - Station assumed to be 270 feet long with 30-foot wide platform

Construction Phase - Total underground station construction duration (48 months) divided by total underground station count (3) = 16 months/station

Off-road Equipment - task-specific equipment

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Architectural Coating - station architectural coating

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Station - Underground - Station Construction - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
2024	1.4310	11.6700	12.8557	0.0274		0.4667	0.4667		0.4476	0.4476	0.0000	2,527.0786	2,527.0786	0.5325		2,540.3917
2025	1.3443	10.8997	12.7825	0.0274		0.4116	0.4116		0.3945	0.3945	0.0000	2,527.0161	2,527.0161	0.5274		2,540.2009
Maximum	1.431	11.67	12.8557	0.0274	#VALUE!	0.4667	0.4667	#VALUE!	0.4476	0.4476	0	2527.0786	2527.0786	0.5325	#VALUE!	2540.3917

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Station Construction	Building Construction	1/1/2024	5/2/2025	5	350	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0

Station - Underground - Station Construction - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Station Construction	Forklifts	2	6.00	89	0.20
Station Construction	Cranes	1	4.00	231	0.29
Station Construction	Cement and Mortar Mixers	2	6.00	9	0.56
Station Construction	Bore/Drill Rigs	1	4.00	221	0.50
Architectrual Coating	Air Compressors	1	6.00	78	0.48
Station Construction	Skid Steer Loaders	1	6.00	65	0.37
Station Construction	Generator Sets	1	8.00	84	0.74
Station Construction	Welders	2	8.00	46	0.45
Station Construction	Rubber Tired Loaders	1	4.00	203	0.36

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Station Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4310	11.6700	12.8557	0.0274		0.4667	0.4667		0.4476	0.4476	0.0000	2,527.0786	2,527.0786	0.5325		2,540.3917
Total	1.4310	11.6700	12.8557	0.0274		0.4667	0.4667		0.4476	0.4476	0.0000	2,527.0786	2,527.0786	0.5325		2,540.3917

Station - Underground - Station Construction - Los Angeles-South Coast County, Summer

3.2 Station Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3443	10.8997	12.7825	0.0274		0.4116	0.4116		0.3945	0.3945	0.0000	2,527.0161	2,527.0161	0.5274		2,540.2009
Total	1.3443	10.8997	12.7825	0.0274		0.4116	0.4116		0.3945	0.3945	0.0000	2,527.0161	2,527.0161	0.5274		2,540.2009

Station - Underground - Cut and Cover - Los Angeles-South Coast County, Summer

Station - Underground - Cut and Cover  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	13.50	1000sqft	0.31	13,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use - Station assumed to be 270 feet long with 30-foot width platform (50-ft width modeled to ensure excavation fully captured)

Construction Phase - Total cut and cover duration (18 months) divided by total underground station count (3) = 6 months/station

Off-road Equipment - task-specific equipment

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Grading - per ACE drawings, 190 ft grade minus 130 ft base of station = 60 ft depth excavation total; 20-ft of cover

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Station - Underground - Cut and Cover - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2024	0.7127	7.0124	9.4791	0.0188	0.0136	0.2956	0.3092	2.0500e-003	0.2720	0.2740	0.0000	1,816.8725	1,816.8725	0.5876	0.0000	1,831.5628
Maximum	0.7127	7.0124	9.4791	0.0188	0.0136	0.2956	0.3092	2.0500e-003	0.2720	0.2740	0.0000	1,816.8725	1,816.8725	0.5876	0.0000	1,831.5628

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Cut and Cover Construction	Grading	1/1/2024	6/28/2024	5	130	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.31

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

Station - Underground - Cut and Cover - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Cut and Cover Construction	Graders	0	0.00	0	0.00
Cut and Cover Construction	Skid Steer Loaders	1	7.00	65	0.37
Cut and Cover Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Cut and Cover Construction	Bore/Drill Rigs	1	4.00	221	0.50
Cut and Cover Construction	Excavators	1	6.00	158	0.38
Cut and Cover Construction	Cranes	1	4.00	231	0.29

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Cut and Cover Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0136	0.0000	0.0136	2.0500e-003	0.0000	2.0500e-003			0.0000			0.0000
Off-Road	0.7127	7.0124	9.4791	0.0188		0.2956	0.2956		0.2720	0.2720	0.0000	1,816.8725	1,816.8725	0.5876		1,831.5628
Total	0.7127	7.0124	9.4791	0.0188	0.0136	0.2956	0.3092	2.0500e-003	0.2720	0.2740	0.0000	1,816.8725	1,816.8725	0.5876		1,831.5628

Station - At-Grade - Los Angeles-South Coast County, Summer

Station - At-Grade  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	8.10	1000sqft	0.19	8,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use - Surface station assumed to be 270 feet long with 30 feet of platform

Construction Phase - Total at-grade station construction duration (18 months) divided by total at-grade station count (3) = 6 months/station

Off-road Equipment - Project-specific equipment

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Architectural Coating - architectural coating

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Station - At-Grade - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	0.7699	6.8620	7.9350	0.0140	0.0000	0.2955	0.2955	0.0000	0.2799	0.2799	0.0000	1,301.5418	1,301.5418	0.2932	0.0000	1,308.8717
Maximum	0.7699	6.8620	7.9350	0.0140	0.0000	0.2955	0.2955	0.0000	0.2799	0.2799	0.0000	1,301.5418	1,301.5418	0.2932	0.0000	1,308.8717

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Station Construction	Building Construction	1/1/2024	5/17/2024	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

Station - At-Grade - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Station Construction	Forklifts	1	8.00	89	0.20
Station Construction	Cranes	1	4.00	231	0.29
Station Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Station Construction	Generator Sets	1	4.00	84	0.74
Station Construction	Welders	1	4.00	46	0.45
Station Construction	Cement and Mortar Mixers	2	6.00	9	0.56
Station Construction	Aerial Lifts	1	4.00	63	0.31

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Station Construction - 2024

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7699	6.8620	7.9350	0.0140		0.2955	0.2955		0.2799	0.2799	0.0000	1,301.5418	1,301.5418	0.2932		1,308.8717
Total	0.7699	6.8620	7.9350	0.0140		0.2955	0.2955		0.2799	0.2799	0.0000	1,301.5418	1,301.5418	0.2932		1,308.8717

Station - Aerial - Los Angeles-South Coast County, Summer

Station - Aerial  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	8.10	1000sqft	0.19	8,100.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use - Station assumed to be 270 feet long with 30-foot wide platform

Construction Phase - project-specific duration

Off-road Equipment - task-specific equipment (groundwork equipment such as loaders not included since this work would occur under the initial guideway installation)

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Architectural Coating - station architectural coating

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Station - Aerial - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
2024	0.8974	7.84854	9.644105	0.0169485	#VALUE!	0.324245	0.324245	#VALUE!	0.311245	0.311245	0	1588.54801	1588.54801	0.287795	#VALUE!	1595.74292
Maximum	0.8974	7.84854	9.644105	0.0169485	#VALUE!	0.324245	0.324245	#VALUE!	0.311245	0.311245	0	1588.54801	1588.54801	0.287795	#VALUE!	1595.74292

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2024	12/27/2024	5	260	
2	Architectural Coatings	Architectural Coating	5/18/2024	6/5/2024	5	13	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 486 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Generator Sets	1	8.00	84	0.74
Architectural Coatings	Air Compressors	1	6.00	78	0.48
Building Construction	Welders	1	8.00	46	0.45
Building Construction	Aerial Lifts	2	6.00	63	0.31

Station - Aerial - Los Angeles-South Coast County, Summer

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8797	7.7876	9.5536	0.0168		0.3212	0.3212		0.3082	0.3082	0.0000	1,574.4756	1,574.4756	0.2870		1,581.6507
Total	0.8797	7.7876	9.5536	0.0168		0.3212	0.3212		0.3082	0.3082	0.0000	1,574.4756	1,574.4756	0.2870		1,581.6507

3.3 Architectural Coatings - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.1733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	0.3540	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Staging - 100,000sqft - Los Angeles-South Coast County, Summer

**Staging - 100,000sqft**  
Los Angeles-South Coast County, Summer

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	100.00	1000sqft	2.30	100,000.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

**1.3 User Entered Comments & Non-Default Data**

**Project Characteristics - CONSTRUCTION**

Construction Phase - CalEEMod defaults for 100,000sqft is 3 days for Site Prep and 20 days for Demolition (23 days total); increased duration to simulate lower-intensity site clearing efforts (daily emissions will need to be reduced by 1/3 in outputs to compensate for increased duration)

Off-road Equipment - assumed lower-intensity longer-duration demolition than CalEEMod default

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Demolition - assumed about 75% of site prep includes demolition

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Off-road Equipment - task-specific equipment

Staging - 100,000sqft - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2024	1.225533333	10.39306667	12.27573333	0.023933333	0.63986667	0.4634	1.1032	0.096866667	0.43586667	0.532733333	0	2269.648	2269.648	0.59053333	#VALUE!	2284.41127
Maximum	1.225533333	10.39306667	12.27573333	0.023933333	0.63986667	0.4634	1.1032	0.096866667	0.43586667	0.532733333	0	2269.648	2269.648	0.59053333	#VALUE!	2284.41127

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demo, Site Prep, Util	Demolition	1/1/2024	2/9/2024	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.3

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

Staging - 100,000sqft - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demo, Site Prep, Util	Concrete/Industrial Saws	1	4.00	81	0.73
Demo, Site Prep, Util	Rubber Tired Dozers	1	4.00	247	0.40
Demo, Site Prep, Util	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Demo, Site Prep, Util	Air Compressors	1	8.00	78	0.48
Demo, Site Prep, Util	Excavators	1	7.00	158	0.38
Demo, Site Prep, Util	Off-Highway Trucks	1	4.00	402	0.38
Demo, Site Prep, Util	Cement and Mortar Mixers	4	6.00	9	0.56
Demo, Site Prep, Util	Pavers	1	4.00	130	0.42
Demo, Site Prep, Util	Forklifts	2	4.00	89	0.20
Demo, Site Prep, Util	Cranes	1	2.00	231	0.29
Demo, Site Prep, Util	Aerial Lifts	1	6.00	63	0.31

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demo, Site Prep, Util - 2024

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9598	0.0000	0.9598	0.1453	0.0000	0.1453			0.0000			0.0000
Off-Road	1.8383	15.5896	18.4136	0.0359		0.6951	0.6951		0.6538	0.6538	0.0000	3,404.4720	3,404.4720	0.8858		3,426.6169
Total	1.8383	15.5896	18.4136	0.0359	0.9598	0.6951	1.6548	0.1453	0.6538	0.7991	0.0000	3,404.4720	3,404.4720	0.8858		3,426.6169

MSF - Los Angeles-South Coast County, Summer

MSF

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-Rail	177.00	1000sqft	4.06	177,000.00	0
Other Non-Asphalt Surfaces	869.00	1000sqft	19.95	869,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION & OPERATION

Land Use - land-use info based on ACE site drawings

Construction Phase - Demo & Site Prep run separately; calemod default

Off-road Equipment - task-specific equipment

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

MSF - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	6.0308	8.5187	8.2582	0.0154	#VALUE!	0.3989	0.3989	#VALUE!	0.3718	0.3718	0.0000	1414.3735	1414.3735	0.4089	#VALUE!	1424.5979
2025	5.9820	7.9304	8.2029	0.0154	#VALUE!	0.3567	0.3567	#VALUE!	0.3329	0.3329	0.0000	1414.6430	1414.6430	0.4090	#VALUE!	1424.8695
Maximum	6.0308	8.5187	8.2582	0.0154	#VALUE!	0.3989	0.3989	#VALUE!	0.3718	0.3718	0.0000	1414.6430	1414.6430	0.4090	#VALUE!	1424.8695

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coatings	Architectural Coating	5/31/2025	6/27/2025	5	20	
2	Building Construction	Building Construction	1/1/2024	5/30/2025	5	370	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 19.95

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 265,500; Non-Residential Outdoor: 88,500; Striped Parking Area: 52,140 (Architectural Coating – sqft)

MSF - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coatings	Air Compressors	1	6.00	78	0.48
Building Construction	Cement and Mortar Mixers	4	8.00	9	0.56

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Architectural Coatings - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	94.1230				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003	0.0515	0.0515	0.0515	0.0515	0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	94.2938	1.1455	1.8091	2.9700e-003	0.0515	0.0515	0.0515	0.0515	0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

3.3 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9338	8.4568	8.1604	0.0152	0.3961	0.3961	0.3961	0.3690	0.3690	0.3690	0.0000	1,399.1601	1,399.1601	0.4081		1,409.3637
Total	0.9338	8.4568	8.1604	0.0152	0.3961	0.3961	0.3961	0.3690	0.3690	0.3690	0.0000	1,399.1601	1,399.1601	0.4081		1,409.3637

3.3 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8850	7.8685	8.1051	0.0152	0.3539	0.3539	0.3539	0.3301	0.3301	0.3301	0.0000	1,399.4296	1,399.4296	0.4082		1,409.6353
Total	0.8850	7.8685	8.1051	0.0152	0.3539	0.3539	0.3539	0.3301	0.3301	0.3301	0.0000	1,399.4296	1,399.4296	0.4082		1,409.6353

Parking - Los Angeles-South Coast County, Summer

Parking  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	370.00	Space	3.33	148,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use -

Construction Phase - 3 months for all surface parking (1820 spaces); 370 spaces at Greenwood (20% of construction time; ~13 days); note that this duration does not include site

Off-road Equipment - Project-specific equipment; pavement breakers included in Staging - Site Clearing

Trips and VMT - Off-Site emissions addressed outside of CalEEMod

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Parking - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2024	4.5139	5.7143	7.3183	0.0125	0.0000	0.2767	0.2767	0.0000	0.2612	0.2612	0.0000	1,174.1328	1,174.1328	0.2879	0.0000	1,181.3308
Maximum	4.5139	5.7143	7.3183	0.0125	0.0000	0.2767	0.2767	0.0000	0.2612	0.2612	0.0000	1,174.1328	1,174.1328	0.2879	0.0000	1,181.3308

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Parking	Building Construction	1/1/2024	1/17/2024	5	13	
2	Paving	Paving	1/1/2024	1/17/2024	5	13	
3	Striping	Architectural Coating	1/1/2024	1/17/2024	5	13	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.33

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 8,880 (Architectural Coating – sqft)

Parking - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Parking	Cranes	1	2.00	231	0.29
Parking	Forklifts	2	6.00	89	0.20
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Striping	Air Compressors	1	6.00	78	0.48

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Parking - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2242	2.2014	2.1526	3.7400e-003		0.1130	0.1130		0.1040	0.1040	0.0000	361.7481	361.7481	0.1170		364.6730
Total	0.2242	2.2014	2.1526	3.7400e-003		0.1130	0.1130		0.1040	0.1040	0.0000	361.7481	361.7481	0.1170		364.6730

Parking - Los Angeles-South Coast County, Summer

3.3 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.2718	2.2941	3.3555	5.7700e-003		0.1028	0.1028		0.0963	0.0963	0.0000	530.9367	530.9367	0.1551			534.8136
Paving	0.6711					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.9429	2.2941	3.3555	5.7700e-003		0.1028	0.1028		0.0963	0.0963	0.0000	530.9367	530.9367	0.1551			534.8136

3.4 Striping - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	3.1661					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159			281.8443
Total	3.3468	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159			281.8443

Street Widening - Los Angeles-South Coast County, Summer

Street Widening  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	4.00	1000sqft	0.09	4,000.00	0
Other Non-Asphalt Surfaces	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Land Use - Assumed 20% as concrete sidewalks

Construction Phase - Total street widening duration (36 months) divided by total street widening area (100,000sqft) = 0.9 months/5000sqft (5000sqft modeled)

Off-road Equipment - task-specific equipment (air compressor for jackhammers; crushing/proc. equip for milling machine; rollers for compacting); most equipment would not operate

Off-road Equipment - task-specific equipment (air compressor for striping)

Trips and VMT - off-site emissions estimated outside of CalEEMod

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

Off-road Equipment - task-specific equipment (air compressors for jackhammers)

Street Widening - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2024	1.3553	10.5802	15.6486	0.0249	0.0000	0.5034	0.5034	0.0000	0.4806	0.4806	0.0000	2,339.2705	2,339.2705	0.5035	0.0000	2,351.8579
Maximum	1.3553	10.5802	15.6486	0.0249	0.0000	0.5034	0.5034	0.0000	0.4806	0.4806	0.0000	2,339.2705	2,339.2705	0.5035	0.0000	2,351.8579

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	General Construction	Building Construction	1/1/2024	2/23/2024	5	40	
2	Striping	Architectural Coating	1/1/2024	2/23/2024	5	40	
3	Paving	Paving	1/1/2024	2/23/2024	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.11

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 300 (Architectural Coating – sqft)

Street Widening - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
General Construction	Crushing/Proc. Equipment	1	2.00	85	0.78
General Construction	Excavators	1	4.00	158	0.38
General Construction	Forklifts	1	6.00	89	0.20
General Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Striping	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
General Construction	Air Compressors	1	8.00	78	0.48
General Construction	Aerial Lifts	1	4.00	63	0.31

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 General Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.6694	5.3989	8.7633	0.0134		0.2578	0.2578		0.2463	0.2463	0.0000	1,285.6291	1,285.6291	0.2712			1,292.4087
Total	0.6694	5.3989	8.7633	0.0134		0.2578	0.2578		0.2463	0.2463	0.0000	1,285.6291	1,285.6291	0.2712			1,292.4087

Street Widening - Los Angeles-South Coast County, Summer

3.3 Striping - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	0.0348					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159			281.8443
Total	0.2155	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159			281.8443

3.4 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.4644	3.9625	5.0752	8.5400e-003		0.1847	0.1847		0.1734	0.1734	0.0000	772.1934	772.1934	0.2165			777.6049
Paving	5.9000e-003					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.4703	3.9625	5.0752	8.5400e-003		0.1847	0.1847		0.1734	0.1734	0.0000	772.1934	772.1934	0.2165			777.6049

TPSS - Los Angeles-South Coast County, Summer

TPSS  
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	12.00	1000sqft	0.28	12,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2050
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CONSTRUCTION

Off-road Equipment - task-specific equipment; crane used only for installation of pre-fab TPSS unit

Trips and VMT - off-site emissions estimated outside of CalEEMod

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 for Large Operations (NOT MITIGATION)

TPSS - Los Angeles-South Coast County, Summer

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	0.3778	3.3814	4.5800	7.6800e-003	5.0000e-005	0.1571	0.1571	2.0000e-005	0.1454	0.1454	0.0000	729.3299	729.3299	0.2278	2.7000e-004	735.1039
Maximum	0.3778	3.3814	4.5800	7.6800e-003	5.0000e-005	0.1571	0.1571	2.0000e-005	0.1454	0.1454	0.0000	729.3299	729.3299	0.2278	2.7000e-004	735.1039

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	1/1/2024	5/20/2024	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.28

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

TPSS - Los Angeles-South Coast County, Summer

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Forklifts	1	4.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Cranes	1	2.00	231	0.29
Building Construction	Excavators	1	4.00	158	0.38

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Building Construction - 2024

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Off-Road	0.3721	3.3794	4.5591	7.6700e-003		0.1570	0.1570		0.1453	0.1453	0.0000	728.3976	728.3976	0.2273		734.0791
Total	0.3721	3.3794	4.5591	7.6700e-003		0.1570	0.1570		0.1453	0.1453	0.0000	728.3976	728.3976	0.2273		734.0791

# ATTACHMENT B – OPERATIONAL EMISSION CALCULATIONS

## Eastside Transit Corridor Phase II

### Parking Facilities

#### Parking

Operational Criteria Pollutant Emissions			Proposed Action - Atlantic to Greenwood
ROG emissions from parking area	Atlantic Blvd	no new spaces	--
maintenance, incl. restriping, landscaping,	Whittier Blvd	no new spaces	--
and cleaning	Commerce/Citadel	no new spaces	--
(pounds per day)	Greenwood Ave	270 - 370 new spaces	0.07
Evaporative ROG emissions from parked	Atlantic Blvd	no new spaces	--
vehicles	Whittier Blvd	no new spaces	--
(pounds per day)	Commerce/Citadel	no new spaces	--
	Greenwood Ave	270 - 370 new spaces	0.26
		Total ROG Emissions (pounds per day)	0.32

## Eastside Transit Corridor Phase II

### MSF

#### MSF

##### MSF Site 1

Operational Criteria Pollutant Emissions		Proposed Action
MSF Criteria Pollutant	ROG	3.96
Emissions	NO <sub>x</sub>	0.04
(pounds per day)	CO	0.03
	SO <sub>2</sub>	< 0.01
	PM <sub>10</sub>	< 0.01
	PM <sub>2.5</sub>	< 0.01

##### MSF Site 2

Operational Criteria Pollutant Emissions		Proposed Action
MSF Criteria Pollutant	ROG	3.96
Emissions	NO <sub>x</sub>	0.04
(pounds per day)	CO	0.03
	SO <sub>2</sub>	< 0.01
	PM <sub>10</sub>	< 0.01
	PM <sub>2.5</sub>	< 0.01

##### MSF Site 3

Operational Criteria Pollutant Emissions		Proposed Action
MSF Criteria Pollutant	ROG	0.19
Emissions	NO <sub>x</sub>	< 0.01
(pounds per day)	CO	< 0.01
	SO <sub>2</sub>	< 0.01
	PM <sub>10</sub>	< 0.01
	PM <sub>2.5</sub>	< 0.01

# Eastside Transit Corridor Phase II Highway Traffic Data

Eastside Transit Corridor Phase 2 - Daily Highway Traffic Data

	2025 Existing Conditions	2050 No Action	2050 Proposed Action
Regional			
Vehicle Miles Traveled (VMT)	510,828,000	577,229,000	577,221,000
Vehicle Hours Traveled (VHT)	15,476,000	19,247,000	19,246,000
Average Vehicle Speed (mph)	33	30	30

*318 day annualization assumed*

Eastside Transit Corridor Phase II  
 Highway Traffic Data

Period	Estimated Weekday Rail Ridership	Estimated Saturday Rail Ridership	Estimated Sunday Rail Ridership	Weekday Schedule Days	Saturday Schedule Days	Sunday Schedule Days	Annualization Value
2015	334,432	216,664	177,763	256	51	58	320
2016	348,505	220,647	187,851	255	53	58	320
2017	359,016	219,879	172,243	254	52	59	314
2018	344,179	199,018	170,754	255	52	58	314
2019	295,889	175,294	148,361	255	52	58	315
2020	160,126	109,424	90,611	256	51	59	324
2021	145,150	106,064	91,366	256	51	58	330
2022	181,644	139,259	120,781	255	52	58	333
2023	194,374	152,425	133,362	254	52	59	335
2024	205,038	158,496	136,539	256	52	58	335

<https://isotp.metro.net/MetroRidership/IndexSys.aspx>

# Eastside Transit Corridor Phase II

## EMFAC Emission Rates Summary

### Emission Factors for Aggregated Highway Vehicles

Calendar Year	Regional Highway Vehicle Emission Factors (g/mile)														
	ROG	TOG	CO	NOx	SOx	PM10 Emissions					PM2.5 Emissions				
						PM10 Total	PM10 Exhaust	PM10 Tire Wear	PM10 Brake Wear	Paved Road Dust	PM2.5 Total	PM2.5 Exhaust	PM2.5 Tire Wear	PM2.5 Brake Wear	Paved Road Dust
2025	0.100	0.112	1.323	0.160	0.003	0.323	0.002	0.009	0.016	0.297	0.084	0.001	0.002	0.006	0.074
2050	0.058	0.062	0.850	0.125	0.003	0.323	0.001	0.010	0.016	0.297	0.083	0.001	0.002	0.006	0.074

**Note:**

EMFAC2021 default regional fleet mix for geographic area limited to the Los Angeles sub-area of the South Coast Air Basin was used.

All vehicle classes and fuel types were included in highway vehicle emissions aggregation.

Where applicable, the EMFAC2021 35 miles per hour speed bin was assumed, representative of the modeled baseline network average vehicle speed of 33 miles per hour.

Where applicable, the EMFAC2021 30 miles per hour speed bin was assumed, representative of the modeled future network average vehicle speed of 30 miles per hour.

## Eastside Transit Corridor Phase II EMFAC Emission Rates Summary

### Emission Factors for Fuel Evaporation from Parked Vehicles

Calendar Year	Regional Parked Vehicle Emission Factors (g/hour)		
	ROG Hotsoak Evap.	ROG Diurnal Evap.	Overall Parking Evap.
2025	0.017	0.060	0.055
2050	0.007	0.035	0.032

**Note:**

Hotsoak represents the first 35 minutes after a vehicle parks. After that, all remaining parking is assumed to be diurnal. A total of 10 parked hours per day per space were assumed for calculation of the overall parking evaporative factor.

# Eastside Transit Corridor Phase II

## CalEEMod Outputs

CalEEMod Version: CalEEMod.2020.4.0

Date: 7/13/2021 12:25 PM

Station, Aerial Lighting & Elevators/Escalators - Los Angeles-South Coast County, Annual

### Station, Aerial Lighting & Elevators/Escalators Los Angeles-South Coast County, Annual

#### 1.0 Project Characteristics

##### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking with Elevator	13.80	1000sqft	0.32	13,800.00	0

##### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9	Operational Year		2026	

##### 1.3 User Entered Comments & Non-Default Data

Land Use - Station assumed to be 300 feet long with two, 23-foot wide platforms

#### 5.0 Energy Detail

Historical Energy Use: N

##### 5.2 Energy by Land Use - NaturalGas

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

##### 5.3 Energy by Land Use - Electricity

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unenclosed Parking with Elevator	26772				

# Eastside Transit Corridor Phase II

## CalEEMod Outputs

CalEEMod Version: CalEEMod.2020.4.0

Date: 7/13/2021 12:24 PM

Station, At-Grade Lighting & Elevators/Escalators - Los Angeles-South Coast County, Annual

### Station, At-Grade Lighting & Elevators/Escalators

Los Angeles-South Coast County, Annual

#### 1.0 Project Characteristics

##### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unenclosed Parking Structure	13.80	1000sqft	0.32	13,800.00	0

##### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

Land Use - Station assumed to be 300 feet long with two, 23-foot wide platforms

#### 5.0 Energy Detail

Historical Energy Use: N

##### 5.2 Energy by Land Use - NaturalGas

Land Use	Natural Gas Use kBTU/yr	Emissions (tons/yr)							Emissions (MT/yr)								
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unenclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

##### 5.3 Energy by Land Use - Electricity

Land Use	Electricity Use kWh/yr	Total CO2	CH4	N2O	CO2e
Unenclosed Parking Structure	24150				

# Eastside Transit Corridor Phase II

## CalEEMod Outputs

CalEEMod Version: CalEEMod.2020.4.0

Date: 7/13/2021 12:20 PM

Station, Underground Lighting & Elevators/Escalators - Los Angeles-South Coast County, Annual

### Station, Underground Lighting & Elevators/Escalators Los Angeles-South Coast County, Annual

#### 1.0 Project Characteristics

##### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	13.80	1000sqft	0.32	13,800.00	0

##### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9	Operational Year		2026	

##### 1.3 User Entered Comments & Non-Default Data

Land Use - Station assumed to be 300 feet long with two, 23-foot wide platforms

#### 5.0 Energy Detail

Historical Energy Use: N

##### 5.2 Energy by Land Use - NaturalGas

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	kBTU/yr	tons/yr										MT/yr					
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

##### 5.3 Energy by Land Use - Electricity

Land Use	Electricity Use	Total CO2	CH4	N2O	CO2e
	kWh/yr				
Enclosed Parking with Elevator	75072				

# Eastside Transit Corridor Phase II

## CalEEMod Outputs

CalEEMod Version: CalEEMod.2020.4.0

Date: 7/13/2021 12:44 PM

Parking Lot - Los Angeles-South Coast County, Annual

Parking Lot  
Los Angeles-South Coast County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	500.00	Space	4.50	200,000.00	0

#### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9	Operational Year		2024	

#### 2.2 Overall Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Area	0.0163	6.0000e-005	6.3700e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0124	0.0124	3.0000e-005	0.0000	0.0132
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	12.4142	12.4142	1.0500e-003	1.3000e-004	12.4782
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0163</b>	<b>6.0000e-005</b>	<b>6.3700e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>12.4266</b>	<b>12.4266</b>	<b>1.0800e-003</b>	<b>1.3000e-004</b>	<b>12.4915</b>

# Eastside Transit Corridor Phase II

## CalEEMod Outputs

CalEEMod Version: CalEEMod.2020.4.0

Date: 3/29/2022 10:12 AM

MSF - facility only - Los Angeles-South Coast County, Annual

MSF - facility only  
Los Angeles-South Coast County, Annual

### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-Rail	177.00	1000sqft	4.06	177,000.00	0

#### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9	Operational Year		2026	

#### 1.3 User Entered Comments & Non-Default Data

Land Use - land-use info based on ACE site drawings

### 2.0 Emissions Summary

#### 2.2 Overall Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Area	0.7218	2.0000e-005	2.2500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2900e-003	4.2900e-003	1.0000e-005	0.0000	4.6800e-003
Energy	8.20E-04	7.4600e-003	6.2700e-003	4.0000e-005		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	128.3474	128.3474	0.0103	1.3800e-003	129.0159
Mobile	0.1772	0.2057	1.9147	4.2900e-003	0.4960	2.1300e-003	0.4991	0.1323	2.9100e-003	0.1352	0.0000	406.0855	406.0855	0.0267	0.0169	411.8011
Waste						0.0000	0.0000		0.0000	0.0000	23.7736	0.0000	23.7736	1.9960	0.0000	23.6728
Water						0.0000	0.0000		0.0000	0.0000	12.9856	94.5191	107.5047	1.3417	0.0325	150.7208
Total	7.23E-01	7.4600e-003	6.2700e-003	4.0000e-005	0	0.00057	0.00057	0	0.00057	0.00057	12.9856	222.8665	235.8521	1.352	0.03388	279.7367

#### Notes:

- MSF operations would not require landscaping;
- Vehicle trips are already accounted for in regional traffic modeling;
- Warehouse waste generation parameters are inappropriate for MSF, actual waste generation would be immaterial;
- Warehouse water demand likely excessive for MSF, but included nonetheless

# ATTACHMENT C – CO HOT-SPOTS DATA

Eastside Transit Corridor Phase II

Peak Hourly Traffic Counts Summary

	Location	Peak Hourly Traffic Counts
Existing Conditions		
First High	Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	4,243
Second High	Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	4,150
No Build (2050)		
First High	Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	4,469
Second High	Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	4,442
Propoesd Action (2050)		
First High	Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	4,514
Second High	Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	4,428

Note: Ryan Winn (AECOM) confirmed that, although the total annual VMT reductions from Alternatives 1, 2, and 3 would vary, these alternatives would serve the same area. Since the traffic model is calibrated to localized growth parameters, the peak hour traffic volumes would not differ between the alternatives.

# Eastside Transit Corridor Phase II

## Daily Traffic Counts

### TOTAL VEHICLES

Existing (2025) AM Intersection	Northbound			Southbound			Eastbound			Westbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp	151	696			718	67	43		206	228	221	209	2539
Atlantic Blvd & SR 60 EB Off-Ramp		1331			550		316		703				2900
Ford Blvd & 3rd St	90	211	72	49	149	87	52	390	73	37	416	83	1709
McDonnell Ave & 3rd St	61	13	29	10	10	29	34	432	23	20	402	10	1073
Arizona Ave & 3rd St	46	2	12	26	11	12	19	430	63	22	384	11	1038
Mednick Ave & 3rd St	101	405	132	130	357	56	77	349	42	40	267	152	2108
La Verne Ave & 3rd St	92		71					441	90	121	465		1280
Atlantic Blvd & Pomona Blvd	30	921	47	107	1012	134	139	96	13	104	138	271	3012
Hillview Ave & Pomona Blvd	182	4	33	8	3	7	17	171	30	60	268	7	790
Atlantic Blvd & Beverly Blvd	88	715	81	161	915	26	60	314	149	171	516	238	3434
Hillview Ave & Beverly Blvd	51	70	54	18	81	17	16	465	27	82	790	19	1690
Atlantic Blvd & 4th St	66	819	30	90	1019	98	88	91	56	58	109	57	2581
Atlantic Blvd & Eagle St	15	816	31	84	963	79	68	51	21	75	30	150	2383
Atlantic Blvd & 6th St	70	702	54	64	818	124	104	69	69	51	64	91	2280
Atlantic Blvd & Hubbard St	27	651	39	57	855	77	82	62	59	44	55	62	2070
Ferris Ave & Whittier Blvd	14	58	29	33	51	34	18	609	12	18	630	37	1543
Atlantic Blvd & Whittier Blvd	48	506	71	159	662	95	136	351	49	139	456	136	2808
Goodrich Blvd & Whittier Blvd	120		138					509	91	101	578		1537
Atlantic Blvd & Verona St	18	564	6	32	765	26	28	31	31	24	30	34	1589
Atlantic Blvd & Olympic Blvd	43	413	33	89	818	150	148	433	71	82	564	54	2898
Atlantic Blvd & Union Pacific Ave	19	387	1	13	694	32	44	36	41	90	62	24	1443
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd	112		82	19	59	23	6	534	6	181	362	7	1391
Hoefner Ave & Flotilla St/Smithway St	5		46					134	8	16	93		302
Vail Ave & Mines Ave		254	39	104	390					67		102	956
Garfield Ave & Flotilla St	20	654	20	192	1056	223	82	10	20	37	73	198	2585
Yates Ave & Flotilla St	30		12					170	52	18	278		560
Vail Ave & Flotilla St	164	279			336	129	38		118				1064
Tubeway Ave & Smithway St	69	123			105	83	16		28				424
Gayhart St & Washington Blvd	3		2	21		86	105	772		1	1154	74	2218
Garfield Ave & Washington Blvd	56	472	13	125	760	212	139	579	34	52	970	117	3529
Yates Ave & Washington Blvd	10	43	132	6	31	17	32	637	48	137	1112	12	2217
Vail Ave & Washington Blvd	21	103	32	142	141	83	119	628	36	78	1165	139	2687
Maple Ave & Washington Blvd	14	44	22	63	55	100	75	662	25	34	1239	82	2415
Greenwood & Washington Blvd	66	302	54	74	323	91	73	553	99	112	1254	98	3099
Montebello Blvd & Washington Blvd	55	64	34	65	61	65	25	676	29	14	1328	34	2450
Bluff Rd & Washington Blvd	15	72	83	256	67	78	24	770	4	2	1335	177	2883
Telegraph Rd & I-5 NB On and Off-Ramps	508	631	19	4	304	29	131	4	234	22	25	8	1919
I-5 SB On and Off-Ramps & Washington Blvd				654		78		591	183	100	1091		2697

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	0	89	246	32	51	26	255	274	102	0	0	0	337	430	58	0	0	265

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	0	235	362	235	247	3	6	698	33	77	73	27	108	319	108	339	39	266

# Eastside Transit Corridor Phase II

## Daily Traffic Counts

### TOTAL VEHICLES

Existing (2025) PM Intersection	Northbound			Southbound			Eastbound			Westbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp	90	890	0	0	793	85	216	0	539	258	155	216	3242
Atlantic Blvd & SR 60 EB Off-Ramp	0	1228	0	0	832	0	429	0	530	0	0	0	3019
Ford Blvd & 3rd St	106	320	56	61	287	44	58	484	81	31	308	42	1878
McDonnell Ave & 3rd St	32	15	17	11	15	25	43	497	40	40	312	14	1061
Arizona Ave & 3rd St	13	13	6	21	7	12	22	504	26	10	355	23	1012
Mednick Ave & 3rd St	46	294	98	218	492	79	41	460	30	44	236	102	2140
La Verne Ave & 3rd St	52	0	40	0	0	0	0	807	56	69	320	0	1344
Atlantic Blvd & Pomona Blvd	23	954	67	166	1104	92	152	179	11	96	97	122	3063
Hillview Ave & Pomona Blvd	72	2	43	9	3	14	2	388	38	52	228	4	855
Atlantic Blvd & Beverly Blvd	67	807	106	339	701	25	29	850	62	101	284	122	3493
Hillview Ave & Beverly Blvd	14	55	97	28	53	6	16	1243	30	40	467	11	2060
Atlantic Blvd & 4th St	54	979	15	33	924	68	58	71	52	8	30	23	2315
Atlantic Blvd & Eagle St	7	962	27	31	931	25	45	21	49	17	22	45	2182
Atlantic Blvd & 6th St	51	878	46	55	887	72	76	117	49	33	36	43	2343
Atlantic Blvd & Hubbard St	50	840	44	59	846	64	67	135	32	38	50	72	2297
Ferris Ave & Whittier Blvd	18	51	28	30	39	33	18	886	27	18	598	65	1811
Atlantic Blvd & Whittier Blvd	70	638	86	183	662	92	105	658	113	114	513	207	3441
Goodrich Blvd & Whittier Blvd	253	0	150	0	0	0	0	808	115	93	601	0	2020
Atlantic Blvd & Verona St	46	718	19	55	744	56	54	110	43	42	54	53	1994
Atlantic Blvd & Olympic Blvd	50	472	42	148	660	133	120	1086	109	94	479	77	3470
Atlantic Blvd & Union Pacific Ave	32	532	8	13	799	26	50	114	61	81	41	12	1769
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd	137	0	54	71	52	14	5	861	3	105	305	17	1624
Hoefner Ave & Flotilla St/Smithway St	5	0	55	0	0	0	0	129	15	21	345	0	570
Vail Ave & Mines Ave	0	513	63	178	519	0	0	0	0	20	0	47	1340
Garfield Ave & Flotilla St	9	1069	49	227	1165	199	242	126	11	32	38	176	3343
Yates Ave & Flotilla St	50	0	46	0	0	0	0	359	43	9	196	0	703
Vail Ave & Flotilla St	75	421	2	6	514	58	162	0	215	0	0	0	1453
Tubeway Ave & Smithway St	31	123	0	0	141	107	167	0	107	0	0	0	676
Gayhart St & Washington Blvd	8	1	3	79	0	170	46	1008	1	1	957	17	2291
Garfield Ave & Washington Blvd	41	738	47	281	655	291	177	879	22	52	624	171	3978
Yates Ave & Washington Blvd	45	44	247	24	15	53	10	1192	5	33	749	11	2428
Vail Ave & Washington Blvd	23	79	41	245	193	75	133	1304	40	28	691	95	2947
Maple Ave & Washington Blvd	32	56	38	101	50	84	99	1446	15	12	663	87	2683
Greenwood & Washington Blvd	67	350	117	113	501	55	83	1286	179	92	637	72	3552
Montebello Blvd & Washington Blvd	26	23	29	47	43	38	36	1505	49	27	748	52	2623
Bluff Rd & Washington Blvd	10	51	79	281	60	88	74	1399	13	4	835	275	3169
Telegraph Rd & I-5 NB On and Off-Ramps	400	343	29	31	920	43	97	24	199	53	38	12	2189
I-5 SB On and Off-Ramps & Washington Blvd	0	0	0	147	0	13	0	979	391	241	1002	0	2773

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	0	63	195	30	41	77	646	238	43	0	0	0	500	1127	70	0	0	270

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	38	251	569	270	486	0	9	860	12	29	17	9	150	744	66	319	16	129

# Eastside Transit Corridor Phase II

## Daily Traffic Counts

### TOTAL VEHICLES

Existing (2025) AM
Intersection
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp
Atlantic Blvd & SR 60 EB Off-Ramp
Ford Blvd & 3rd St
McDonnell Ave & 3rd St
Arizona Ave & 3rd St
Mednick Ave & 3rd St
La Verne Ave & 3rd St
Atlantic Blvd & Pomona Blvd
Hillview Ave & Pomona Blvd
Atlantic Blvd & Beverly Blvd
Hillview Ave & Beverly Blvd
Atlantic Blvd & 4th St
Atlantic Blvd & Eagle St
Atlantic Blvd & 6th St
Atlantic Blvd & Hubbard St
Ferris Ave & Whittier Blvd
Atlantic Blvd & Whittier Blvd
Goodrich Blvd & Whittier Blvd
Atlantic Blvd & Verona St
Atlantic Blvd & Olympic Blvd
Atlantic Blvd & Union Pacific Ave
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd
Hoefner Ave & Flotilla St/Smithway St
Vail Ave & Mines Ave
Garfield Ave & Flotilla St
Yates Ave & Flotilla St
Vail Ave & Flotilla St
Tubeway Ave & Smithway St
Gayhart St & Washington Blvd
Garfield Ave & Washington Blvd
Yates Ave & Washington Blvd
Vail Ave & Washington Blvd
Maple Ave & Washington Blvd
Greenwood & Washington Blvd
Montebello Blvd & Washington Blvd
Bluff Rd & Washington Blvd
Telegraph Rd & I-5 NB On and Off-Ramps
I-5 SB On and Off-Ramps & Washington Blvd

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	90	0	0	0	0	0	0	0	546	477	50	0	0	0	0	0	3328

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	8	2	0	0	0	0	121	0	0	0	0	0	0	0	0	15	3321

# Eastside Transit Corridor Phase II

## Daily Traffic Counts

### TOTAL VEHICLES

Existing (2025) PM
Intersection
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp
Atlantic Blvd & SR 60 EB Off-Ramp
Ford Blvd & 3rd St
McDonnell Ave & 3rd St
Arizona Ave & 3rd St
Mednick Ave & 3rd St
La Verne Ave & 3rd St
Atlantic Blvd & Pomona Blvd
Hillview Ave & Pomona Blvd
Atlantic Blvd & Beverly Blvd
Hillview Ave & Beverly Blvd
Atlantic Blvd & 4th St
Atlantic Blvd & Eagle St
Atlantic Blvd & 6th St
Atlantic Blvd & Hubbard St
Ferris Ave & Whittier Blvd
Atlantic Blvd & Whittier Blvd
Goodrich Blvd & Whittier Blvd
Atlantic Blvd & Verona St
Atlantic Blvd & Olympic Blvd
Atlantic Blvd & Union Pacific Ave
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd
Hoefner Ave & Flotilla St/Smithway St
Vail Ave & Mines Ave
Garfield Ave & Flotilla St
Yates Ave & Flotilla St
Vail Ave & Flotilla St
Tubeway Ave & Smithway St
Gayhart St & Washington Blvd
Garfield Ave & Washington Blvd
Yates Ave & Washington Blvd
Vail Ave & Washington Blvd
Maple Ave & Washington Blvd
Greenwood & Washington Blvd
Montebello Blvd & Washington Blvd
Bluff Rd & Washington Blvd
Telegraph Rd & I-5 NB On and Off-Ramps
I-5 SB On and Off-Ramps & Washington Blvd

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	124	0	0	0	0	0	0	0	378	274	74	0	0	0	0	0	4150

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	7	6	0	0	0	0	235	0	0	0	0	0	0	0	0	21	4243

# Eastside Transit Corridor Phase II

## Peak Hour Traffic Counts

### TOTAL VEHICLES

No Build (2050) AM Intersection	Northbound			Southbound			Eastbound			Westbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp	157	725	0	0	748	70	45	0	215	237	230	218	2645
Atlantic Blvd & SR 60 EB Off-Ramp	0	1386	0	0	573	0	329	0	732	0	0	0	3020
Ford Blvd & 3rd St	96	225	77	52	159	93	56	417	78	40	445	89	1827
McDonnell Ave & 3rd St	65	14	31	11	11	31	36	462	25	21	430	11	1148
Arizona Ave & 3rd St	49	2	13	28	12	13	20	460	67	24	410	12	1110
Mednick Ave & 3rd St	108	433	141	139	381	60	82	373	45	43	285	162	2252
La Verne Ave & 3rd St	98	0	76	0	0	0	0	471	96	129	497	0	1367
Atlantic Blvd & Pomona Blvd	31	959	49	111	1054	140	145	100	14	108	144	282	3137
Hillview Ave & Pomona Blvd	192	4	35	8	3	7	18	180	32	63	282	7	831
Atlantic Blvd & Beverly Blvd	93	752	85	169	963	27	63	330	157	180	543	250	3612
Hillview Ave & Beverly Blvd	54	74	57	19	85	18	17	489	28	86	831	20	1778
Atlantic Blvd & 4th St	69	862	32	95	1072	103	93	96	59	61	115	60	2717
Atlantic Blvd & Eagle St	16	859	33	88	1013	83	72	54	22	79	32	158	2509
Atlantic Blvd & 6th St	74	739	57	67	861	130	109	73	73	54	67	96	2400
Atlantic Blvd & Hubbard St	28	685	41	60	900	81	86	65	62	46	58	65	2177
Ferris Ave & Whittier Blvd	15	61	31	35	54	36	19	641	13	19	663	39	1626
Atlantic Blvd & Whittier Blvd	51	533	75	167	697	100	143	369	52	146	480	143	2956
Goodrich Blvd & Whittier Blvd	126	0	145	0	0	0	0	536	96	106	608	0	1617
Atlantic Blvd & Verona St	19	594	6	34	805	27	29	33	33	25	32	36	1673
Atlantic Blvd & Olympic Blvd	45	435	35	94	861	158	156	456	75	86	594	57	3052
Atlantic Blvd & Union Pacific Ave	20	407	1	14	730	34	46	38	43	95	65	25	1518
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd	118	0	86	20	62	24	6	562	6	190	381	7	1462
Hoefner Ave & Flotilla St/Smithway St	5	0	48	0	0	0	0	140	8	17	97	0	315
Vail Ave & Mines Ave	0	266	41	109	408	0	0	0	0	70	0	107	1001
Garfield Ave & Flotilla St	21	684	21	201	1105	233	86	10	21	39	76	207	2704
Yates Ave & Flotilla St	31	0	13	0	0	0	0	178	54	19	291	0	586
Vail Ave & Flotilla St	172	292	0	0	352	135	40	0	124	0	0	0	1115
Tubeway Ave & Smithway St	72	129	0	0	110	87	17	0	29	0	0	0	444
Gayhart St & Washington Blvd	3	0	2	22	0	90	110	808	0	1	1208	77	2321
Garfield Ave & Washington Blvd	59	494	14	131	795	222	145	606	36	54	1015	122	3693
Yates Ave & Washington Blvd	10	45	138	6	32	18	33	667	50	143	1164	13	2319
Vail Ave & Washington Blvd	22	108	33	149	148	87	125	657	38	82	1219	145	2813
Maple Ave & Washington Blvd	15	46	23	66	58	105	78	693	26	36	1297	86	2529
Greenwood & Washington Blvd	69	316	57	77	338	95	76	579	104	117	1312	103	3243
Montebello Blvd & Washington Blvd	58	67	36	68	64	68	26	708	30	15	1390	36	2566
Bluff Rd & Washington Blvd	16	75	87	268	70	82	25	806	4	2	1397	185	3017
Telegraph Rd & I-5 NB On and Off-Ramps	532	660	20	4	318	30	137	4	245	23	26	8	2007
I-5 SB On and Off-Ramps & Washington Blvd	0	0	0	684	0	82	0	619	192	105	1142	0	2824

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	0	95	263	34	54	28	272	293	109	0	0	0	360	460	62	0	0	283

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	0	247	381	247	260	3	6	735	35	81	77	28	114	336	114	357	41	280

# Eastside Transit Corridor Phase II

## Peak Hour Traffic Counts

### TOTAL VEHICLES

No Build (2050) PM Intersection	Northbound			Southbound			Eastbound			Westbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp	95	943	0	0	841	90	229	0	571	273	164	229	3435
Atlantic Blvd & SR 60 EB Off-Ramp	0	1302	0	0	882	0	455	0	562	0	0	0	3201
Ford Blvd & 3rd St	114	345	60	66	309	47	62	521	87	33	332	45	2021
McDonnell Ave & 3rd St	34	16	18	12	16	27	46	535	43	43	336	15	1141
Arizona Ave & 3rd St	14	14	6	23	8	13	24	543	28	11	382	25	1091
Mednick Ave & 3rd St	50	317	106	235	530	85	44	495	32	47	254	110	2305
La Verne Ave & 3rd St	56	0	43	0	0	0	0	869	60	74	345	0	1447
Atlantic Blvd & Pomona Blvd	24	1011	71	176	1170	98	161	190	12	102	103	129	3247
Hillview Ave & Pomona Blvd	75	2	45	9	3	15	2	406	40	54	239	4	894
Atlantic Blvd & Beverly Blvd	70	845	111	355	734	26	30	890	65	106	297	128	3657
Hillview Ave & Beverly Blvd	15	58	102	29	55	6	17	1301	31	42	489	12	2157
Atlantic Blvd & 4th St	57	1025	16	35	967	71	61	74	54	8	31	24	2423
Atlantic Blvd & Eagle St	7	1007	28	32	975	26	47	22	51	18	23	47	2283
Atlantic Blvd & 6th St	53	919	48	58	928	75	80	122	51	35	38	45	2452
Atlantic Blvd & Hubbard St	52	879	46	62	886	67	70	141	33	40	52	75	2403
Ferris Ave & Whittier Blvd	19	53	29	31	41	35	19	927	28	19	626	68	1895
Atlantic Blvd & Whittier Blvd	73	668	90	192	693	96	110	689	118	119	537	217	3602
Goodrich Blvd & Whittier Blvd	265	0	157	0	0	0	0	846	120	97	629	0	2114
Atlantic Blvd & Verona St	48	752	20	58	779	59	57	115	45	44	57	55	2089
Atlantic Blvd & Olympic Blvd	52	494	44	155	691	139	126	1137	114	98	501	81	3632
Atlantic Blvd & Union Pacific Ave	33	557	8	14	836	27	52	119	64	85	43	13	1851
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd	143	0	57	74	54	15	5	901	3	110	319	18	1699
Hoefner Ave & Flotilla St/Smithway St	5	0	59	0	0	0	0	137	16	22	368	0	607
Vail Ave & Mines Ave	0	546	67	190	553	0	0	0	0	21	0	50	1427
Garfield Ave & Flotilla St	10	1139	52	242	1241	212	258	134	12	34	40	187	3561
Yates Ave & Flotilla St	53	0	49	0	0	0	0	382	46	10	209	0	749
Vail Ave & Flotilla St	80	448	2	6	548	62	173	0	229	0	0	0	1548
Tubeway Ave & Smithway St	33	131	0	0	150	114	178	0	114	0	0	0	720
Gayhart St & Washington Blvd	9	1	3	84	0	181	49	1074	1	1	1019	18	2440
Garfield Ave & Washington Blvd	44	786	50	299	698	310	189	936	23	55	665	182	4237
Yates Ave & Washington Blvd	48	47	263	26	16	56	11	1270	5	35	798	12	2587
Vail Ave & Washington Blvd	25	84	44	261	206	80	142	1389	43	30	736	101	3141
Maple Ave & Washington Blvd	34	60	40	108	53	89	105	1540	16	13	706	93	2857
Greenwood & Washington Blvd	71	373	125	120	534	59	88	1370	191	98	679	77	3785
Montebello Blvd & Washington Blvd	28	25	31	50	46	40	38	1603	52	29	797	55	2794
Bluff Rd & Washington Blvd	11	54	84	299	64	94	79	1490	14	4	889	293	3375
Telegraph Rd & I-5 NB On and Off-Ramps	426	365	31	33	980	46	103	26	212	56	40	13	2331
I-5 SB On and Off-Ramps & Washington Blvd	0	0	0	157	0	14	0	1043	417	257	1067	0	2955

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	0	68	210	32	44	83	696	256	46	0	0	0	538	1214	75	0	0	291

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	40	263	596	283	509	0	9	900	13	30	18	9	157	779	69	334	17	135

# Eastside Transit Corridor Phase II

## Peak Hour Traffic Counts

### TOTAL VEHICLES

No Build (2050) AM
Intersection
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp
Atlantic Blvd & SR 60 EB Off-Ramp
Ford Blvd & 3rd St
McDonnell Ave & 3rd St
Arizona Ave & 3rd St
Mednick Ave & 3rd St
La Verne Ave & 3rd St
Atlantic Blvd & Pomona Blvd
Hillview Ave & Pomona Blvd
Atlantic Blvd & Beverly Blvd
Hillview Ave & Beverly Blvd
Atlantic Blvd & 4th St
Atlantic Blvd & Eagle St
Atlantic Blvd & 6th St
Atlantic Blvd & Hubbard St
Ferris Ave & Whittier Blvd
Atlantic Blvd & Whittier Blvd
Goodrich Blvd & Whittier Blvd
Atlantic Blvd & Verona St
Atlantic Blvd & Olympic Blvd
Atlantic Blvd & Union Pacific Ave
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd
Hoefner Ave & Flotilla St/Smithway St
Vail Ave & Mines Ave
Garfield Ave & Flotilla St
Yates Ave & Flotilla St
Vail Ave & Flotilla St
Tubeway Ave & Smithway St
Gayhart St & Washington Blvd
Garfield Ave & Washington Blvd
Yates Ave & Washington Blvd
Vail Ave & Washington Blvd
Maple Ave & Washington Blvd
Greenwood & Washington Blvd
Montebello Blvd & Washington Blvd
Bluff Rd & Washington Blvd
Telegraph Rd & I-5 NB On and Off-Ramps
I-5 SB On and Off-Ramps & Washington Blvd

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	96	0	0	0	0	0	0	0	583	510	53	0	0	0	0	0	3555

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	8	2	0	0	0	0	127	0	0	0	0	0	0	0	0	16	3495

# Eastside Transit Corridor Phase II

## Peak Hour Traffic Counts

### TOTAL VEHICLES

No Build (2050) PM
Intersection
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp
Atlantic Blvd & SR 60 EB Off-Ramp
Ford Blvd & 3rd St
McDonnell Ave & 3rd St
Arizona Ave & 3rd St
Mednick Ave & 3rd St
La Verne Ave & 3rd St
Atlantic Blvd & Pomona Blvd
Hillview Ave & Pomona Blvd
Atlantic Blvd & Beverly Blvd
Hillview Ave & Beverly Blvd
Atlantic Blvd & 4th St
Atlantic Blvd & Eagle St
Atlantic Blvd & 6th St
Atlantic Blvd & Hubbard St
Ferris Ave & Whittier Blvd
Atlantic Blvd & Whittier Blvd
Goodrich Blvd & Whittier Blvd
Atlantic Blvd & Verona St
Atlantic Blvd & Olympic Blvd
Atlantic Blvd & Union Pacific Ave
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd
Hoefner Ave & Flotilla St/Smithway St
Vail Ave & Mines Ave
Garfield Ave & Flotilla St
Yates Ave & Flotilla St
Vail Ave & Flotilla St
Tubeway Ave & Smithway St
Gayhart St & Washington Blvd
Garfield Ave & Washington Blvd
Yates Ave & Washington Blvd
Vail Ave & Washington Blvd
Maple Ave & Washington Blvd
Greenwood & Washington Blvd
Montebello Blvd & Washington Blvd
Bluff Rd & Washington Blvd
Telegraph Rd & I-5 NB On and Off-Ramps
I-5 SB On and Off-Ramps & Washington Blvd

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	134	0	0	0	0	0	0	0	407	295	80	0	0	0	0	0	4469

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	7	6	0	0	0	0	246	0	0	0	0	0	0	0	0	22	4442

# Eastside Transit Corridor Phase II

## Peak Hour Traffic Counts

### TOTAL VEHICLES

Build (2050) AM Intersection	Northbound			Southbound			Eastbound			Westbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp	158	730	0	0	753	70	45	0	216	239	232	219	2662
Atlantic Blvd & SR 60 EB Off-Ramp	0	1396	0	0	577	0	332	0	738	0	0	0	3043
Ford Blvd & 3rd St	96	226	77	53	160	93	56	418	78	40	446	89	1832
McDonnell Ave & 3rd St	65	14	31	11	11	31	36	463	25	21	431	11	1150
Arizona Ave & 3rd St	49	2	13	28	12	13	20	461	68	24	412	12	1114
Mednick Ave & 3rd St	108	434	141	139	383	60	83	374	45	43	286	163	2259
La Verne Ave & 3rd St	0	0	175	0	0	0	0	473	189	0	591	0	1428
Atlantic Blvd & Pomona Blvd	31	966	49	112	1062	141	146	101	14	109	145	284	3160
Hillview Ave & Pomona Blvd	191	4	35	8	3	7	18	179	31	63	281	7	827
Atlantic Blvd & Beverly Blvd	92	749	85	169	958	27	63	329	156	179	540	249	3596
Hillview Ave & Beverly Blvd	53	73	57	19	85	18	17	487	28	86	827	20	1770
Atlantic Blvd & 4th St	69	858	31	94	1067	103	92	95	59	61	114	60	2703
Atlantic Blvd & Eagle St	16	855	32	88	1009	83	71	53	22	79	31	157	2496
Atlantic Blvd & 6th St	73	735	57	67	857	130	109	72	72	53	67	95	2387
Atlantic Blvd & Hubbard St	28	685	41	60	898	81	86	65	62	46	58	65	2175
Ferris Ave & Whittier Blvd	15	61	30	35	53	36	19	638	13	19	660	39	1618
Atlantic Blvd & Whittier Blvd	50	533	74	167	696	99	142	368	51	146	478	142	2946
Goodrich Blvd & Whittier Blvd	126	0	145	0	0	0	0	533	95	106	605	0	1610
Atlantic Blvd & Verona St	19	594	6	34	804	27	29	32	32	25	31	36	1669
Atlantic Blvd & Olympic Blvd	45	433	35	93	857	157	155	453	74	86	591	57	3036
Atlantic Blvd & Union Pacific Ave	20	405	1	14	727	34	46	38	43	94	65	25	1512
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd	117	0	86	20	62	24	6	559	6	190	379	7	1456
Hoefner Ave & Flotilla St/Smithway St	5	0	48	0	0	0	0	150	8	17	99	0	327
Vail Ave & Mines Ave	0	264	41	108	406	0	0	0	0	70	0	106	995
Garfield Ave & Flotilla St	21	681	21	200	1099	232	85	10	21	39	76	206	2691
Yates Ave & Flotilla St	31	0	12	0	0	0	0	177	54	19	289	0	582
Vail Ave & Flotilla St	171	290	0	0	350	134	40	0	123	0	0	0	1108
Tubeway Ave & Smithway St	83	128	0	0	109	86	17	0	31	0	0	0	454
Gayhart St & Washington Blvd	3	0	2	22	0	90	109	803	0	1	1201	77	2308
Garfield Ave & Washington Blvd	58	491	14	130	791	221	145	603	35	54	1010	122	3674
Yates Ave & Washington Blvd	10	45	137	6	32	18	33	663	50	143	1157	12	2306
Vail Ave & Washington Blvd	22	107	33	148	147	86	124	654	37	81	1212	145	2796
Maple Ave & Washington Blvd	15	46	23	66	57	104	78	689	26	35	1289	85	2513
Greenwood & Washington Blvd	71	323	58	77	338	95	78	576	110	134	1305	109	3274
Montebello Blvd & Washington Blvd	60	67	35	68	63	72	0	731	31	0	1399	35	2561
Bluff Rd & Washington Blvd	16	75	86	266	70	83	52	801	4	2	1389	184	3028
Telegraph Rd & I-5 NB On and Off-Ramps	529	657	20	4	316	30	136	4	244	23	26	8	1997
I-5 SB On and Off-Ramps & Washington Blvd	0	0	0	681	0	81	0	615	190	104	1135	0	2806

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	0	95	263	34	54	28	272	293	109	0	0	108	360	460	25	0	37	247

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	0	247	381	247	260	3	6	735	35	81	77	28	114	336	114	357	41	280

# Eastside Transit Corridor Phase II

## Peak Hour Traffic Counts

### TOTAL VEHICLES

Build (2050) PM Intersection	Northbound			Southbound			Eastbound			Westbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp	95	940	0	0	837	90	228	0	569	272	164	228	3423
Atlantic Blvd & SR 60 EB Off-Ramp	0	1296	0	0	878	0	453	0	560	0	0	0	3187
Ford Blvd & 3rd St	114	345	60	66	309	47	62	521	87	33	332	45	2021
McDonnell Ave & 3rd St	34	16	18	12	16	27	46	535	43	43	336	15	1141
Arizona Ave & 3rd St	14	14	6	23	8	13	24	543	28	11	382	25	1091
Mednick Ave & 3rd St	50	317	106	235	530	85	44	495	32	47	254	110	2305
La Verne Ave & 3rd St	0	0	99	0	0	0	0	869	102	0	387	0	1457
Atlantic Blvd & Pomona Blvd	24	1007	71	175	1165	97	160	189	12	101	102	129	3232
Hillview Ave & Pomona Blvd	75	2	45	9	3	15	2	405	40	54	238	4	892
Atlantic Blvd & Beverly Blvd	70	842	111	354	731	26	30	887	65	105	296	127	3644
Hillview Ave & Beverly Blvd	15	57	101	29	55	6	17	1297	31	42	487	11	2148
Atlantic Blvd & 4th St	56	1022	16	34	964	71	61	74	54	8	31	24	2415
Atlantic Blvd & Eagle St	7	1004	28	32	971	26	47	22	51	18	23	47	2276
Atlantic Blvd & 6th St	53	916	48	57	926	75	79	122	51	34	38	45	2444
Atlantic Blvd & Hubbard St	52	880	46	62	886	67	70	141	33	40	52	75	2404
Ferris Ave & Whittier Blvd	19	53	29	31	41	34	19	925	28	19	624	68	1890
Atlantic Blvd & Whittier Blvd	73	669	90	191	694	96	110	687	118	119	535	216	3598
Goodrich Blvd & Whittier Blvd	264	0	157	0	0	0	0	843	120	97	627	0	2108
Atlantic Blvd & Verona St	48	752	20	57	779	58	56	115	45	44	56	55	2085
Atlantic Blvd & Olympic Blvd	52	493	44	154	689	139	125	1133	114	98	500	80	3621
Atlantic Blvd & Union Pacific Ave	33	555	8	14	834	27	52	119	64	85	43	13	1847
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd	143	0	56	74	54	15	5	898	3	110	318	18	1694
Hoefner Ave & Flotilla St/Smithway St	5	0	59	0	0	0	0	139	16	22	378	0	619
Vail Ave & Mines Ave	0	546	67	190	553	0	0	0	0	21	0	50	1427
Garfield Ave & Flotilla St	10	1139	52	242	1241	212	258	134	12	34	40	187	3561
Yates Ave & Flotilla St	53	0	49	0	0	0	0	382	46	10	209	0	749
Vail Ave & Flotilla St	80	448	2	6	547	62	173	0	229	0	0	0	1547
Tubeway Ave & Smithway St	35	131	0	0	150	114	178	0	125	0	0	0	733
Gayhart St & Washington Blvd	9	1	3	84	0	181	49	1074	1	1	1019	18	2440
Garfield Ave & Washington Blvd	44	786	50	299	698	310	189	936	23	55	665	182	4237
Yates Ave & Washington Blvd	48	47	263	26	16	56	11	1269	5	35	798	12	2586
Vail Ave & Washington Blvd	24	84	44	261	206	80	142	1389	43	30	736	101	3140
Maple Ave & Washington Blvd	34	60	40	108	53	89	105	1540	16	13	706	93	2857
Greenwood & Washington Blvd	73	375	127	127	543	66	88	1370	193	129	678	77	3846
Montebello Blvd & Washington Blvd	29	24	31	50	46	41	0	1647	55	0	826	55	2804
Bluff Rd & Washington Blvd	11	54	84	299	64	94	120	1492	15	4	889	293	3419
Telegraph Rd & I-5 NB On and Off-Ramps	426	365	31	33	980	46	103	26	212	56	40	13	2331
I-5 SB On and Off-Ramps & Washington Blvd	0	0	0	157	0	14	0	1043	416	257	1067	0	2954

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	0	68	210	32	44	83	695	256	46	0	0	79	538	1213	43	0	32	259

	NBL2	NBL	NBT	NBR	NBR2	SBL2	SBL	SBT	SBR	SBR2	EBL2	EBL	EBT	EBR	EBR2	WBL2	WBL	WBT
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	40	262	594	282	507	0	9	897	13	30	18	9	157	776	69	333	17	135

# Eastside Transit Corridor Phase II

## Peak Hour Traffic Counts

### TOTAL VEHICLES

Build (2050) AM
Intersection
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp
Atlantic Blvd & SR 60 EB Off-Ramp
Ford Blvd & 3rd St
McDonnell Ave & 3rd St
Arizona Ave & 3rd St
Mednick Ave & 3rd St
La Verne Ave & 3rd St
Atlantic Blvd & Pomona Blvd
Hillview Ave & Pomona Blvd
Atlantic Blvd & Beverly Blvd
Hillview Ave & Beverly Blvd
Atlantic Blvd & 4th St
Atlantic Blvd & Eagle St
Atlantic Blvd & 6th St
Atlantic Blvd & Hubbard St
Ferris Ave & Whittier Blvd
Atlantic Blvd & Whittier Blvd
Goodrich Blvd & Whittier Blvd
Atlantic Blvd & Verona St
Atlantic Blvd & Olympic Blvd
Atlantic Blvd & Union Pacific Ave
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd
Hoefner Ave & Flotilla St/Smithway St
Vail Ave & Mines Ave
Garfield Ave & Flotilla St
Yates Ave & Flotilla St
Vail Ave & Flotilla St
Tubeway Ave & Smithway St
Gayhart St & Washington Blvd
Garfield Ave & Washington Blvd
Yates Ave & Washington Blvd
Vail Ave & Washington Blvd
Maple Ave & Washington Blvd
Greenwood & Washington Blvd
Montebello Blvd & Washington Blvd
Bluff Rd & Washington Blvd
Telegraph Rd & I-5 NB On and Off-Ramps
I-5 SB On and Off-Ramps & Washington Blvd

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	96	0	0	0	0	0	0	0	583	510	53	0	0	0	0	0	3627

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	8	2	0	0	0	0	127	0	0	0	0	0	0	0	0	16	3495

# Eastside Transit Corridor Phase II

## Peak Hour Traffic Counts

### TOTAL VEHICLES

Build (2050) PM
Intersection
Atlantic Blvd & 1st St/SR 60 WB Off-Ramp
Atlantic Blvd & SR 60 EB Off-Ramp
Ford Blvd & 3rd St
McDonnell Ave & 3rd St
Arizona Ave & 3rd St
Mednick Ave & 3rd St
La Verne Ave & 3rd St
Atlantic Blvd & Pomona Blvd
Hillview Ave & Pomona Blvd
Atlantic Blvd & Beverly Blvd
Hillview Ave & Beverly Blvd
Atlantic Blvd & 4th St
Atlantic Blvd & Eagle St
Atlantic Blvd & 6th St
Atlantic Blvd & Hubbard St
Ferris Ave & Whittier Blvd
Atlantic Blvd & Whittier Blvd
Goodrich Blvd & Whittier Blvd
Atlantic Blvd & Verona St
Atlantic Blvd & Olympic Blvd
Atlantic Blvd & Union Pacific Ave
I-5 NB On and Off-Ramps/Woods Ave & Telegraph Rd
Hoefner Ave & Flotilla St/Smithway St
Vail Ave & Mines Ave
Garfield Ave & Flotilla St
Yates Ave & Flotilla St
Vail Ave & Flotilla St
Tubeway Ave & Smithway St
Gayhart St & Washington Blvd
Garfield Ave & Washington Blvd
Yates Ave & Washington Blvd
Vail Ave & Washington Blvd
Maple Ave & Washington Blvd
Greenwood & Washington Blvd
Montebello Blvd & Washington Blvd
Bluff Rd & Washington Blvd
Telegraph Rd & I-5 NB On and Off-Ramps
I-5 SB On and Off-Ramps & Washington Blvd

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Woods Ave & Beverly Blvd & 3rd St/Pomona Blvd	134	0	0	0	0	0	0	0	407	295	80	0	0	0	0	0	4514

	WBR	WBR2	NEL2	NEL	NET	NER	NER2	NWL2	NWL	NWR	NWR2	SWL2	SWL	SWT	SWR	SWR2	Total
Atlantic Blvd & Triggs St/Goodrich Blvd & Telegraph Rd/Ferguson Dr	7	6	0	0	0	0	245	0	0	0	0	0	0	0	0	22	4428